

-----Class 1-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][012][021][100]]$

--
Rules of $T[L]$:

R1) $0,-->0,0,--0,0,--$

R2) $0,0,-->$

List of different nodes in $T[L]$

LEN=1) $0,:$

LEN=2) $0,0,:$

Number new nodes in level n is given by : 1,1, DONE

-----Class 2-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][012][021][101]]$

--
Rules of $T[L]$:

R1) $0,-->0,0,--0,0,--$

R2) $0,0,-->$

List of different nodes in $T[L]$

LEN=1) $0,:$

LEN=2) $0,0,:$

Number new nodes in level n is given by : 1,1, DONE

-----Class 3-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][012][021][102]]$

--
Rules of $T[L]$:

R1) $0,-->0,0,--0,0,--$

R2) $0,0,-->$

List of different nodes in $T[L]$

LEN=1) $0,:$

LEN=2) $0,0,:$

Number new nodes in level n is given by : 1,1, DONE

-----Class 4-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][012][021][110]]$

--
Rules of $T[L]$:

R1) $0,-->0,0,--0,0,--$

R2) $0,0,-->$

List of different nodes in $T[L]$

LEN=1) $0,:$

LEN=2) $0,0,:$

Number new nodes in level n is given by : 1,1, DONE

-----Class 5-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][012][021][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1, DONE

-----Class 6-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][012][021][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1, DONE

-----Class 7-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][012][021][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1, DONE

-----Class 8-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][012][100][101]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1, DONE

-----Class 9-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][012][100][102]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 0, \rightarrow$

R2) $0, 0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, :$

Number new nodes in level n is given by : 1,1, DONE

-----Class

10-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][012][100][110]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 0, \rightarrow$

R2) $0, 0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, :$

Number new nodes in level n is given by : 1,1, DONE

-----Class

11-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][012][100][120]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 0, \rightarrow$

R2) $0, 0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, :$

Number new nodes in level n is given by : 1,1, DONE

-----Class

12-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][012][100][201]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 0, \rightarrow$

R2) $0, 0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, :$

Number new nodes in level n is given by : 1,1, DONE

-----Class

13-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][012][100][210]]$

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-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
    Number new nodes in level n is given by : 1,1,    DONE

-----Class
14-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][011][012][101][102]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
    Number new nodes in level n is given by : 1,1,    DONE

-----Class
15-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][011][012][101][110]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
    Number new nodes in level n is given by : 1,1,    DONE

-----Class
16-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][011][012][101][120]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
    Number new nodes in level n is given by : 1,1,    DONE

-----Class

```

17-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][012][101][201]]$

--
Rules of T[L]:

R1) $0,-->0,0,--0,0,--$

R2) $0,0,-->$

List of different nodes in T[L]

LEN=1) $0,:$

LEN=2) $0,0,:$

Number new nodes in level n is given by : 1,1, DONE

-----Class

18-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][012][101][210]]$

--
Rules of T[L]:

R1) $0,-->0,0,--0,0,--$

R2) $0,0,-->$

List of different nodes in T[L]

LEN=1) $0,:$

LEN=2) $0,0,:$

Number new nodes in level n is given by : 1,1, DONE

-----Class

19-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][012][102][110]]$

--
Rules of T[L]:

R1) $0,-->0,0,--0,0,--$

R2) $0,0,-->$

List of different nodes in T[L]

LEN=1) $0,:$

LEN=2) $0,0,:$

Number new nodes in level n is given by : 1,1, DONE

-----Class

20-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][012][102][120]]$

--
Rules of T[L]:

R1) $0,-->0,0,--0,0,--$

R2) $0,0,-->$

List of different nodes in T[L]

LEN=1) $0,:$

LEN=2) $0,0,:$

Number new nodes in level n is given by : 1,1, DONE

-----Class
21-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][012][102][201]]$

--
Rules of $T[L]$:
R1) $0,-->0,0,--0,0,--$
R2) $0,0,-->$
List of different nodes in $T[L]$
LEN=1) $0,:$
LEN=2) $0,0,:$
Number new nodes in level n is given by : 1,1, DONE

-----Class
22-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][012][102][210]]$

--
Rules of $T[L]$:
R1) $0,-->0,0,--0,0,--$
R2) $0,0,-->$
List of different nodes in $T[L]$
LEN=1) $0,:$
LEN=2) $0,0,:$
Number new nodes in level n is given by : 1,1, DONE

-----Class
23-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][012][110][120]]$

--
Rules of $T[L]$:
R1) $0,-->0,0,--0,0,--$
R2) $0,0,-->$
List of different nodes in $T[L]$
LEN=1) $0,:$
LEN=2) $0,0,:$
Number new nodes in level n is given by : 1,1, DONE

-----Class
24-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][012][110][201]]$

--
Rules of $T[L]$:
R1) $0,-->0,0,--0,0,--$
R2) $0,0,-->$
List of different nodes in $T[L]$
LEN=1) $0,:$

LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1, DONE

-----Class

25-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][011][012][110][210]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,0,--

R2) 0,0,-->

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,:

Number new nodes in level n is given by : 1,1, DONE

-----Class

26-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][011][012][120][201]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,0,--

R2) 0,0,-->

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,:

Number new nodes in level n is given by : 1,1, DONE

-----Class

27-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][011][012][120][210]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,0,--

R2) 0,0,-->

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,:

Number new nodes in level n is given by : 1,1, DONE

-----Class

28-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][011][012][201][210]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,0,--

R2) 0,0,-->

List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

29-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][021][100][101]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

30-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][021][100][102]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

31-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][021][100][110]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

32-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][021][100][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class
33-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][021][100][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class
34-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][021][100][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class
35-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][021][101][102]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:

LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

36-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][011][021][101][110]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->

R3) 0,1,-->0,1,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

Number new nodes in level n is given by : 1,2, DONE

-----Class

37-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][011][021][101][120]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->

R3) 0,1,-->0,1,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

Number new nodes in level n is given by : 1,2, DONE

-----Class

38-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][011][021][101][201]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->

R3) 0,1,-->0,1,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

Number new nodes in level n is given by : 1,2, DONE

-----Class

39-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][011][021][101][210]]

Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

40-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][021][102][110]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

41-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][021][102][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

42-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][021][102][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

```

-----Class
43-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][011][021][102][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

```

-----Class
44-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][011][021][110][120]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

```

-----Class
45-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][011][021][110][201]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

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-----Class
46-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][011][021][110][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--

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R2) 0,0,-->
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

47-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][021][120][201]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->

R3) 0,1,-->0,1,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, : 0,1, :

Number new nodes in level n is given by : 1,2, DONE

-----Class

48-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][021][120][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->

R3) 0,1,-->0,1,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, : 0,1, :

Number new nodes in level n is given by : 1,2, DONE

-----Class

49-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][021][201][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->

R3) 0,1,-->0,1,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, : 0,1, :

Number new nodes in level n is given by : 1,2, DONE

-----Class

50-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][100][101][102]]$

--
Rules of $T[L]$:
R1) $0,-->0,0,--0,1,--$
R2) $0,0,-->$
R3) $0,1,-->0,1,--$
List of different nodes in $T[L]$
LEN=1) $0,:$
LEN=2) $0,0,: 0,1,:$
Number new nodes in level n is given by : 1,2, DONE

-----Class
51-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][100][101][110]]$

--
Rules of $T[L]$:
R1) $0,-->0,0,--0,1,--$
R2) $0,0,-->$
R3) $0,1,-->0,1,--$
List of different nodes in $T[L]$
LEN=1) $0,:$
LEN=2) $0,0,: 0,1,:$
Number new nodes in level n is given by : 1,2, DONE

-----Class
52-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][100][101][120]]$

--
Rules of $T[L]$:
R1) $0,-->0,0,--0,1,--$
R2) $0,0,-->$
R3) $0,1,-->0,1,--$
List of different nodes in $T[L]$
LEN=1) $0,:$
LEN=2) $0,0,: 0,1,:$
Number new nodes in level n is given by : 1,2, DONE

-----Class
53-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][100][101][201]]$

--
Rules of $T[L]$:
R1) $0,-->0,0,--0,1,--$
R2) $0,0,-->$
R3) $0,1,-->0,1,--$

List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

54-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][100][101][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

55-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][100][102][110]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

56-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][100][102][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

57-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][100][102][201]]$

--
Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$

R2) $0, 0, \rightarrow$

R3) $0, 1, \rightarrow 0, 1, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, : 0, 1, :$

Number new nodes in level n is given by : 1,2, DONE

-----Class

58-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][100][102][210]]$

--
Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$

R2) $0, 0, \rightarrow$

R3) $0, 1, \rightarrow 0, 1, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, : 0, 1, :$

Number new nodes in level n is given by : 1,2, DONE

-----Class

59-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][100][110][120]]$

--
Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$

R2) $0, 0, \rightarrow$

R3) $0, 1, \rightarrow 0, 1, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, : 0, 1, :$

Number new nodes in level n is given by : 1,2, DONE

-----Class

60-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][100][110][201]]$

--
Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$

R2) $0, 0, \rightarrow$

R3) $0, 1, \rightarrow 0, 1, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

61-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][011][100][110][210]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->

R3) 0,1,-->0,1,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

Number new nodes in level n is given by : 1,2, DONE

-----Class

62-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][011][100][120][201]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->

R3) 0,1,-->0,1,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

Number new nodes in level n is given by : 1,2, DONE

-----Class

63-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][011][100][120][210]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->

R3) 0,1,-->0,1,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

Number new nodes in level n is given by : 1,2, DONE

-----Class

64-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][011][100][201][210]]

Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

65-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][101][102][110]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

66-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][101][102][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

67-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][101][102][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

```

-----Class
68-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][011][101][102][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

```

-----Class
69-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][011][101][110][120]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

```

-----Class
70-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][011][101][110][201]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

```

-----Class
71-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][011][101][110][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--

```

R2) 0,0,-->
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

72-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][101][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

73-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][101][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

74-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][101][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

75-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][102][110][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

76-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][102][110][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

77-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][102][110][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

78-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][011][102][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,1,--

List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

79-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][011][102][120][210]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

80-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][011][102][201][210]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

81-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][011][110][120][201]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

82-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][011][110][120][210]]

```

-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

```

-----Class
83-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][011][110][201][210]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

```

-----Class
84-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][011][120][201][210]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

```

-----Class
85-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][012][021][100][101]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:

```

LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

86-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][012][021][100][102]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->

R3) 0,1,-->0,0,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

Number new nodes in level n is given by : 1,2, DONE

-----Class

87-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][012][021][100][110]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->

R3) 0,1,-->0,0,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

Number new nodes in level n is given by : 1,2, DONE

-----Class

88-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][012][021][100][120]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->

R3) 0,1,-->0,0,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

Number new nodes in level n is given by : 1,2, DONE

-----Class

89-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][012][021][100][201]]

Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

90-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][012][021][100][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

91-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][012][021][101][102]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

92-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][012][021][101][110]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

```

-----Class
93-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][012][021][101][120]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

```

-----Class
94-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][012][021][101][201]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

```

-----Class
95-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][012][021][101][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

```

-----Class
96-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][012][021][102][110]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--

```

R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

97-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][012][021][102][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

98-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][012][021][102][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

99-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][012][021][102][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

100-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][012][021][110][120]]$

--
Rules of $T[L]$:

R1) $0,-->0,0,--0,1,--$

R2) $0,0,-->$

R3) $0,1,-->0,0,--$

List of different nodes in $T[L]$

LEN=1) $0,:$

LEN=2) $0,0,: 0,1,:$

Number new nodes in level n is given by : 1,2, DONE

-----Class

101-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][012][021][110][201]]$

--
Rules of $T[L]$:

R1) $0,-->0,0,--0,1,--$

R2) $0,0,-->$

R3) $0,1,-->0,0,--$

List of different nodes in $T[L]$

LEN=1) $0,:$

LEN=2) $0,0,: 0,1,:$

Number new nodes in level n is given by : 1,2, DONE

-----Class

102-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][012][021][110][210]]$

--
Rules of $T[L]$:

R1) $0,-->0,0,--0,1,--$

R2) $0,0,-->$

R3) $0,1,-->0,0,--$

List of different nodes in $T[L]$

LEN=1) $0,:$

LEN=2) $0,0,: 0,1,:$

Number new nodes in level n is given by : 1,2, DONE

-----Class

103-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][012][021][120][201]]$

--
Rules of $T[L]$:

R1) $0,-->0,0,--0,1,--$

R2) $0,0,-->$

R3) $0,1,-->0,0,--$

List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

104-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][012][021][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

105-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][012][021][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

106-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][012][100][101][102]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

107-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][012][100][101][110]]$

--
Rules of T[L]:
R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$
R2) $0, 0, \rightarrow$
R3) $0, 1, \rightarrow 0, 0, \rightarrow$
List of different nodes in T[L]
LEN=1) $0, :$
LEN=2) $0, 0, : 0, 1, :$
Number new nodes in level n is given by : 1,2, DONE

-----Class
108-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][012][100][101][120]]$

Rules of T[L]:
R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$
R2) $0, 0, \rightarrow$
R3) $0, 1, \rightarrow 0, 0, \rightarrow$
List of different nodes in T[L]
LEN=1) $0, :$
LEN=2) $0, 0, : 0, 1, :$
Number new nodes in level n is given by : 1,2, DONE

-----Class
109-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][012][100][101][201]]$

Rules of T[L]:
R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$
R2) $0, 0, \rightarrow$
R3) $0, 1, \rightarrow 0, 0, \rightarrow$
List of different nodes in T[L]
LEN=1) $0, :$
LEN=2) $0, 0, : 0, 1, :$
Number new nodes in level n is given by : 1,2, DONE

-----Class
110-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][012][100][101][210]]$

Rules of T[L]:
R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$
R2) $0, 0, \rightarrow$
R3) $0, 1, \rightarrow 0, 0, \rightarrow$
List of different nodes in T[L]
LEN=1) $0, :$

LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

111-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][012][100][102][110]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->

R3) 0,1,-->0,0,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

Number new nodes in level n is given by : 1,2, DONE

-----Class

112-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][012][100][102][120]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->

R3) 0,1,-->0,0,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

Number new nodes in level n is given by : 1,2, DONE

-----Class

113-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][012][100][102][201]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->

R3) 0,1,-->0,0,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

Number new nodes in level n is given by : 1,2, DONE

-----Class

114-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][012][100][102][210]]

Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

115-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][012][100][110][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

116-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][012][100][110][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

117-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][012][100][110][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE


```

-----Class
118-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][012][100][120][201]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

```

-----Class
119-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][012][100][120][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

```

-----Class
120-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][012][100][201][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

```

-----Class
121-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][012][101][102][110]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--

```

R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

122-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][012][101][102][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

123-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][012][101][102][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

124-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][012][101][102][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

125-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][012][101][110][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

126-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][012][101][110][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

127-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][012][101][110][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

128-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][012][101][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--

List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

129-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][012][101][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

130-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][012][101][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

131-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][012][102][110][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

132-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][012][102][110][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class
133-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][012][102][110][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class
134-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][012][102][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class
135-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][012][102][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:

LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

136-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][012][102][201][210]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->

R3) 0,1,-->0,0,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

Number new nodes in level n is given by : 1,2, DONE

-----Class

137-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][012][110][120][201]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->

R3) 0,1,-->0,0,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

Number new nodes in level n is given by : 1,2, DONE

-----Class

138-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][012][110][120][210]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->

R3) 0,1,-->0,0,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

Number new nodes in level n is given by : 1,2, DONE

-----Class

139-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][012][110][201][210]]

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$

R2) $0, 0, \rightarrow$

R3) $0, 1, \rightarrow 0, 0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, : 0, 1, :$

Number new nodes in level n is given by : 1,2, DONE

-----Class

140-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][012][120][201][210]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$

R2) $0, 0, \rightarrow$

R3) $0, 1, \rightarrow 0, 0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, : 0, 1, :$

Number new nodes in level n is given by : 1,2, DONE

-----Class

141-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][021][100][101][102]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, \rightarrow$

R2) $0, 0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, :$

Number new nodes in level n is given by : 1,1, DONE

-----Class

142-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][021][100][101][110]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, \rightarrow$

R2) $0, 0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, :$

Number new nodes in level n is given by : 1,1, DONE

-----Class

143-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][021][100][101][120]]$

--
Rules of T[L]:

R1) $0,-->0,0,--0,--$

R2) $0,0,-->$

List of different nodes in T[L]

LEN=1) $0,:$

LEN=2) $0,0,:$

Number new nodes in level n is given by : 1,1, DONE

-----Class

144-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][021][100][101][201]]$

--
Rules of T[L]:

R1) $0,-->0,0,--0,--$

R2) $0,0,-->$

List of different nodes in T[L]

LEN=1) $0,:$

LEN=2) $0,0,:$

Number new nodes in level n is given by : 1,1, DONE

-----Class

145-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][021][100][101][210]]$

--
Rules of T[L]:

R1) $0,-->0,0,--0,--$

R2) $0,0,-->$

List of different nodes in T[L]

LEN=1) $0,:$

LEN=2) $0,0,:$

Number new nodes in level n is given by : 1,1, DONE

-----Class

146-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][021][100][102][110]]$

--
Rules of T[L]:

R1) $0,-->0,0,--0,--$

R2) $0,0,-->$

List of different nodes in T[L]

LEN=1) $0,:$

LEN=2) $0,0,:$

Number new nodes in level n is given by : 1,1, DONE


```

-----Class
147-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][021][100][102][120]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1,  DONE

```

```

-----Class
148-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][021][100][102][201]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1,  DONE

```

```

-----Class
149-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][021][100][102][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1,  DONE

```

```

-----Class
150-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][021][100][110][120]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->
List of different nodes in T[L]
LEN=1) 0,:

```

LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1, DONE

-----Class

151-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][021][100][110][201]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,--

R2) 0,0,-->

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,:

Number new nodes in level n is given by : 1,1, DONE

-----Class

152-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][021][100][110][210]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,--

R2) 0,0,-->

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,:

Number new nodes in level n is given by : 1,1, DONE

-----Class

153-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][021][100][120][201]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,--

R2) 0,0,-->

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,:

Number new nodes in level n is given by : 1,1, DONE

-----Class

154-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][021][100][120][210]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,--

R2) 0,0,-->

List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

155-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][021][100][201][210]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,--

R2) 0,0,-->

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, :

Number new nodes in level n is given by : 1,1, DONE

-----Class

156-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][021][101][102][110]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,--

R2) 0,0,-->

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, :

Number new nodes in level n is given by : 1,1, DONE

-----Class

157-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][021][101][102][120]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,--

R2) 0,0,-->

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, :

Number new nodes in level n is given by : 1,1, DONE

-----Class

158-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][021][101][102][201]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,--
R2) 0,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1, DONE

-----Class

159-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][021][101][102][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1, DONE

-----Class

160-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][021][101][110][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1, DONE

-----Class

161-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][021][101][110][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1, DONE

-----Class

162-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][021][101][110][210]]$

```
--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1,  DONE
```

```
-----Class
163-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][021][101][120][201]]
-----
```

```
--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1,  DONE
```

```
-----Class
164-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][021][101][120][210]]
-----
```

```
--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1,  DONE
```

```
-----Class
165-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][021][101][201][210]]
-----
```

```
--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1,  DONE
```

```
-----Class
166-----
```

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][021][102][110][120]]$

--

Rules of T[L]:

R1) $0,-->0,0,--0,--$

R2) $0,0,-->$

List of different nodes in T[L]

LEN=1) $0,:$

LEN=2) $0,0,:$

Number new nodes in level n is given by : 1,1, DONE

-----Class

167-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][021][102][110][201]]$

--

Rules of T[L]:

R1) $0,-->0,0,--0,--$

R2) $0,0,-->$

List of different nodes in T[L]

LEN=1) $0,:$

LEN=2) $0,0,:$

Number new nodes in level n is given by : 1,1, DONE

-----Class

168-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][021][102][110][210]]$

--

Rules of T[L]:

R1) $0,-->0,0,--0,--$

R2) $0,0,-->$

List of different nodes in T[L]

LEN=1) $0,:$

LEN=2) $0,0,:$

Number new nodes in level n is given by : 1,1, DONE

-----Class

169-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][021][102][120][201]]$

--

Rules of T[L]:

R1) $0,-->0,0,--0,--$

R2) $0,0,-->$

List of different nodes in T[L]

LEN=1) $0,:$

LEN=2) $0,0,:$

Number new nodes in level n is given by : 1,1, DONE

-----Class
170-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][021][102][120][210]]$

--
Rules of T[L]:
R1) $0,-->0,0,--0,--$
R2) $0,0,-->$
List of different nodes in T[L]
LEN=1) $0,:$
LEN=2) $0,0,:$
Number new nodes in level n is given by : 1,1, DONE

-----Class
171-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][021][102][201][210]]$

--
Rules of T[L]:
R1) $0,-->0,0,--0,--$
R2) $0,0,-->$
List of different nodes in T[L]
LEN=1) $0,:$
LEN=2) $0,0,:$
Number new nodes in level n is given by : 1,1, DONE

-----Class
172-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][021][110][120][201]]$

--
Rules of T[L]:
R1) $0,-->0,0,--0,--$
R2) $0,0,-->$
List of different nodes in T[L]
LEN=1) $0,:$
LEN=2) $0,0,:$
Number new nodes in level n is given by : 1,1, DONE

-----Class
173-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][021][110][120][210]]$

--
Rules of T[L]:
R1) $0,-->0,0,--0,--$
R2) $0,0,-->$
List of different nodes in T[L]
LEN=1) $0,:$
LEN=2) $0,0,:$

Number new nodes in level n is given by : 1,1, DONE

-----Class

174-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][021][110][201][210]]$

--

Rules of $T[L]$:

R1) $0,-->0,0,--0,--$

R2) $0,0,-->$

List of different nodes in $T[L]$

LEN=1) $0,:$

LEN=2) $0,0,:$

Number new nodes in level n is given by : 1,1, DONE

-----Class

175-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][021][120][201][210]]$

--

Rules of $T[L]$:

R1) $0,-->0,0,--0,--$

R2) $0,0,-->$

List of different nodes in $T[L]$

LEN=1) $0,:$

LEN=2) $0,0,:$

Number new nodes in level n is given by : 1,1, DONE

-----Class

176-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][100][101][102][110]]$

--

Rules of $T[L]$:

R1) $0,-->0,0,--0,--$

R2) $0,0,-->$

List of different nodes in $T[L]$

LEN=1) $0,:$

LEN=2) $0,0,:$

Number new nodes in level n is given by : 1,1, DONE

-----Class

177-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][100][101][102][120]]$

--

Rules of $T[L]$:

R1) $0,-->0,0,--0,--$

R2) $0,0,-->$

List of different nodes in $T[L]$

LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

178-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][100][101][102][201]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,--

R2) 0,0,-->

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, :

Number new nodes in level n is given by : 1,1, DONE

-----Class

179-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][100][101][102][210]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,--

R2) 0,0,-->

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, :

Number new nodes in level n is given by : 1,1, DONE

-----Class

180-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][100][101][110][120]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,--

R2) 0,0,-->

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, :

Number new nodes in level n is given by : 1,1, DONE

-----Class

181-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][100][101][110][201]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,--

R2) 0,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1, DONE

-----Class

182-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][100][101][110][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1, DONE

-----Class

183-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][100][101][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1, DONE

-----Class

184-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][100][101][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1, DONE

-----Class

185-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][100][101][201][210]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, \rightarrow$

R2) $0, 0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, :$

Number new nodes in level n is given by : 1,1, DONE

-----Class

186-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][100][102][110][120]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, \rightarrow$

R2) $0, 0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, :$

Number new nodes in level n is given by : 1,1, DONE

-----Class

187-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][100][102][110][201]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, \rightarrow$

R2) $0, 0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, :$

Number new nodes in level n is given by : 1,1, DONE

-----Class

188-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][100][102][110][210]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, \rightarrow$

R2) $0, 0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, :$

Number new nodes in level n is given by : 1,1, DONE

-----Class

189-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][100][102][120][201]]$

```

-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
  Number new nodes in level n is given by : 1,1,  DONE

-----Class
190-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][100][102][120][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
  Number new nodes in level n is given by : 1,1,  DONE

-----Class
191-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][100][102][201][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
  Number new nodes in level n is given by : 1,1,  DONE

-----Class
192-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][100][110][120][201]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
  Number new nodes in level n is given by : 1,1,  DONE

-----Class

```

193-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][100][110][120][210]]$

--
Rules of T[L]:

R1) $0,-->0,0,--0,--$

R2) $0,0,-->$

List of different nodes in T[L]

LEN=1) $0,:$

LEN=2) $0,0,:$

Number new nodes in level n is given by : 1,1, DONE

-----Class

194-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][100][110][201][210]]$

--
Rules of T[L]:

R1) $0,-->0,0,--0,--$

R2) $0,0,-->$

List of different nodes in T[L]

LEN=1) $0,:$

LEN=2) $0,0,:$

Number new nodes in level n is given by : 1,1, DONE

-----Class

195-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][100][120][201][210]]$

--
Rules of T[L]:

R1) $0,-->0,0,--0,--$

R2) $0,0,-->$

List of different nodes in T[L]

LEN=1) $0,:$

LEN=2) $0,0,:$

Number new nodes in level n is given by : 1,1, DONE

-----Class

196-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][101][102][110][120]]$

--
Rules of T[L]:

R1) $0,-->0,0,--0,--$

R2) $0,0,-->$

List of different nodes in T[L]

LEN=1) $0,:$

LEN=2) $0,0,:$

Number new nodes in level n is given by : 1,1, DONE

-----Class
197-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][101][102][110][201]]$

--
Rules of $T[L]$:
R1) $0,-->0,0,--0,--$
R2) $0,0,-->$
List of different nodes in $T[L]$
LEN=1) $0,:$
LEN=2) $0,0,:$
Number new nodes in level n is given by : 1,1, DONE

-----Class
198-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][101][102][110][210]]$

--
Rules of $T[L]$:
R1) $0,-->0,0,--0,--$
R2) $0,0,-->$
List of different nodes in $T[L]$
LEN=1) $0,:$
LEN=2) $0,0,:$
Number new nodes in level n is given by : 1,1, DONE

-----Class
199-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][101][102][120][201]]$

--
Rules of $T[L]$:
R1) $0,-->0,0,--0,--$
R2) $0,0,-->$
List of different nodes in $T[L]$
LEN=1) $0,:$
LEN=2) $0,0,:$
Number new nodes in level n is given by : 1,1, DONE

-----Class
200-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][101][102][120][210]]$

--
Rules of $T[L]$:
R1) $0,-->0,0,--0,--$
R2) $0,0,-->$
List of different nodes in $T[L]$
LEN=1) $0,:$

LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1, DONE

-----Class

201-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][101][102][201][210]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,--

R2) 0,0,-->

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,:

Number new nodes in level n is given by : 1,1, DONE

-----Class

202-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][101][110][120][201]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,--

R2) 0,0,-->

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,:

Number new nodes in level n is given by : 1,1, DONE

-----Class

203-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][101][110][120][210]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,--

R2) 0,0,-->

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,:

Number new nodes in level n is given by : 1,1, DONE

-----Class

204-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][101][110][201][210]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,--

R2) 0,0,-->

List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

205-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][101][120][201][210]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

206-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][102][110][120][201]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

207-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][102][110][120][210]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

208-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][010][102][110][201][210]]

--
Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, \rightarrow$
R2) $0, 0, \rightarrow$
List of different nodes in $T[L]$
LEN=1) $0, :$
LEN=2) $0, 0, :$
Number new nodes in level n is given by : 1,1, DONE

-----Class

209-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][102][120][201][210]]$

--
Rules of $T[L]$:
R1) $0, \rightarrow 0, 0, \rightarrow 0, \rightarrow$
R2) $0, 0, \rightarrow$
List of different nodes in $T[L]$
LEN=1) $0, :$
LEN=2) $0, 0, :$
Number new nodes in level n is given by : 1,1, DONE

-----Class

210-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][010][110][120][201][210]]$

--
Rules of $T[L]$:
R1) $0, \rightarrow 0, 0, \rightarrow 0, \rightarrow$
R2) $0, 0, \rightarrow$
List of different nodes in $T[L]$
LEN=1) $0, :$
LEN=2) $0, 0, :$
Number new nodes in level n is given by : 1,1, DONE

-----Class

211-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][012][021][100][101]]$

--
Rules of $T[L]$:
R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$
R2) $0, 0, \rightarrow$
R3) $0, 1, \rightarrow 0, 0, \rightarrow$
List of different nodes in $T[L]$
LEN=1) $0, :$
LEN=2) $0, 0, : 0, 1, :$
Number new nodes in level n is given by : 1,2, DONE

-----Class

212-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][012][021][100][102]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class
213-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][012][021][100][110]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class
214-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][012][021][100][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class
215-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][012][021][100][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:

LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

216-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][011][012][021][100][210]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->

R3) 0,1,-->0,0,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

Number new nodes in level n is given by : 1,2, DONE

-----Class

217-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][011][012][021][101][102]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->

R3) 0,1,-->0,0,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

Number new nodes in level n is given by : 1,2, DONE

-----Class

218-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][011][012][021][101][110]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->

R3) 0,1,-->0,0,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

Number new nodes in level n is given by : 1,2, DONE

-----Class

219-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][011][012][021][101][120]]

Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

220-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][012][021][101][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

221-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][012][021][101][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

222-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][012][021][102][110]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

```

-----Class
223-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][011][012][021][102][120]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

```

-----Class
224-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][011][012][021][102][201]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

```

-----Class
225-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][011][012][021][102][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

```

-----Class
226-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][011][012][021][110][120]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--

```

R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

227-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][012][021][110][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

228-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][012][021][110][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

229-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][012][021][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

230-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][012][021][120][210]]$

--
Rules of T[L]:
R1) $0,-->0,0,--0,1,--$
R2) $0,0,-->$
R3) $0,1,-->0,0,--$
List of different nodes in T[L]
LEN=1) $0,:$
LEN=2) $0,0,: 0,1,:$
Number new nodes in level n is given by : 1,2, DONE

-----Class

231-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][012][021][201][210]]$

--
Rules of T[L]:
R1) $0,-->0,0,--0,1,--$
R2) $0,0,-->$
R3) $0,1,-->0,0,--$
List of different nodes in T[L]
LEN=1) $0,:$
LEN=2) $0,0,: 0,1,:$
Number new nodes in level n is given by : 1,2, DONE

-----Class

232-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][012][100][101][102]]$

--
Rules of T[L]:
R1) $0,-->0,0,--0,1,--$
R2) $0,0,-->$
R3) $0,1,-->0,0,--$
List of different nodes in T[L]
LEN=1) $0,:$
LEN=2) $0,0,: 0,1,:$
Number new nodes in level n is given by : 1,2, DONE

-----Class

233-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][012][100][101][110]]$

--
Rules of T[L]:
R1) $0,-->0,0,--0,1,--$
R2) $0,0,-->$
R3) $0,1,-->0,0,--$

List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

234-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][011][012][100][101][120]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

235-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][011][012][100][101][201]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

236-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][011][012][100][101][210]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

237-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][011][012][100][102][110]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class
238-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][012][100][102][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class
239-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][012][100][102][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class
240-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][012][100][102][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:

LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

241-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][011][012][100][110][120]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->

R3) 0,1,-->0,0,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

Number new nodes in level n is given by : 1,2, DONE

-----Class

242-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][011][012][100][110][201]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->

R3) 0,1,-->0,0,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

Number new nodes in level n is given by : 1,2, DONE

-----Class

243-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][011][012][100][110][210]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->

R3) 0,1,-->0,0,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

Number new nodes in level n is given by : 1,2, DONE

-----Class

244-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][011][012][100][120][201]]

--

Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

245-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][012][100][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

246-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][012][100][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

247-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][012][101][102][110]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

```

-----Class
248-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][011][012][101][102][120]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

```

-----Class
249-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][011][012][101][102][201]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

```

-----Class
250-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][011][012][101][102][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

```

-----Class
251-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][011][012][101][110][120]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--

```

R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

252-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][012][101][110][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

253-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][012][101][110][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

254-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][012][101][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

255-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][012][101][120][210]]$

--
Rules of $T[L]$:

R1) $0,-->0,0,--0,1,--$

R2) $0,0,-->$

R3) $0,1,-->0,0,--$

List of different nodes in $T[L]$

LEN=1) $0,:$

LEN=2) $0,0,: 0,1,:$

Number new nodes in level n is given by : 1,2, DONE

-----Class

256-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][012][101][201][210]]$

--
Rules of $T[L]$:

R1) $0,-->0,0,--0,1,--$

R2) $0,0,-->$

R3) $0,1,-->0,0,--$

List of different nodes in $T[L]$

LEN=1) $0,:$

LEN=2) $0,0,: 0,1,:$

Number new nodes in level n is given by : 1,2, DONE

-----Class

257-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][012][102][110][120]]$

--
Rules of $T[L]$:

R1) $0,-->0,0,--0,1,--$

R2) $0,0,-->$

R3) $0,1,-->0,0,--$

List of different nodes in $T[L]$

LEN=1) $0,:$

LEN=2) $0,0,: 0,1,:$

Number new nodes in level n is given by : 1,2, DONE

-----Class

258-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][012][102][110][201]]$

--
Rules of $T[L]$:

R1) $0,-->0,0,--0,1,--$

R2) $0,0,-->$

R3) $0,1,-->0,0,--$

List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

259-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][012][102][110][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

260-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][012][102][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

261-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][012][102][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

262-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][012][102][201][210]]$

```

-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

```

-----Class
263-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][011][012][110][120][201]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

```

-----Class
264-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][011][012][110][120][210]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

```

-----Class
265-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][011][012][110][201][210]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:

```


LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

266-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][011][012][120][201][210]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->

R3) 0,1,-->0,0,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

Number new nodes in level n is given by : 1,2, DONE

-----Class

267-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][011][021][100][101][102]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,--

R2) 0,0,-->

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,:

Number new nodes in level n is given by : 1,1, DONE

-----Class

268-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][011][021][100][101][110]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,--

R2) 0,0,-->

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,:

Number new nodes in level n is given by : 1,1, DONE

-----Class

269-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][011][021][100][101][120]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,2,--
R4) 0,1,2,-->0,1,2,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,2, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class
270-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][021][100][101][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class
271-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][021][100][101][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class
272-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][021][100][102][110]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class
273-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][021][100][102][120]]$

--

Rules of $T[L]$:

R1) $0,-->0,0,--0,1,--$

R2) $0,0,-->$

R3) $0,1,-->0,0,--0,1,2,--$

R4) $0,1,2,-->0,1,2,--$

List of different nodes in $T[L]$

LEN=1) $0,:$

LEN=2) $0,0,: 0,1,:$

LEN=3) $0,1,2,:$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

274-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][021][100][102][201]]$

--

Rules of $T[L]$:

R1) $0,-->0,0,--0,--$

R2) $0,0,-->$

List of different nodes in $T[L]$

LEN=1) $0,:$

LEN=2) $0,0,:$

Number new nodes in level n is given by : 1,1, DONE

-----Class

275-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][021][100][102][210]]$

--

Rules of $T[L]$:

R1) $0,-->0,0,--0,--$

R2) $0,0,-->$

List of different nodes in $T[L]$

LEN=1) $0,:$

LEN=2) $0,0,:$

Number new nodes in level n is given by : 1,1, DONE

-----Class

276-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][021][100][110][120]]$

--

Rules of $T[L]$:

R1) $0,-->0,0,--0,1,--$

R2) $0,0,-->$

R3) $0,1,-->0,0,--0,1,2,--$

R4) $0,1,2,-->0,1,2,--$

List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,2, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

277-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][021][100][110][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->

List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

278-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][021][100][110][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->

List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

279-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][021][100][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,2,--
R4) 0,1,2,-->0,1,2,--

List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,2, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

280-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][021][100][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,2,--
R4) 0,1,2,-->0,1,2,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,2, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class
281-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][021][100][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class
282-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][021][101][102][110]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class
283-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][021][101][102][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,2,--
R4) 0,1,2,-->0,1,2,--

List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,2, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

284-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][021][101][102][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->

List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

285-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][021][101][102][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->

List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

286-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][021][101][110][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,2,--
R4) 0,1,2,-->0,1,2,--

List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,2, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

287-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][021][101][110][201]]$

--

Rules of T[L]:

R1) $0,-->0,0,--0,--$

R2) $0,0,-->$

List of different nodes in T[L]

LEN=1) $0,:$

LEN=2) $0,0,:$

Number new nodes in level n is given by : 1,1, DONE

-----Class

288-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][021][101][110][210]]$

--

Rules of T[L]:

R1) $0,-->0,0,--0,--$

R2) $0,0,-->$

List of different nodes in T[L]

LEN=1) $0,:$

LEN=2) $0,0,:$

Number new nodes in level n is given by : 1,1, DONE

-----Class

289-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][021][101][120][201]]$

--

Rules of T[L]:

R1) $0,-->0,0,--0,1,--$

R2) $0,0,-->$

R3) $0,1,-->0,0,--0,1,2,--$

R4) $0,1,2,-->0,1,2,--$

List of different nodes in T[L]

LEN=1) $0,:$

LEN=2) $0,0,; 0,1,:$

LEN=3) $0,1,2,:$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

290-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][021][101][120][210]]$

--

Rules of T[L]:

R1) $0,-->0,0,--0,1,--$

R2) $0,0,-->$

R3) $0,1,-->0,0,--0,1,2,--$

R4) $0,1,2,-->0,1,2,--$

List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,2, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

291-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][021][101][201][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,--

R2) 0,0,-->

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, :

Number new nodes in level n is given by : 1,1, DONE

-----Class

292-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][021][102][110][120]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->

R3) 0,1,-->0,0,--0,1,2,--

R4) 0,1,2,-->0,1,2,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, : 0,1, :

LEN=3) 0,1,2, :

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

293-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][021][102][110][201]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,--

R2) 0,0,-->

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, :

Number new nodes in level n is given by : 1,1, DONE

-----Class

294-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][021][102][110][210]]$

--

Rules of $T[L]$:

R1) $0,-->0,0,--0,--$

R2) $0,0,-->$

List of different nodes in $T[L]$

LEN=1) $0,:$

LEN=2) $0,0,:$

Number new nodes in level n is given by : 1,1, DONE

-----Class

295-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][021][102][120][201]]$

--

Rules of $T[L]$:

R1) $0,-->0,0,--0,1,--$

R2) $0,0,-->$

R3) $0,1,-->0,0,--0,1,2,--$

R4) $0,1,2,-->0,1,2,--$

List of different nodes in $T[L]$

LEN=1) $0,:$

LEN=2) $0,0, : 0,1,:$

LEN=3) $0,1,2,:$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

296-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][021][102][120][210]]$

--

Rules of $T[L]$:

R1) $0,-->0,0,--0,1,--$

R2) $0,0,-->$

R3) $0,1,-->0,0,--0,1,2,--$

R4) $0,1,2,-->0,1,2,--$

List of different nodes in $T[L]$

LEN=1) $0,:$

LEN=2) $0,0, : 0,1,:$

LEN=3) $0,1,2,:$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

297-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][021][102][201][210]]$

--

Rules of $T[L]$:

R1) $0,-->0,0,--0,--$

R2) 0,0,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

298-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][021][110][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,2,--
R4) 0,1,2,-->0,1,2,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,2, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

299-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][021][110][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,2,--
R4) 0,1,2,-->0,1,2,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,2, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

300-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][021][110][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class
301-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][021][120][201][210]]$

--
Rules of T[L]:
R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$
R2) $0, 0, \rightarrow$
R3) $0, 1, \rightarrow 0, 0, \rightarrow 0, 1, 2, \rightarrow$
R4) $0, 1, 2, \rightarrow 0, 1, 2, \rightarrow$
List of different nodes in T[L]
LEN=1) $0, :$
LEN=2) $0, 0, : 0, 1, :$
LEN=3) $0, 1, 2, :$
Number new nodes in level n is given by : 1,2,1, DONE

-----Class
302-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][100][101][102][110]]$

--
Rules of T[L]:
R1) $0, \rightarrow 0, 0, \rightarrow 0, \rightarrow$
R2) $0, 0, \rightarrow$
List of different nodes in T[L]
LEN=1) $0, :$
LEN=2) $0, 0, :$
Number new nodes in level n is given by : 1,1, DONE

-----Class
303-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][100][101][102][120]]$

--
Rules of T[L]:
R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$
R2) $0, 0, \rightarrow$
R3) $0, 1, \rightarrow 0, 0, \rightarrow 0, 1, 2, \rightarrow$
R4) $0, 1, 2, \rightarrow 0, 1, 2, \rightarrow$
List of different nodes in T[L]
LEN=1) $0, :$
LEN=2) $0, 0, : 0, 1, :$
LEN=3) $0, 1, 2, :$
Number new nodes in level n is given by : 1,2,1, DONE

-----Class
304-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][100][101][102][201]]$

```
--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
    Number new nodes in level n is given by : 1,1,    DONE
```

```
-----Class
305-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][011][100][101][102][210]]
-----
```

```
--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
    Number new nodes in level n is given by : 1,1,    DONE
```

```
-----Class
306-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][011][100][101][110][120]]
-----
```

```
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,2,--
R4) 0,1,2,-->0,1,2,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,2,:
    Number new nodes in level n is given by : 1,2,1,    DONE
```

```
-----Class
307-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][011][100][101][110][201]]
-----
```

```
--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
    Number new nodes in level n is given by : 1,1,    DONE
```

```

-----Class
308-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][011][100][101][110][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1,  DONE

```

```

-----Class
309-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][011][100][101][120][201]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,2,--
R4) 0,1,2,-->0,1,2,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,2,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

```

-----Class
310-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][011][100][101][120][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,2,--
R4) 0,1,2,-->0,1,2,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,2,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

```

-----Class
311-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][011][100][101][201][210]]
-----

```

```
--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1,  DONE
```

-----Class

```
312-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][011][100][102][110][120]]
-----
```

```
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,2,--
R4) 0,1,2,-->0,1,2,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,2,:
Number new nodes in level n is given by : 1,2,1,  DONE
```

-----Class

```
313-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][011][100][102][110][201]]
-----
```

```
--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1,  DONE
```

-----Class

```
314-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][011][100][102][110][210]]
-----
```

```
--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1,  DONE
```

-----Class
315-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][100][102][120][201]]$

--
Rules of T[L]:
R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$
R2) $0, 0, \rightarrow$
R3) $0, 1, \rightarrow 0, 0, \rightarrow 0, 1, 2, \rightarrow$
R4) $0, 1, 2, \rightarrow 0, 1, 2, \rightarrow$
List of different nodes in T[L]
LEN=1) $0, :$
LEN=2) $0, 0, : 0, 1, :$
LEN=3) $0, 1, 2, :$
Number new nodes in level n is given by : 1,2,1, DONE

-----Class
316-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][100][102][120][210]]$

--
Rules of T[L]:
R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$
R2) $0, 0, \rightarrow$
R3) $0, 1, \rightarrow 0, 0, \rightarrow 0, 1, 2, \rightarrow$
R4) $0, 1, 2, \rightarrow 0, 1, 2, \rightarrow$
List of different nodes in T[L]
LEN=1) $0, :$
LEN=2) $0, 0, : 0, 1, :$
LEN=3) $0, 1, 2, :$
Number new nodes in level n is given by : 1,2,1, DONE

-----Class
317-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][100][102][201][210]]$

--
Rules of T[L]:
R1) $0, \rightarrow 0, 0, \rightarrow 0, \rightarrow$
R2) $0, 0, \rightarrow$
List of different nodes in T[L]
LEN=1) $0, :$
LEN=2) $0, 0, :$
Number new nodes in level n is given by : 1,1, DONE

-----Class
318-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][100][110][120][201]]$

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,2,--
R4) 0,1,2,-->0,1,2,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,2,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

-----Class

```

319-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][011][100][110][120][210]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,2,--
R4) 0,1,2,-->0,1,2,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,2,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

-----Class

```

320-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][011][100][110][201][210]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1,  DONE

```

-----Class

```

321-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][011][100][120][201][210]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,2,--

```


R4) 0,1,2,-->0,1,2,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,2, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

322-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][101][102][110][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,2,--
R4) 0,1,2,-->0,1,2,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,2, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

323-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][101][102][110][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

324-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][101][102][110][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

325-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][101][102][120][201]]$

--
Rules of $T[L]$:

- R1) $0, -- \rightarrow 0, 0, -- 0, 1, --$
- R2) $0, 0, -- \rightarrow$
- R3) $0, 1, -- \rightarrow 0, 0, -- 0, 1, 2, --$
- R4) $0, 1, 2, -- \rightarrow 0, 1, 2, --$

List of different nodes in $T[L]$

- LEN=1) $0, :$
- LEN=2) $0, 0, : 0, 1, :$
- LEN=3) $0, 1, 2, :$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

326-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][101][102][120][210]]$

--
Rules of $T[L]$:

- R1) $0, -- \rightarrow 0, 0, -- 0, 1, --$
- R2) $0, 0, -- \rightarrow$
- R3) $0, 1, -- \rightarrow 0, 0, -- 0, 1, 2, --$
- R4) $0, 1, 2, -- \rightarrow 0, 1, 2, --$

List of different nodes in $T[L]$

- LEN=1) $0, :$
- LEN=2) $0, 0, : 0, 1, :$
- LEN=3) $0, 1, 2, :$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

327-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][101][102][201][210]]$

--
Rules of $T[L]$:

- R1) $0, -- \rightarrow 0, 0, -- 0, --$
 - R2) $0, 0, -- \rightarrow$
- List of different nodes in $T[L]$

- LEN=1) $0, :$
- LEN=2) $0, 0, :$

Number new nodes in level n is given by : 1,1, DONE

-----Class

328-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][101][110][120][201]]$

--
Rules of $T[L]$:

R1) 0,-->0,0,--0,1,--
 R2) 0,0,-->
 R3) 0,1,-->0,0,--0,1,2,--
 R4) 0,1,2,-->0,1,2,--
 List of different nodes in T[L]
 LEN=1) 0,:
 LEN=2) 0,0,: 0,1,:
 LEN=3) 0,1,2,:
 Number new nodes in level n is given by : 1,2,1, DONE

-----Class

329-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][101][110][120][210]]$

--
 Rules of T[L]:
 R1) 0,-->0,0,--0,1,--
 R2) 0,0,-->
 R3) 0,1,-->0,0,--0,1,2,--
 R4) 0,1,2,-->0,1,2,--
 List of different nodes in T[L]
 LEN=1) 0,:
 LEN=2) 0,0,: 0,1,:
 LEN=3) 0,1,2,:
 Number new nodes in level n is given by : 1,2,1, DONE

-----Class

330-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][101][110][201][210]]$

--
 Rules of T[L]:
 R1) 0,-->0,0,--0,--
 R2) 0,0,-->
 List of different nodes in T[L]
 LEN=1) 0,:
 LEN=2) 0,0,:
 Number new nodes in level n is given by : 1,1, DONE

-----Class

331-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][101][120][201][210]]$

--
 Rules of T[L]:
 R1) 0,-->0,0,--0,1,--
 R2) 0,0,-->
 R3) 0,1,-->0,0,--0,1,2,--
 R4) 0,1,2,-->0,1,2,--
 List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,2, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

332-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][102][110][120][201]]$

--
Rules of T[L]:
R1) 0, -->0,0, --0,1, --
R2) 0,0, -->
R3) 0,1, -->0,0, --0,1,2, --
R4) 0,1,2, -->0,1,2, --
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,2, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

333-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][102][110][120][210]]$

--
Rules of T[L]:
R1) 0, -->0,0, --0,1, --
R2) 0,0, -->
R3) 0,1, -->0,0, --0,1,2, --
R4) 0,1,2, -->0,1,2, --
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,2, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

334-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][011][102][110][201][210]]$

--
Rules of T[L]:
R1) 0, -->0,0, --0, --
R2) 0,0, -->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

```

-----Class
335-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][011][102][120][201][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,2,--
R4) 0,1,2,-->0,1,2,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,2,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

```

-----Class
336-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][011][110][120][201][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,2,--
R4) 0,1,2,-->0,1,2,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,2,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

```

-----Class
337-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][012][021][100][101][102]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,1,--
R4) 0,1,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,1,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

```

-----Class
338-----

```

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][021][100][101][110]]$

--

Rules of T[L]:

R1) $0, -->0,0, --0,1, --$

R2) $0,0, -->$

R3) $0,1, -->0,0, --0,0, --$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

Number new nodes in level n is given by : 1,2, DONE

-----Class

339-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][021][100][101][120]]$

--

Rules of T[L]:

R1) $0, -->0,0, --0,1, --$

R2) $0,0, -->$

R3) $0,1, -->0,0, --0,1,1, --$

R4) $0,1,1, -->0,0, --$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

LEN=3) $0,1,1, :$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

340-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][021][100][101][201]]$

--

Rules of T[L]:

R1) $0, -->0,0, --0,1, --$

R2) $0,0, -->$

R3) $0,1, -->0,0, --0,1,1, --$

R4) $0,1,1, -->0,0, --$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

LEN=3) $0,1,1, :$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

341-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][021][100][101][210]]$

--

Rules of T[L]:

```

R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,1,--
R4) 0,1,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,1,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

-----Class

```

342-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][012][021][100][102][110]]
-----

```

Rules of T[L]:

```

R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,0,--

```

List of different nodes in T[L]

```

LEN=1) 0,:
LEN=2) 0,0,: 0,1,:

```

Number new nodes in level n is given by : 1,2, DONE

-----Class

```

343-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][012][021][100][102][120]]
-----

```

Rules of T[L]:

```

R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,1,--
R4) 0,1,1,-->0,0,--

```

List of different nodes in T[L]

```

LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,1,:

```

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

```

344-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][012][021][100][102][201]]
-----

```

Rules of T[L]:

```

R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,1,--
R4) 0,1,1,-->0,0,--

```

List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,1, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

345-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][021][100][102][210]]$

--
Rules of T[L]:
R1) 0, -->0,0, --0,1, --
R2) 0,0, -->
R3) 0,1, -->0,0, --0,1,1, --
R4) 0,1,1, -->0,0, --
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,1, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

346-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][021][100][110][120]]$

--
Rules of T[L]:
R1) 0, -->0,0, --0,1, --
R2) 0,0, -->
R3) 0,1, -->0,0, --0,0, --
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

347-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][021][100][110][201]]$

--
Rules of T[L]:
R1) 0, -->0,0, --0,1, --
R2) 0,0, -->
R3) 0,1, -->0,0, --0,0, --
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class
348-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][021][100][110][210]]$

--
Rules of $T[L]$:
R1) $0, -->0,0, --0,1, --$
R2) $0,0, -->$
R3) $0,1, -->0,0, --0,0, --$
List of different nodes in $T[L]$
LEN=1) $0, :$
LEN=2) $0,0, : 0,1, :$
Number new nodes in level n is given by : 1,2, DONE

-----Class
349-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][021][100][120][201]]$

--
Rules of $T[L]$:
R1) $0, -->0,0, --0,1, --$
R2) $0,0, -->$
R3) $0,1, -->0,0, --0,1,1, --$
R4) $0,1,1, -->0,0, --$
List of different nodes in $T[L]$
LEN=1) $0, :$
LEN=2) $0,0, : 0,1, :$
LEN=3) $0,1,1, :$
Number new nodes in level n is given by : 1,2,1, DONE

-----Class
350-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][021][100][120][210]]$

--
Rules of $T[L]$:
R1) $0, -->0,0, --0,1, --$
R2) $0,0, -->$
R3) $0,1, -->0,0, --0,1,1, --$
R4) $0,1,1, -->0,0, --$
List of different nodes in $T[L]$
LEN=1) $0, :$
LEN=2) $0,0, : 0,1, :$
LEN=3) $0,1,1, :$
Number new nodes in level n is given by : 1,2,1, DONE

-----Class
351-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][021][100][201][210]]$

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,1,--
R4) 0,1,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,1,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

-----Class

```

352-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][012][021][101][102][110]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

-----Class

```

353-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][012][021][101][102][120]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,1,--
R4) 0,1,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,1,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

-----Class

```

354-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][012][021][101][102][201]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->

```

R3) 0,1,-->0,0,--0,1,1,--
R4) 0,1,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,1,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

355-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][021][101][102][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,1,--
R4) 0,1,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,1,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

356-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][021][101][110][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

357-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][021][101][110][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

Number new nodes in level n is given by : 1,2, DONE

-----Class

358-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][021][101][110][210]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0,0, \rightarrow 0,1, \rightarrow$

R2) $0,0, \rightarrow$

R3) $0,1, \rightarrow 0,0, \rightarrow 0,0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

Number new nodes in level n is given by : 1,2, DONE

-----Class

359-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][021][101][120][201]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0,0, \rightarrow 0,1, \rightarrow$

R2) $0,0, \rightarrow$

R3) $0,1, \rightarrow 0,0, \rightarrow 0,1,1, \rightarrow$

R4) $0,1,1, \rightarrow 0,0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

LEN=3) $0,1,1, :$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

360-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][021][101][120][210]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0,0, \rightarrow 0,1, \rightarrow$

R2) $0,0, \rightarrow$

R3) $0,1, \rightarrow 0,0, \rightarrow 0,1,1, \rightarrow$

R4) $0,1,1, \rightarrow 0,0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

LEN=3) $0,1,1, :$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

361-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][021][101][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,1,--
R4) 0,1,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,1, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class
362-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][021][102][110][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class
363-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][021][102][110][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class
364-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][021][102][110][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->

R3) 0,1,-->0,0,--0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

365-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][021][102][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,1,--
R4) 0,1,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,1, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

366-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][021][102][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,1,--
R4) 0,1,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,1, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

367-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][021][102][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,1,--
R4) 0,1,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :

LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,1,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

368-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][012][021][110][120][201]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

369-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][012][021][110][120][210]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

370-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][012][021][110][201][210]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

371-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][012][021][120][201][210]]

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,1,--
R4) 0,1,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,1,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

-----Class

```

372-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][012][100][101][102][110]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

-----Class

```

373-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][012][100][101][102][120]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,1,--
R4) 0,1,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,1,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

-----Class

```

374-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][012][100][101][102][201]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->

```


R3) 0,1,-->0,0,--0,1,1,--
R4) 0,1,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,1,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

375-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][100][101][102][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,1,--
R4) 0,1,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,1,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

376-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][100][101][110][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

377-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][100][101][110][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

Number new nodes in level n is given by : 1,2, DONE

-----Class

378-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][100][101][110][210]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0,0, \rightarrow 0,1, \rightarrow$

R2) $0,0, \rightarrow$

R3) $0,1, \rightarrow 0,0, \rightarrow 0,0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

Number new nodes in level n is given by : 1,2, DONE

-----Class

379-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][100][101][120][201]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0,0, \rightarrow 0,1, \rightarrow$

R2) $0,0, \rightarrow$

R3) $0,1, \rightarrow 0,0, \rightarrow 0,1,1, \rightarrow$

R4) $0,1,1, \rightarrow 0,0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

LEN=3) $0,1,1, :$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

380-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][100][101][120][210]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0,0, \rightarrow 0,1, \rightarrow$

R2) $0,0, \rightarrow$

R3) $0,1, \rightarrow 0,0, \rightarrow 0,1,1, \rightarrow$

R4) $0,1,1, \rightarrow 0,0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

LEN=3) $0,1,1, :$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

381-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][100][101][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,1,--
R4) 0,1,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,1,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class
382-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][100][102][110][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class
383-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][100][102][110][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class
384-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][100][102][110][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->

R3) 0,1,-->0,0,--0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

385-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][100][102][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,1,--
R4) 0,1,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,1, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

386-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][100][102][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,1,--
R4) 0,1,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,1, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

387-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][100][102][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,1,--
R4) 0,1,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :

LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,1,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

388-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][100][110][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

389-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][100][110][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

390-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][100][110][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

391-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][100][120][201][210]]$

```
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,1,--
R4) 0,1,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,1,:
Number new nodes in level n is given by : 1,2,1,  DONE
```

-----Class

392-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][101][102][110][120]]$

```
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE
```

-----Class

393-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][101][102][110][201]]$

```
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE
```

-----Class

394-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][101][102][110][210]]$

```
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,0,--
List of different nodes in T[L]
```

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

395-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][101][102][120][201]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->

R3) 0,1,-->0,0,--0,1,1,--

R4) 0,1,1,-->0,0,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, : 0,1, :

LEN=3) 0,1,1, :

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

396-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][101][102][120][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->

R3) 0,1,-->0,0,--0,1,1,--

R4) 0,1,1,-->0,0,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, : 0,1, :

LEN=3) 0,1,1, :

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

397-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][101][102][201][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->

R3) 0,1,-->0,0,--0,1,1,--

R4) 0,1,1,-->0,0,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, : 0,1, :

LEN=3) 0,1,1, :

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

398-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][012][101][110][120][201]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->

R3) 0,1,-->0,0,--0,0,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

Number new nodes in level n is given by : 1,2, DONE

-----Class

399-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][012][101][110][120][210]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->

R3) 0,1,-->0,0,--0,0,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

Number new nodes in level n is given by : 1,2, DONE

-----Class

400-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][012][101][110][201][210]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->

R3) 0,1,-->0,0,--0,0,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

Number new nodes in level n is given by : 1,2, DONE

-----Class

401-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][012][101][120][201][210]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--
 R2) 0,0,-->
 R3) 0,1,-->0,0,--0,1,1,--
 R4) 0,1,1,-->0,0,--
 List of different nodes in T[L]
 LEN=1) 0,:
 LEN=2) 0,0,: 0,1,:
 LEN=3) 0,1,1,:
 Number new nodes in level n is given by : 1,2,1, DONE

-----Class

402-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][102][110][120][201]]$

--
 Rules of T[L]:
 R1) 0,-->0,0,--0,1,--
 R2) 0,0,-->
 R3) 0,1,-->0,0,--0,0,--
 List of different nodes in T[L]
 LEN=1) 0,:
 LEN=2) 0,0,: 0,1,:
 Number new nodes in level n is given by : 1,2, DONE

-----Class

403-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][102][110][120][210]]$

--
 Rules of T[L]:
 R1) 0,-->0,0,--0,1,--
 R2) 0,0,-->
 R3) 0,1,-->0,0,--0,0,--
 List of different nodes in T[L]
 LEN=1) 0,:
 LEN=2) 0,0,: 0,1,:
 Number new nodes in level n is given by : 1,2, DONE

-----Class

404-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][102][110][201][210]]$

--
 Rules of T[L]:
 R1) 0,-->0,0,--0,1,--
 R2) 0,0,-->
 R3) 0,1,-->0,0,--0,0,--
 List of different nodes in T[L]
 LEN=1) 0,:
 LEN=2) 0,0,: 0,1,:

Number new nodes in level n is given by : 1,2, DONE

-----Class

405-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][102][120][201][210]]$

--
Rules of T[L]:

R1) $0, \rightarrow 0,0, \rightarrow 0,1, \rightarrow$

R2) $0,0, \rightarrow$

R3) $0,1, \rightarrow 0,0, \rightarrow 0,1,1, \rightarrow$

R4) $0,1,1, \rightarrow 0,0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

LEN=3) $0,1,1, :$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

406-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][012][110][120][201][210]]$

--
Rules of T[L]:

R1) $0, \rightarrow 0,0, \rightarrow 0,1, \rightarrow$

R2) $0,0, \rightarrow$

R3) $0,1, \rightarrow 0,0, \rightarrow 0,0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

Number new nodes in level n is given by : 1,2, DONE

-----Class

407-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][021][100][101][102][110]]$

--
Rules of T[L]:

R1) $0, \rightarrow 0,0, \rightarrow 0,1, \rightarrow$

R2) $0,0, \rightarrow$

R3) $0,1, \rightarrow 0,0, \rightarrow 0,0, \rightarrow 0,1, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

Number new nodes in level n is given by : 1,2, DONE

-----Class

408-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][021][100][101][102][120]]$

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,1,--0,1,2,--
R4) 0,1,1,-->0,0,--
R5) 0,1,2,-->0,0,--0,1,2,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,1,: 0,1,2,:
Number new nodes in level n is given by : 1,2,2,   DONE

```

-----Class

```

409-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][021][100][101][102][201]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,1,--0,1,--
R4) 0,1,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,1,:
Number new nodes in level n is given by : 1,2,1,   DONE

```

-----Class

```

410-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][021][100][101][102][210]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,1,--0,1,--
R4) 0,1,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,1,:
Number new nodes in level n is given by : 1,2,1,   DONE

```

-----Class

```

411-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][021][100][101][110][120]]
-----

```

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$

R2) $0, 0, \rightarrow$

R3) $0, 1, \rightarrow 0, 0, \rightarrow 0, 0, \rightarrow 0, 1, 2, \rightarrow$

R4) $0, 1, 2, \rightarrow 0, 0, \rightarrow 0, 1, 2, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, : 0, 1, :$

LEN=3) $0, 1, 2, :$

Number new nodes in level n is given by : 1, 2, 1, DONE

-----Class

412-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][021][100][101][110][201]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$

R2) $0, 0, \rightarrow$

R3) $0, 1, \rightarrow 0, 0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, : 0, 1, :$

Number new nodes in level n is given by : 1, 2, DONE

-----Class

413-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][021][100][101][110][210]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$

R2) $0, 0, \rightarrow$

R3) $0, 1, \rightarrow 0, 0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, : 0, 1, :$

Number new nodes in level n is given by : 1, 2, DONE

-----Class

414-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][021][100][101][120][201]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$

R2) $0, 0, \rightarrow$

R3) $0, 1, \rightarrow 0, 0, \rightarrow 0, 1, 1, \rightarrow 0, 1, 2, \rightarrow$

R4) $0, 1, 1, \rightarrow 0, 0, \rightarrow$

R5) $0, 1, 2, \rightarrow 0, 0, \rightarrow 0, 1, 2, \rightarrow$

List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,1, : 0,1,2, :
Number new nodes in level n is given by : 1,2,2, DONE

-----Class

415-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][021][100][101][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,1,--0,1,2,--
R4) 0,1,1,-->0,0,--
R5) 0,1,2,-->0,0,--0,1,2,--

List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,1, : 0,1,2, :
Number new nodes in level n is given by : 1,2,2, DONE

-----Class

416-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][021][100][101][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,1,--0,1,--
R4) 0,1,1,-->0,0,--

List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,1, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

417-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][021][100][102][110][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,0,--0,1,2,--
R4) 0,1,2,-->0,0,--0,1,2,--

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,2, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

418-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][021][100][102][110][201]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->

R3) 0,1,-->0,0,--0,0,--0,1,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, : 0,1, :

Number new nodes in level n is given by : 1,2, DONE

-----Class

419-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][021][100][102][110][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->

R3) 0,1,-->0,0,--0,0,--0,1,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, : 0,1, :

Number new nodes in level n is given by : 1,2, DONE

-----Class

420-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][021][100][102][120][201]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->

R3) 0,1,-->0,0,--0,1,1,--0,1,2,--

R4) 0,1,1,-->0,0,--

R5) 0,1,2,-->0,0,--0,1,2,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, : 0,1, :

LEN=3) 0,1,1, : 0,1,2, :

Number new nodes in level n is given by : 1,2,2, DONE

```

-----Class
421-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][021][100][102][120][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,1,--0,1,2,--
R4) 0,1,1,-->0,0,--
R5) 0,1,2,-->0,0,--0,1,2,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,1,: 0,1,2,:
Number new nodes in level n is given by : 1,2,2,   DONE

```

```

-----Class
422-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][021][100][102][201][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,1,--0,1,--
R4) 0,1,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,1,:
Number new nodes in level n is given by : 1,2,1,   DONE

```

```

-----Class
423-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][021][100][110][120][201]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,0,--0,1,2,--
R4) 0,1,2,-->0,0,--0,1,2,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,2,:
Number new nodes in level n is given by : 1,2,1,   DONE

```

```

-----Class

```

424-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][021][100][110][120][210]]$

--
Rules of $T[L]$:

- R1) $0, -- \rightarrow 0, 0, -- 0, 1, --$
- R2) $0, 0, -- \rightarrow$
- R3) $0, 1, -- \rightarrow 0, 0, -- 0, 0, -- 0, 1, 2, --$
- R4) $0, 1, 2, -- \rightarrow 0, 0, -- 0, 1, 2, --$

List of different nodes in $T[L]$

LEN=1) $0, :$

LEN=2) $0, 0, : 0, 1, :$

LEN=3) $0, 1, 2, :$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

425-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][021][100][110][201][210]]$

--
Rules of $T[L]$:

- R1) $0, -- \rightarrow 0, 0, -- 0, 1, --$
- R2) $0, 0, -- \rightarrow$
- R3) $0, 1, -- \rightarrow 0, 0, -- 0, 0, -- 0, 1, --$

List of different nodes in $T[L]$

LEN=1) $0, :$

LEN=2) $0, 0, : 0, 1, :$

Number new nodes in level n is given by : 1,2, DONE

-----Class

426-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][021][100][120][201][210]]$

--
Rules of $T[L]$:

- R1) $0, -- \rightarrow 0, 0, -- 0, 1, --$
- R2) $0, 0, -- \rightarrow$
- R3) $0, 1, -- \rightarrow 0, 0, -- 0, 1, 1, -- 0, 1, 2, --$
- R4) $0, 1, 1, -- \rightarrow 0, 0, --$
- R5) $0, 1, 2, -- \rightarrow 0, 0, -- 0, 1, 2, --$

List of different nodes in $T[L]$

LEN=1) $0, :$

LEN=2) $0, 0, : 0, 1, :$

LEN=3) $0, 1, 1, : 0, 1, 2, :$

Number new nodes in level n is given by : 1,2,2, DONE

-----Class

427-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][021][101][102][110][120]]$


```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,0,--0,1,2,--
R4) 0,1,2,-->0,0,--0,1,2,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,2,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

-----Class

428-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][021][101][102][110][201]]$

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,0,--0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

-----Class

429-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][021][101][102][110][210]]$

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,0,--0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

-----Class

430-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][021][101][102][120][201]]$

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,1,--0,1,2,--
R4) 0,1,1,-->0,0,--

```

R5) 0,1,2,-->0,0,--0,1,2,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,1, : 0,1,2, :
Number new nodes in level n is given by : 1,2,2, DONE

-----Class

431-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][021][101][102][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,1,--0,1,2,--
R4) 0,1,1,-->0,0,--
R5) 0,1,2,-->0,0,--0,1,2,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,1, : 0,1,2, :
Number new nodes in level n is given by : 1,2,2, DONE

-----Class

432-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][021][101][102][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,1,--0,1,--
R4) 0,1,1,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,1, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

433-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][021][101][110][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,0,--0,1,2,--
R4) 0,1,2,-->0,0,--0,1,2,--

List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,2, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

434-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][021][101][110][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,0,--0,1,2,--
R4) 0,1,2,-->0,0,--0,1,2,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,2, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

435-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][021][101][110][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,0,--0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

436-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][021][101][120][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,1,--0,1,2,--
R4) 0,1,1,-->0,0,--
R5) 0,1,2,-->0,0,--0,1,2,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :

LEN=3) 0,1,1,: 0,1,2,:
Number new nodes in level n is given by : 1,2,2, DONE

-----Class

437-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][021][102][110][120][201]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->

R3) 0,1,-->0,0,--0,0,--0,1,2,--

R4) 0,1,2,-->0,0,--0,1,2,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,1,2,:

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

438-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][021][102][110][120][210]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->

R3) 0,1,-->0,0,--0,0,--0,1,2,--

R4) 0,1,2,-->0,0,--0,1,2,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,1,2,:

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

439-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][001][021][102][110][201][210]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->

R3) 0,1,-->0,0,--0,0,--0,1,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

Number new nodes in level n is given by : 1,2, DONE

-----Class

440-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][021][102][120][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,1,--0,1,2,--
R4) 0,1,1,-->0,0,--
R5) 0,1,2,-->0,0,--0,1,2,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,1,: 0,1,2,:
Number new nodes in level n is given by : 1,2,2, DONE

-----Class
441-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][021][110][120][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,0,--0,1,2,--
R4) 0,1,2,-->0,0,--0,1,2,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,2,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class
442-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][100][101][102][110][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,0,--0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class
443-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][100][101][102][110][201]]$

--

Rules of T[L]:

R1) 0, -->0,0,--0,1,--

R2) 0,0,-->

R3) 0,1,-->0,0,--0,0,--0,1,2,--

R4) 0,1,2,-->0,0,--0,0,--0,0,--0,1,2,3,--

R5) 0,1,2,3,-->0,0,--0,0,--0,0,--0,0,--0,1,2,3,4,--

R6) 0,1,2,3,4,-->0,0,--0,0,--0,0,--0,0,--0,0,--0,1,2,3,4,5,--

R7) 0,1,2,3,4,5,-->0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,1,2,3,4,5,6,--

R8) 0,1,2,3,4,5,6,-->0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,1,2,3,4,5,6,7,--

R9)

0,1,2,3,4,5,6,7,-->0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,1,2,3,4,5,6,7,

8,--

R10)

0,1,2,3,4,5,6,7,8,-->0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,1,2,3,

4,5,6,7,8,9,--

R11)

0,1,2,3,4,5,6,7,8,9,-->0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--

0,1,2,3,4,5,6,7,8,9,10,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,1,2,:

LEN=4) 0,1,2,3,:

LEN=5) 0,1,2,3,4,:

LEN=6) 0,1,2,3,4,5,:

LEN=7) 0,1,2,3,4,5,6,:

LEN=8) 0,1,2,3,4,5,6,7,:

LEN=9) 0,1,2,3,4,5,6,7,8,:

LEN=10) 0,1,2,3,4,5,6,7,8,9,:

LEN=11) 0,1,2,3,4,5,6,7,8,9,10,:

Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,1,

-----Class

444-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][100][101][102][110][210]]$

--

Rules of T[L]:

R1) 0, -->0,0,--0,1,--

R2) 0,0,-->

R3) 0,1,-->0,0,--0,0,--0,1,2,--

R4) 0,1,2,-->0,0,--0,0,--0,0,--0,1,2,3,--

R5) 0,1,2,3,-->0,0,--0,0,--0,0,--0,0,--0,1,2,3,4,--

R6) 0,1,2,3,4,-->0,0,--0,0,--0,0,--0,0,--0,0,--0,1,2,3,4,5,--

R7) 0,1,2,3,4,5,-->0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,1,2,3,4,5,6,--

R8) 0,1,2,3,4,5,6,-->0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,1,2,3,4,5,6,7,--

R9)

0,1,2,3,4,5,6,7,-->0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,1,2,3,4,5,6,7,

8,--

R10)
0,1,2,3,4,5,6,7,8,-->0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,1,2,3,
4,5,6,7,8,9,--

R11)
0,1,2,3,4,5,6,7,8,9,-->0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--
0,1,2,3,4,5,6,7,8,9,10,--

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,2, :
LEN=4) 0,1,2,3, :
LEN=5) 0,1,2,3,4, :
LEN=6) 0,1,2,3,4,5, :
LEN=7) 0,1,2,3,4,5,6, :
LEN=8) 0,1,2,3,4,5,6,7, :
LEN=9) 0,1,2,3,4,5,6,7,8, :
LEN=10) 0,1,2,3,4,5,6,7,8,9, :
LEN=11) 0,1,2,3,4,5,6,7,8,9,10, :

Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,1,

-----Class

445-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][100][101][102][120][201]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,1,--0,1,--
R4) 0,1,1,-->0,0,--

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,1, :

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

446-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][100][101][102][120][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,1,--0,1,--
R4) 0,1,1,-->0,0,--

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,1, :

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,1,2,:

LEN=4) 0,1,2,3,:

LEN=5) 0,1,2,3,4,:

LEN=6) 0,1,2,3,4,5,:

LEN=7) 0,1,2,3,4,5,6,:

LEN=8) 0,1,2,3,4,5,6,7,:

LEN=9) 0,1,2,3,4,5,6,7,8,:

LEN=10) 0,1,2,3,4,5,6,7,8,9,:

LEN=11) 0,1,2,3,4,5,6,7,8,9,10,:

Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

-----Class

451-----

Inversion Sequences ($I_n=(n+1)!$) avoiding L=[[000][001][100][101][120][201][210]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->

R3) 0,1,-->0,0,--0,1,1,--0,1,--

R4) 0,1,1,-->0,0,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,1,1,:

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

452-----

Inversion Sequences ($I_n=(n+1)!$) avoiding L=[[000][001][100][102][110][120][201]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->

R3) 0,1,-->0,0,--0,0,--0,1,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

Number new nodes in level n is given by : 1,2, DONE

-----Class

453-----

Inversion Sequences ($I_n=(n+1)!$) avoiding L=[[000][001][100][102][110][120][210]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,0,--0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

454-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][100][102][110][201][210]]$

--
Rules of T[L]:

R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,0,--0,1,2,--
R4) 0,1,2,-->0,0,--0,0,--0,0,--0,1,2,3,--
R5) 0,1,2,3,-->0,0,--0,0,--0,0,--0,0,--0,1,2,3,4,--
R6) 0,1,2,3,4,-->0,0,--0,0,--0,0,--0,0,--0,0,--0,1,2,3,4,5,--
R7) 0,1,2,3,4,5,-->0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,1,2,3,4,5,6,--
R8) 0,1,2,3,4,5,6,-->0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,1,2,3,4,5,6,7,--
R9) 0,1,2,3,4,5,6,7,-->0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,1,2,3,4,5,6,7,8,--
R10) 0,1,2,3,4,5,6,7,8,-->0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,1,2,3,4,5,6,7,8,9,--
R11) 0,1,2,3,4,5,6,7,8,9,-->0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,1,2,3,4,5,6,7,8,9,10,--

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,2, :
LEN=4) 0,1,2,3, :
LEN=5) 0,1,2,3,4, :
LEN=6) 0,1,2,3,4,5, :
LEN=7) 0,1,2,3,4,5,6, :
LEN=8) 0,1,2,3,4,5,6,7, :
LEN=9) 0,1,2,3,4,5,6,7,8, :
LEN=10) 0,1,2,3,4,5,6,7,8,9, :
LEN=11) 0,1,2,3,4,5,6,7,8,9,10, :
Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,1,

-----Class

455-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][100][102][120][201][210]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$

R2) $0, 0, \rightarrow$

R3) $0, 1, \rightarrow 0, 0, \rightarrow 0, 1, 1, \rightarrow 0, 1, \rightarrow$

R4) $0, 1, 1, \rightarrow 0, 0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, : 0, 1, :$

LEN=3) $0, 1, 1, :$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

456-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][100][110][120][201][210]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$

R2) $0, 0, \rightarrow$

R3) $0, 1, \rightarrow 0, 0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, : 0, 1, :$

Number new nodes in level n is given by : 1,2, DONE

-----Class

457-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][101][102][110][120][201]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$

R2) $0, 0, \rightarrow$

R3) $0, 1, \rightarrow 0, 0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, : 0, 1, :$

Number new nodes in level n is given by : 1,2, DONE

-----Class

458-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][101][102][110][120][210]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$

R2) $0, 0, \rightarrow$

R3) $0, 1, \rightarrow 0, 0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) 0,0: 0,1,
Number new nodes in level n is given by : 1,2, DONE

-----Class

459-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][101][102][110][201][210]]$

--

Rules of $T[L]$:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->

R3) 0,1,-->0,0,--0,0,--0,1,2,--

R4) 0,1,2,-->0,0,--0,0,--0,0,--0,1,2,3,--

R5) 0,1,2,3,-->0,0,--0,0,--0,0,--0,0,--0,1,2,3,4,--

R6) 0,1,2,3,4,-->0,0,--0,0,--0,0,--0,0,--0,0,--0,1,2,3,4,5,--

R7) 0,1,2,3,4,5,-->0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,1,2,3,4,5,6,--

R8) 0,1,2,3,4,5,6,-->0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,1,2,3,4,5,6,7,--

R9)

0,1,2,3,4,5,6,7,-->0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,1,2,3,4,5,6,7,8,--

R10)

0,1,2,3,4,5,6,7,8,-->0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,1,2,3,4,5,6,7,8,9,--

R11)

0,1,2,3,4,5,6,7,8,9,-->0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,1,2,3,4,5,6,7,8,9,10,--

List of different nodes in $T[L]$

LEN=1) 0,:

LEN=2) 0,0: 0,1,:

LEN=3) 0,1,2,:

LEN=4) 0,1,2,3,:

LEN=5) 0,1,2,3,4,:

LEN=6) 0,1,2,3,4,5,:

LEN=7) 0,1,2,3,4,5,6,:

LEN=8) 0,1,2,3,4,5,6,7,:

LEN=9) 0,1,2,3,4,5,6,7,8,:

LEN=10) 0,1,2,3,4,5,6,7,8,9,:

LEN=11) 0,1,2,3,4,5,6,7,8,9,10,:

Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,1,

-----Class

460-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][101][102][120][201][210]]$

--

Rules of $T[L]$:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->

R3) 0,1,-->0,0,--0,1,1,--0,1,--

R4) 0,1,1,-->0,0,--

List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,1, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

461-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][101][110][120][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,0,--0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

462-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][001][102][110][120][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,0,--0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

463-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][012][021][100][101]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,1,--
R3) 0,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

464-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][012][021][100][102]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$

R2) $0, 0, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$

R3) $0, 1, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, : 0, 1, :$

Number new nodes in level n is given by : 1,2, DONE

-----Class

465-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][012][021][100][110]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$

R2) $0, 0, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$

R3) $0, 1, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, : 0, 1, :$

Number new nodes in level n is given by : 1,2, DONE

-----Class

466-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][012][021][100][120]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$

R2) $0, 0, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$

R3) $0, 1, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, : 0, 1, :$

Number new nodes in level n is given by : 1,2, DONE

-----Class

467-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][012][021][100][201]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$

R2) $0, 0, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$

R3) $0, 1, \rightarrow$

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

468-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][012][021][100][210]]$

--

Rules of $T[L]$:

- R1) 0, -->0,0, --0,1, --
- R2) 0,0, -->0,1, --0,1, --
- R3) 0,1, -->

List of different nodes in $T[L]$

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

469-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][012][021][101][102]]$

--

Rules of $T[L]$:

- R1) 0, -->0,0, --0,1, --
- R2) 0,0, -->0,1, --0,1, --
- R3) 0,1, -->

List of different nodes in $T[L]$

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

470-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][012][021][101][110]]$

--

Rules of $T[L]$:

- R1) 0, -->0,0, --0,1, --
- R2) 0,0, -->0,1, --0,1, --
- R3) 0,1, -->

List of different nodes in $T[L]$

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

471-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][012][021][101][120]]$


```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,1,--
R3) 0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

-----Class

472-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][012][021][101][201]]$

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,1,--
R3) 0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

-----Class

473-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][012][021][101][210]]$

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,1,--
R3) 0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

-----Class

474-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][012][021][102][110]]$

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,1,--
R3) 0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:

```

Number new nodes in level n is given by : 1,2, DONE

-----Class

475-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][012][021][102][120]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0,0, \rightarrow 0,1, \rightarrow$

R2) $0,0, \rightarrow 0,1, \rightarrow 0,1, \rightarrow$

R3) $0,1, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

Number new nodes in level n is given by : 1,2, DONE

-----Class

476-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][012][021][102][201]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0,0, \rightarrow 0,1, \rightarrow$

R2) $0,0, \rightarrow 0,1, \rightarrow 0,1, \rightarrow$

R3) $0,1, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

Number new nodes in level n is given by : 1,2, DONE

-----Class

477-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][012][021][102][210]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0,0, \rightarrow 0,1, \rightarrow$

R2) $0,0, \rightarrow 0,1, \rightarrow 0,1, \rightarrow$

R3) $0,1, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

Number new nodes in level n is given by : 1,2, DONE

-----Class

478-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][012][021][110][120]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,1,--
R3) 0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

479-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][012][021][110][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,1,--
R3) 0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

480-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][012][021][110][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,1,--
R3) 0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

481-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][012][021][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,1,--
R3) 0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

```

-----Class
482-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][010][011][012][021][120][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,1,--
R3) 0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,   DONE

```

```

-----Class
483-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][010][011][012][021][201][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,1,--
R3) 0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,   DONE

```

```

-----Class
484-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][010][011][012][100][101][102]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->
R4) 0,0,2,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,2,:
Number new nodes in level n is given by : 1,2,1,   DONE

```

```

-----Class
485-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][010][011][012][100][101][110]]
-----
--
Rules of T[L]:

```

```

R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->
R4) 0,0,2,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,2,:
  Number new nodes in level n is given by : 1,2,1,   DONE

```

-----Class

```

486-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][010][011][012][100][101][120]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->
R4) 0,0,2,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,2,:
  Number new nodes in level n is given by : 1,2,1,   DONE

```

-----Class

```

487-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][010][011][012][100][101][201]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->
R4) 0,0,2,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,2,:
  Number new nodes in level n is given by : 1,2,1,   DONE

```

-----Class

```

488-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][010][011][012][100][101][210]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--

```

R3) 0,1,-->
R4) 0,0,2,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,2,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

489-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][012][100][102][110]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->
R4) 0,0,2,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,2,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

490-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][012][100][102][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->
R4) 0,0,2,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,2,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

491-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][012][100][102][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->
R4) 0,0,2,-->0,1,--

List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,2, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

492-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][012][100][102][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->
R4) 0,0,2,-->0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,2, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

493-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][012][100][110][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->
R4) 0,0,2,-->0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,2, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

494-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][012][100][110][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->
R4) 0,0,2,-->0,1,--
List of different nodes in T[L]
LEN=1) 0, :

LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,2,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

495-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][010][011][012][100][110][210]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->
R4) 0,0,2,-->0,1,--
List of different nodes in T[L]

LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,2,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

496-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][010][011][012][100][120][201]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->
R4) 0,0,2,-->0,1,--
List of different nodes in T[L]

LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,2,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

497-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][010][011][012][100][120][210]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->
R4) 0,0,2,-->0,1,--
List of different nodes in T[L]

LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,2,:

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

498-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][012][100][201][210]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0,0, \rightarrow 0,1, \rightarrow$

R2) $0,0, \rightarrow 0,1, \rightarrow 0,0,2, \rightarrow$

R3) $0,1, \rightarrow$

R4) $0,0,2, \rightarrow 0,1, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

LEN=3) $0,0,2, :$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

499-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][012][101][102][110]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0,0, \rightarrow 0,1, \rightarrow$

R2) $0,0, \rightarrow 0,1, \rightarrow 0,0,2, \rightarrow$

R3) $0,1, \rightarrow$

R4) $0,0,2, \rightarrow 0,1, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

LEN=3) $0,0,2, :$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

500-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][012][101][102][120]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0,0, \rightarrow 0,1, \rightarrow$

R2) $0,0, \rightarrow 0,1, \rightarrow 0,0,2, \rightarrow$

R3) $0,1, \rightarrow$

R4) $0,0,2, \rightarrow 0,1, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

LEN=3) $0,0,2, :$

Number new nodes in level n is given by : 1,2,1, DONE

```

-----Class
501-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][010][011][012][101][102][201]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->
R4) 0,0,2,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,2,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

```

-----Class
502-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][010][011][012][101][102][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->
R4) 0,0,2,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,2,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

```

-----Class
503-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][010][011][012][101][110][120]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->
R4) 0,0,2,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,2,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

```

-----Class
504-----

```

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][012][101][110][201]]$

--

Rules of $T[L]$:

R1) $0, -- \rightarrow 0, 0, -- 0, 1, --$

R2) $0, 0, -- \rightarrow 0, 1, -- 0, 0, 2, --$

R3) $0, 1, -- \rightarrow$

R4) $0, 0, 2, -- \rightarrow 0, 1, --$

List of different nodes in $T[L]$

LEN=1) $0, :$

LEN=2) $0, 0, : 0, 1, :$

LEN=3) $0, 0, 2, :$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

505-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][012][101][110][210]]$

--

Rules of $T[L]$:

R1) $0, -- \rightarrow 0, 0, -- 0, 1, --$

R2) $0, 0, -- \rightarrow 0, 1, -- 0, 0, 2, --$

R3) $0, 1, -- \rightarrow$

R4) $0, 0, 2, -- \rightarrow 0, 1, --$

List of different nodes in $T[L]$

LEN=1) $0, :$

LEN=2) $0, 0, : 0, 1, :$

LEN=3) $0, 0, 2, :$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

506-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][012][101][120][201]]$

--

Rules of $T[L]$:

R1) $0, -- \rightarrow 0, 0, -- 0, 1, --$

R2) $0, 0, -- \rightarrow 0, 1, -- 0, 0, 2, --$

R3) $0, 1, -- \rightarrow$

R4) $0, 0, 2, -- \rightarrow 0, 1, --$

List of different nodes in $T[L]$

LEN=1) $0, :$

LEN=2) $0, 0, : 0, 1, :$

LEN=3) $0, 0, 2, :$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

507-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][012][101][120][210]]$

```
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->
R4) 0,0,2,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,2,:
Number new nodes in level n is given by : 1,2,1,  DONE
```

-----Class

508-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][012][101][201][210]]$

```
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->
R4) 0,0,2,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,2,:
Number new nodes in level n is given by : 1,2,1,  DONE
```

-----Class

509-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][012][102][110][120]]$

```
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->
R4) 0,0,2,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,2,:
Number new nodes in level n is given by : 1,2,1,  DONE
```

-----Class

510-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][012][102][110][201]]$

```
--
Rules of T[L]:
```

R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->
R4) 0,0,2,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,2,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

511-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][012][102][110][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->
R4) 0,0,2,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,2,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

512-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][012][102][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->
R4) 0,0,2,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,2,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

513-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][012][102][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--

R3) 0,1,-->
R4) 0,0,2,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,2,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

514-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][012][102][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->
R4) 0,0,2,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,2,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

515-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][012][110][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->
R4) 0,0,2,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,2,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

516-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][012][110][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->
R4) 0,0,2,-->0,1,--

List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,2, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

517-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][012][110][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->
R4) 0,0,2,-->0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,2, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

518-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][012][120][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->
R4) 0,0,2,-->0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,2, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

519-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][021][100][101][102]]$

--
Rules of T[L]:
R1) 0,-->0,--0,1,--
R2) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,1, :
Number new nodes in level n is given by : 1,1, DONE

```

-----Class
520-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][010][011][021][100][101][110]]
-----
--
Rules of T[L]:
R1) 0,-->0,--0,1,--
R2) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,1,:
Number new nodes in level n is given by : 1,1,  DONE

```

```

-----Class
521-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][010][011][021][100][101][120]]
-----
--
Rules of T[L]:
R1) 0,-->0,--0,1,--
R2) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,1,:
Number new nodes in level n is given by : 1,1,  DONE

```

```

-----Class
522-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][010][011][021][100][101][201]]
-----
--
Rules of T[L]:
R1) 0,-->0,--0,1,--
R2) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,1,:
Number new nodes in level n is given by : 1,1,  DONE

```

```

-----Class
523-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][010][011][021][100][101][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,--0,1,--
R2) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:

```


LEN=2) 0,1,:
Number new nodes in level n is given by : 1,1, DONE

-----Class

524-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][010][011][021][100][102][110]]

--
Rules of T[L]:

R1) 0,-->0,--0,1,--

R2) 0,1,-->0,1,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,1,:

Number new nodes in level n is given by : 1,1, DONE

-----Class

525-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][010][011][021][100][102][120]]

--
Rules of T[L]:

R1) 0,-->0,--0,1,--

R2) 0,1,-->0,1,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,1,:

Number new nodes in level n is given by : 1,1, DONE

-----Class

526-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][010][011][021][100][102][201]]

--
Rules of T[L]:

R1) 0,-->0,--0,1,--

R2) 0,1,-->0,1,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,1,:

Number new nodes in level n is given by : 1,1, DONE

-----Class

527-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][010][011][021][100][102][210]]

--
Rules of T[L]:

R1) 0,-->0,--0,1,--

R2) 0,1,-->0,1,--

List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,1, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

528-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][010][011][021][100][110][120]]

--
Rules of T[L]:
R1) 0,-->0,--0,1,--
R2) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,1, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

529-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][010][011][021][100][110][201]]

--
Rules of T[L]:
R1) 0,-->0,--0,1,--
R2) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,1, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

530-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][010][011][021][100][110][210]]

--
Rules of T[L]:
R1) 0,-->0,--0,1,--
R2) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,1, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

531-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][010][011][021][100][120][201]]

--
Rules of T[L]:

R1) 0,-->0,--0,1,--
R2) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,1,:
Number new nodes in level n is given by : 1,1, DONE

-----Class

532-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][021][100][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,--0,1,--
R2) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,1,:
Number new nodes in level n is given by : 1,1, DONE

-----Class

533-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][021][100][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,--0,1,--
R2) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,1,:
Number new nodes in level n is given by : 1,1, DONE

-----Class

534-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][021][101][102][110]]$

--
Rules of T[L]:
R1) 0,-->0,--0,1,--
R2) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,1,:
Number new nodes in level n is given by : 1,1, DONE

-----Class

535-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][021][101][102][120]]$

```
--
Rules of T[L]:
R1) 0,-->0,--0,1,--
R2) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,1,:
  Number new nodes in level n is given by : 1,1,  DONE
```

-----Class

```
536-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][010][011][021][101][102][201]]
-----
```

```
--
Rules of T[L]:
R1) 0,-->0,--0,1,--
R2) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,1,:
  Number new nodes in level n is given by : 1,1,  DONE
```

-----Class

```
537-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][010][011][021][101][102][210]]
-----
```

```
--
Rules of T[L]:
R1) 0,-->0,--0,1,--
R2) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,1,:
  Number new nodes in level n is given by : 1,1,  DONE
```

-----Class

```
538-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][010][011][021][101][110][120]]
-----
```

```
--
Rules of T[L]:
R1) 0,-->0,--0,1,--
R2) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,1,:
  Number new nodes in level n is given by : 1,1,  DONE
```

-----Class

```
539-----
```

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][021][101][110][201]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, \rightarrow 0, 1, \rightarrow$

R2) $0, 1, \rightarrow 0, 1, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 1, :$

Number new nodes in level n is given by : 1,1, DONE

-----Class

540-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][021][101][110][210]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, \rightarrow 0, 1, \rightarrow$

R2) $0, 1, \rightarrow 0, 1, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 1, :$

Number new nodes in level n is given by : 1,1, DONE

-----Class

541-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][021][101][120][201]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, \rightarrow 0, 1, \rightarrow$

R2) $0, 1, \rightarrow 0, 1, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 1, :$

Number new nodes in level n is given by : 1,1, DONE

-----Class

542-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][021][101][120][210]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, \rightarrow 0, 1, \rightarrow$

R2) $0, 1, \rightarrow 0, 1, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 1, :$

Number new nodes in level n is given by : 1,1, DONE

```

-----Class
543-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][010][011][021][101][201][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,--0,1,--
R2) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,1,:
Number new nodes in level n is given by : 1,1,  DONE

```

```

-----Class
544-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][010][011][021][102][110][120]]
-----
--
Rules of T[L]:
R1) 0,-->0,--0,1,--
R2) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,1,:
Number new nodes in level n is given by : 1,1,  DONE

```

```

-----Class
545-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][010][011][021][102][110][201]]
-----
--
Rules of T[L]:
R1) 0,-->0,--0,1,--
R2) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,1,:
Number new nodes in level n is given by : 1,1,  DONE

```

```

-----Class
546-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][010][011][021][102][110][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,--0,1,--
R2) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,1,:

```

Number new nodes in level n is given by : 1,1, DONE

-----Class

547-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][021][102][120][201]]$

--

Rules of T[L]:

R1) $0,-->0,--0,1,--$

R2) $0,1,-->0,1,--$

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,1,:

Number new nodes in level n is given by : 1,1, DONE

-----Class

548-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][021][102][120][210]]$

--

Rules of T[L]:

R1) $0,-->0,--0,1,--$

R2) $0,1,-->0,1,--$

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,1,:

Number new nodes in level n is given by : 1,1, DONE

-----Class

549-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][021][102][201][210]]$

--

Rules of T[L]:

R1) $0,-->0,--0,1,--$

R2) $0,1,-->0,1,--$

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,1,:

Number new nodes in level n is given by : 1,1, DONE

-----Class

550-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][021][110][120][201]]$

--

Rules of T[L]:

R1) $0,-->0,--0,1,--$

R2) $0,1,-->0,1,--$

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,1, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

551-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][010][011][021][110][120][210]]

--

Rules of T[L]:

R1) 0,-->0,--0,1,--

R2) 0,1,-->0,1,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,1, :

Number new nodes in level n is given by : 1,1, DONE

-----Class

552-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][010][011][021][110][201][210]]

--

Rules of T[L]:

R1) 0,-->0,--0,1,--

R2) 0,1,-->0,1,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,1, :

Number new nodes in level n is given by : 1,1, DONE

-----Class

553-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][010][011][021][120][201][210]]

--

Rules of T[L]:

R1) 0,-->0,--0,1,--

R2) 0,1,-->0,1,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,1, :

Number new nodes in level n is given by : 1,1, DONE

-----Class

554-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][010][011][100][101][102][110]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,--0,0,2,--
 R3) 0,1,-->0,1,--
 R4) 0,0,2,-->0,0,2,1,--0,0,2,--
 R5) 0,0,2,1,-->
 List of different nodes in T[L]
 LEN=1) 0,:
 LEN=2) 0,0,: 0,1,:
 LEN=3) 0,0,2,:
 LEN=4) 0,0,2,1,:
 Number new nodes in level n is given by : 1,2,1,1, DONE

-----Class

555-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][100][101][102][120]]$

--
 Rules of T[L]:
 R1) 0,-->0,0,--0,1,--
 R2) 0,0,-->0,0,--0,0,2,--
 R3) 0,1,-->0,1,--
 R4) 0,0,2,-->0,0,2,1,--0,1,--
 R5) 0,0,2,1,-->
 List of different nodes in T[L]
 LEN=1) 0,:
 LEN=2) 0,0,: 0,1,:
 LEN=3) 0,0,2,:
 LEN=4) 0,0,2,1,:
 Number new nodes in level n is given by : 1,2,1,1, DONE

-----Class

556-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][100][101][102][201]]$

--
 Rules of T[L]:
 R1) 0,-->0,0,--0,1,--
 R2) 0,0,-->0,0,--0,0,2,--
 R3) 0,1,-->0,1,--
 R4) 0,0,2,-->0,0,2,1,--0,0,2,--
 R5) 0,0,2,1,-->
 List of different nodes in T[L]
 LEN=1) 0,:
 LEN=2) 0,0,: 0,1,:
 LEN=3) 0,0,2,:
 LEN=4) 0,0,2,1,:
 Number new nodes in level n is given by : 1,2,1,1, DONE

-----Class

557-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][100][101][102][210]]$

```

-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--0,0,2,--
R3) 0,1,-->0,1,--
R4) 0,0,2,-->0,0,2,1,--0,0,2,--
R5) 0,0,2,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,2,:
LEN=4) 0,0,2,1,:
Number new nodes in level n is given by : 1,2,1,1,  DONE

```

```

-----Class
558-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][010][011][100][101][110][120]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--0,--
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

```

-----Class
559-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][010][011][100][101][110][201]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--0,0,--
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

```

-----Class
560-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][010][011][100][101][110][210]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--

```

R2) 0,0,-->0,0,--0,0,--
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

561-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][100][101][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--0,--
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

562-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][100][101][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--0,--
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

563-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][100][101][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--0,0,--
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

564-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][100][102][110][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--0,0,2,--
R3) 0,1,-->0,1,--
R4) 0,0,2,-->0,0,2,1,--0,1,--
R5) 0,0,2,1,-->

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,2, :
LEN=4) 0,0,2,1, :

Number new nodes in level n is given by : 1,2,1,1, DONE

-----Class

565-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][100][102][110][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--0,0,2,--
R3) 0,1,-->0,1,--
R4) 0,0,2,-->0,0,2,1,--0,0,2,--
R5) 0,0,2,1,-->

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,2, :
LEN=4) 0,0,2,1, :

Number new nodes in level n is given by : 1,2,1,1, DONE

-----Class

566-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][100][102][110][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--0,0,2,--
R3) 0,1,-->0,1,--
R4) 0,0,2,-->0,0,2,1,--0,0,2,--
R5) 0,0,2,1,-->

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,2, :

LEN=4) 0,0,2,1,:
Number new nodes in level n is given by : 1,2,1,1, DONE

-----Class

567-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][100][102][120][201]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,--0,0,2,--
- R3) 0,1,-->0,1,--
- R4) 0,0,2,-->0,0,2,1,--0,1,--
- R5) 0,0,2,1,-->

List of different nodes in T[L]

- LEN=1) 0,:
- LEN=2) 0,0,: 0,1,:
- LEN=3) 0,0,2,:
- LEN=4) 0,0,2,1,:

Number new nodes in level n is given by : 1,2,1,1, DONE

-----Class

568-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][100][102][120][210]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,--0,0,2,--
- R3) 0,1,-->0,1,--
- R4) 0,0,2,-->0,0,2,1,--0,1,--
- R5) 0,0,2,1,-->

List of different nodes in T[L]

- LEN=1) 0,:
- LEN=2) 0,0,: 0,1,:
- LEN=3) 0,0,2,:
- LEN=4) 0,0,2,1,:

Number new nodes in level n is given by : 1,2,1,1, DONE

-----Class

569-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][100][102][201][210]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,--0,0,2,--
- R3) 0,1,-->0,1,--
- R4) 0,0,2,-->0,0,2,1,--0,0,2,--
- R5) 0,0,2,1,-->

List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,2, :
LEN=4) 0,0,2,1, :
Number new nodes in level n is given by : 1,2,1,1, DONE

-----Class

570-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][100][110][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--0,--
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

571-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][100][110][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--0,--
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

572-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][100][110][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--0,0,--
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

573-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][100][120][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--0,--
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

574-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][101][102][110][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--0,0,2,--
R3) 0,1,-->0,1,--
R4) 0,0,2,-->0,0,2,1,--0,1,--
R5) 0,0,2,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,2, :
LEN=4) 0,0,2,1, :
Number new nodes in level n is given by : 1,2,1,1, DONE

-----Class

575-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][101][102][110][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--0,0,2,--
R3) 0,1,-->0,1,--
R4) 0,0,2,-->0,0,2,1,--0,0,2,--
R5) 0,0,2,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,2, :
LEN=4) 0,0,2,1, :
Number new nodes in level n is given by : 1,2,1,1, DONE

-----Class

576-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][101][102][110][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--0,0,2,--
R3) 0,1,-->0,1,--
R4) 0,0,2,-->0,0,2,1,--0,0,2,--
R5) 0,0,2,1,-->

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,2, :
LEN=4) 0,0,2,1, :

Number new nodes in level n is given by : 1,2,1,1, DONE

-----Class

577-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][101][102][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--0,0,2,--
R3) 0,1,-->0,1,--
R4) 0,0,2,-->0,0,2,1,--0,1,--
R5) 0,0,2,1,-->

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,2, :
LEN=4) 0,0,2,1, :

Number new nodes in level n is given by : 1,2,1,1, DONE

-----Class

578-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][101][102][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--0,0,2,--
R3) 0,1,-->0,1,--
R4) 0,0,2,-->0,0,2,1,--0,1,--
R5) 0,0,2,1,-->

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,2, :

LEN=4) 0,0,2,1,:
Number new nodes in level n is given by : 1,2,1,1, DONE

-----Class

579-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][101][102][201][210]]$

--
Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,--0,0,2,--
- R3) 0,1,-->0,1,--
- R4) 0,0,2,-->0,0,2,1,--0,0,2,--
- R5) 0,0,2,1,-->

List of different nodes in T[L]

- LEN=1) 0,:
- LEN=2) 0,0,: 0,1,:
- LEN=3) 0,0,2,:
- LEN=4) 0,0,2,1,:

Number new nodes in level n is given by : 1,2,1,1, DONE

-----Class

580-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][101][110][120][201]]$

--
Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,--0,--
- R3) 0,1,-->0,1,--

List of different nodes in T[L]

- LEN=1) 0,:
- LEN=2) 0,0,: 0,1,:

Number new nodes in level n is given by : 1,2, DONE

-----Class

581-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][101][110][120][210]]$

--
Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,--0,--
- R3) 0,1,-->0,1,--

List of different nodes in T[L]

- LEN=1) 0,:
- LEN=2) 0,0,: 0,1,:

Number new nodes in level n is given by : 1,2, DONE

-----Class

582-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][101][110][201][210]]$

--

Rules of $T[L]$:

R1) $0,-->0,0,--0,1,--$

R2) $0,0,-->0,0,--0,0,--$

R3) $0,1,-->0,1,--$

List of different nodes in $T[L]$

LEN=1) $0,:$

LEN=2) $0,0,: 0,1,:$

Number new nodes in level n is given by : 1,2, DONE

-----Class

583-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][101][120][201][210]]$

--

Rules of $T[L]$:

R1) $0,-->0,0,--0,1,--$

R2) $0,0,-->0,0,--0,--$

R3) $0,1,-->0,1,--$

List of different nodes in $T[L]$

LEN=1) $0,:$

LEN=2) $0,0,: 0,1,:$

Number new nodes in level n is given by : 1,2, DONE

-----Class

584-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][102][110][120][201]]$

--

Rules of $T[L]$:

R1) $0,-->0,0,--0,1,--$

R2) $0,0,-->0,0,--0,0,2,--$

R3) $0,1,-->0,1,--$

R4) $0,0,2,-->0,0,2,1,--0,1,--$

R5) $0,0,2,1,-->$

List of different nodes in $T[L]$

LEN=1) $0,:$

LEN=2) $0,0,: 0,1,:$

LEN=3) $0,0,2,:$

LEN=4) $0,0,2,1,:$

Number new nodes in level n is given by : 1,2,1,1, DONE

-----Class

585-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][102][110][120][210]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,--0,0,2,--
- R3) 0,1,-->0,1,--
- R4) 0,0,2,-->0,0,2,1,--0,1,--
- R5) 0,0,2,1,-->

List of different nodes in T[L]

- LEN=1) 0,:
- LEN=2) 0,0,: 0,1,:
- LEN=3) 0,0,2,:
- LEN=4) 0,0,2,1,:

Number new nodes in level n is given by : 1,2,1,1, DONE

-----Class

586-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][102][110][201][210]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,--0,0,2,--
- R3) 0,1,-->0,1,--
- R4) 0,0,2,-->0,0,2,1,--0,0,2,--
- R5) 0,0,2,1,-->

List of different nodes in T[L]

- LEN=1) 0,:
- LEN=2) 0,0,: 0,1,:
- LEN=3) 0,0,2,:
- LEN=4) 0,0,2,1,:

Number new nodes in level n is given by : 1,2,1,1, DONE

-----Class

587-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][102][120][201][210]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,--0,0,2,--
- R3) 0,1,-->0,1,--
- R4) 0,0,2,-->0,0,2,1,--0,1,--
- R5) 0,0,2,1,-->

List of different nodes in T[L]

- LEN=1) 0,:
- LEN=2) 0,0,: 0,1,:
- LEN=3) 0,0,2,:
- LEN=4) 0,0,2,1,:

Number new nodes in level n is given by : 1,2,1,1, DONE

-----Class

588-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][011][110][120][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--0,--
R3) 0,1,-->0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

589-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][021][100][101][102]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,1,--
R3) 0,1,-->0,1,1,--
R4) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,1, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

590-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][021][100][101][110]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,1,--
R3) 0,1,-->0,1,1,--
R4) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,1, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

591-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][021][100][101][120]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,1,--0,1,--
- R3) 0,1,-->0,1,1,--
- R4) 0,1,1,-->

List of different nodes in T[L]

- LEN=1) 0,:
- LEN=2) 0,0,: 0,1,:
- LEN=3) 0,1,1,:

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

592-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][021][100][101][201]]$

--
Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,1,--0,1,--
- R3) 0,1,-->0,1,1,--
- R4) 0,1,1,-->

List of different nodes in T[L]

- LEN=1) 0,:
- LEN=2) 0,0,: 0,1,:
- LEN=3) 0,1,1,:

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

593-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][021][100][101][210]]$

--
Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,1,--0,1,--
- R3) 0,1,-->0,1,1,--
- R4) 0,1,1,-->

List of different nodes in T[L]

- LEN=1) 0,:
- LEN=2) 0,0,: 0,1,:
- LEN=3) 0,1,1,:

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

594-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][021][100][102][110]]$

--
Rules of T[L]:

- R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,1,--0,1,--
R3) 0,1,-->0,1,1,--
R4) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,1,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

595-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][021][100][102][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,1,--
R3) 0,1,-->0,1,1,--
R4) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,1,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

596-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][021][100][102][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,1,--
R3) 0,1,-->0,1,1,--
R4) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,1,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

597-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][021][100][102][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,1,--
R3) 0,1,-->0,1,1,--

R4) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,1, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

598-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][021][100][110][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,1,--
R3) 0,1,-->0,1,1,--
R4) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,1, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

599-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][021][100][110][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,1,--
R3) 0,1,-->0,1,1,--
R4) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,1, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

600-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][021][100][110][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,1,--
R3) 0,1,-->0,1,1,--
R4) 0,1,1,-->
List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,1, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

601-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][021][100][120][201]]$

--
Rules of T[L]:
R1) 0, -->0,0, --0,1, --
R2) 0,0, -->0,1, --0,1, --
R3) 0,1, -->0,1,1, --
R4) 0,1,1, -->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,1, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

602-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][021][100][120][210]]$

--
Rules of T[L]:
R1) 0, -->0,0, --0,1, --
R2) 0,0, -->0,1, --0,1, --
R3) 0,1, -->0,1,1, --
R4) 0,1,1, -->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,1, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

603-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][021][100][201][210]]$

--
Rules of T[L]:
R1) 0, -->0,0, --0,1, --
R2) 0,0, -->0,1, --0,1, --
R3) 0,1, -->0,1,1, --
R4) 0,1,1, -->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :

LEN=3) 0,1,1,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

604-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][021][101][102][110]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,1,--0,1,--

R3) 0,1,-->0,1,1,--

R4) 0,1,1,-->

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,1,1,:

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

605-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][021][101][102][120]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,1,--0,1,--

R3) 0,1,-->0,1,1,--

R4) 0,1,1,-->

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,1,1,:

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

606-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][021][101][102][201]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,1,--0,1,--

R3) 0,1,-->0,1,1,--

R4) 0,1,1,-->

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,1,1,:

Number new nodes in level n is given by : 1,2,1, DONE

-----Class
607-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][021][101][102][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,1,--
R3) 0,1,-->0,1,1,--
R4) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,1,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class
608-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][021][101][110][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,1,--
R3) 0,1,-->0,1,1,--
R4) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,1,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class
609-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][021][101][110][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,1,--
R3) 0,1,-->0,1,1,--
R4) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,1,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

610-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][021][101][110][210]]$

--
Rules of $T[L]$:

- R1) $0,-->0,0,--0,1,--$
- R2) $0,0,-->0,1,--0,1,--$
- R3) $0,1,-->0,1,1,--$
- R4) $0,1,1,-->$

List of different nodes in $T[L]$

LEN=1) $0,:$

LEN=2) $0,0,: 0,1,:$

LEN=3) $0,1,1,:$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

611-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][021][101][120][201]]$

--
Rules of $T[L]$:

- R1) $0,-->0,0,--0,1,--$
- R2) $0,0,-->0,1,--0,1,--$
- R3) $0,1,-->0,1,1,--$
- R4) $0,1,1,-->$

List of different nodes in $T[L]$

LEN=1) $0,:$

LEN=2) $0,0,: 0,1,:$

LEN=3) $0,1,1,:$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

612-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][021][101][120][210]]$

--
Rules of $T[L]$:

- R1) $0,-->0,0,--0,1,--$
- R2) $0,0,-->0,1,--0,1,--$
- R3) $0,1,-->0,1,1,--$
- R4) $0,1,1,-->$

List of different nodes in $T[L]$

LEN=1) $0,:$

LEN=2) $0,0,: 0,1,:$

LEN=3) $0,1,1,:$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

613-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][021][101][201][210]]$

```

-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,1,--
R3) 0,1,-->0,1,1,--
R4) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,1,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

```

-----Class
614-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][010][012][021][102][110][120]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,1,--
R3) 0,1,-->0,1,1,--
R4) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,1,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

```

-----Class
615-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][010][012][021][102][110][201]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,1,--
R3) 0,1,-->0,1,1,--
R4) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,1,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

```

-----Class
616-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][010][012][021][102][110][210]]
-----

```

```

--

```

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,1,--0,1,--
- R3) 0,1,-->0,1,1,--
- R4) 0,1,1,-->

List of different nodes in T[L]

- LEN=1) 0,:
- LEN=2) 0,0,: 0,1,:
- LEN=3) 0,1,1,:

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

617-----

Inversion Sequences ($I_n=(n+1)!$) avoiding L=[[000][010][012][021][102][120][201]]

--
Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,1,--0,1,--
- R3) 0,1,-->0,1,1,--
- R4) 0,1,1,-->

List of different nodes in T[L]

- LEN=1) 0,:
- LEN=2) 0,0,: 0,1,:
- LEN=3) 0,1,1,:

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

618-----

Inversion Sequences ($I_n=(n+1)!$) avoiding L=[[000][010][012][021][102][120][210]]

--
Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,1,--0,1,--
- R3) 0,1,-->0,1,1,--
- R4) 0,1,1,-->

List of different nodes in T[L]

- LEN=1) 0,:
- LEN=2) 0,0,: 0,1,:
- LEN=3) 0,1,1,:

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

619-----

Inversion Sequences ($I_n=(n+1)!$) avoiding L=[[000][010][012][021][102][201][210]]

--
Rules of T[L]:

- R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,1,--0,1,--
R3) 0,1,-->0,1,1,--
R4) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,1,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

620-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][021][110][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,1,--
R3) 0,1,-->0,1,1,--
R4) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,1,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

621-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][021][110][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,1,--
R3) 0,1,-->0,1,1,--
R4) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,1,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

622-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][021][110][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,1,--
R3) 0,1,-->0,1,1,--

R4) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,1, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

623-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][021][120][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,1,--
R3) 0,1,-->0,1,1,--
R4) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,1, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

624-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][100][101][102][110]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->0,1,1,--
R4) 0,0,2,-->0,1,1,--0,1,1,--
R5) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,2, : 0,1,1, :
Number new nodes in level n is given by : 1,2,2, DONE

-----Class

625-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][100][101][102][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->0,1,1,--
R4) 0,0,2,-->0,1,1,--0,1,--

R5) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,2, : 0,1,1, :
Number new nodes in level n is given by : 1,2,2, DONE

-----Class

626-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][100][101][102][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->0,1,1,--
R4) 0,0,2,-->0,1,1,--0,1,--
R5) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,2, : 0,1,1, :
Number new nodes in level n is given by : 1,2,2, DONE

-----Class

627-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][100][101][102][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->0,1,1,--
R4) 0,0,2,-->0,1,1,--0,1,--
R5) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,2, : 0,1,1, :
Number new nodes in level n is given by : 1,2,2, DONE

-----Class

628-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][100][101][110][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->0,1,1,--

R4) 0,0,2,-->0,1,1,--0,1,1,--
R5) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,2, : 0,1,1, :
Number new nodes in level n is given by : 1,2,2, DONE

-----Class

629-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][100][101][110][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->0,1,1,--
R4) 0,0,2,-->0,1,1,--0,1,1,--
R5) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,2, : 0,1,1, :
Number new nodes in level n is given by : 1,2,2, DONE

-----Class

630-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][100][101][110][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->0,1,1,--
R4) 0,0,2,-->0,1,1,--0,1,1,--
R5) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,2, : 0,1,1, :
Number new nodes in level n is given by : 1,2,2, DONE

-----Class

631-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][100][101][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--

R3) 0,1,-->0,1,1,--
R4) 0,0,2,-->0,1,1,--0,1,--
R5) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,2, : 0,1,1, :
Number new nodes in level n is given by : 1,2,2, DONE

-----Class

632-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][100][101][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->0,1,1,--
R4) 0,0,2,-->0,1,1,--0,1,--
R5) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,2, : 0,1,1, :
Number new nodes in level n is given by : 1,2,2, DONE

-----Class

633-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][100][101][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->0,1,1,--
R4) 0,0,2,-->0,1,1,--0,1,--
R5) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,2, : 0,1,1, :
Number new nodes in level n is given by : 1,2,2, DONE

-----Class

634-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][100][102][110][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->0,1,1,--
R4) 0,0,2,-->0,1,1,--0,1,1,--
R5) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,2, : 0,1,1, :
Number new nodes in level n is given by : 1,2,2, DONE

-----Class

635-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][100][102][110][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->0,1,1,--
R4) 0,0,2,-->0,1,1,--0,1,1,--
R5) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,2, : 0,1,1, :
Number new nodes in level n is given by : 1,2,2, DONE

-----Class

636-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][100][102][110][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->0,1,1,--
R4) 0,0,2,-->0,1,1,--0,1,1,--
R5) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,2, : 0,1,1, :
Number new nodes in level n is given by : 1,2,2, DONE

-----Class

637-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][100][102][120][201]]$

--
Rules of T[L]:

```

R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->0,1,1,--
R4) 0,0,2,-->0,1,1,--0,1,--
R5) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,2,: 0,1,1,:
Number new nodes in level n is given by : 1,2,2,  DONE

```

-----Class

638-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][100][102][120][210]]$

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->0,1,1,--
R4) 0,0,2,-->0,1,1,--0,1,--
R5) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,2,: 0,1,1,:
Number new nodes in level n is given by : 1,2,2,  DONE

```

-----Class

639-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][100][102][201][210]]$

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->0,1,1,--
R4) 0,0,2,-->0,1,1,--0,1,--
R5) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,2,: 0,1,1,:
Number new nodes in level n is given by : 1,2,2,  DONE

```

-----Class

640-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][100][110][120][201]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,1,--0,0,2,--
- R3) 0,1,-->0,1,1,--
- R4) 0,0,2,-->0,1,1,--0,1,1,--
- R5) 0,1,1,-->

List of different nodes in T[L]

- LEN=1) 0,:
- LEN=2) 0,0,: 0,1,:
- LEN=3) 0,0,2,: 0,1,1,:

Number new nodes in level n is given by : 1,2,2, DONE

-----Class

641-----

Inversion Sequences ($I_n=(n+1)!$) avoiding L=[[000][010][012][100][110][120][210]]

--
Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,1,--0,0,2,--
- R3) 0,1,-->0,1,1,--
- R4) 0,0,2,-->0,1,1,--0,1,1,--
- R5) 0,1,1,-->

List of different nodes in T[L]

- LEN=1) 0,:
- LEN=2) 0,0,: 0,1,:
- LEN=3) 0,0,2,: 0,1,1,:

Number new nodes in level n is given by : 1,2,2, DONE

-----Class

642-----

Inversion Sequences ($I_n=(n+1)!$) avoiding L=[[000][010][012][100][110][201][210]]

--
Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,1,--0,0,2,--
- R3) 0,1,-->0,1,1,--
- R4) 0,0,2,-->0,1,1,--0,1,1,--
- R5) 0,1,1,-->

List of different nodes in T[L]

- LEN=1) 0,:
- LEN=2) 0,0,: 0,1,:
- LEN=3) 0,0,2,: 0,1,1,:

Number new nodes in level n is given by : 1,2,2, DONE

-----Class

643-----

Inversion Sequences ($I_n=(n+1)!$) avoiding L=[[000][010][012][100][120][201][210]]

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->0,1,1,--
R4) 0,0,2,-->0,1,1,--0,1,--
R5) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,2,: 0,1,1,:
Number new nodes in level n is given by : 1,2,2,  DONE

```

-----Class

644-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][101][102][110][120]]$

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->0,1,1,--
R4) 0,0,2,-->0,1,--0,1,1,--
R5) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,2,: 0,1,1,:
Number new nodes in level n is given by : 1,2,2,  DONE

```

-----Class

645-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][101][102][110][201]]$

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->0,1,1,--
R4) 0,0,2,-->0,1,--0,1,1,--
R5) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,2,: 0,1,1,:
Number new nodes in level n is given by : 1,2,2,  DONE

```

-----Class

646-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][101][102][110][210]]$

```

-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->0,1,1,--
R4) 0,0,2,-->0,1,--0,1,1,--
R5) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,2,: 0,1,1,:
Number new nodes in level n is given by : 1,2,2,  DONE

```

-----Class

```

647-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][010][012][101][102][120][201]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->0,1,1,--
R4) 0,0,2,-->0,1,--0,0,2,2,--
R5) 0,1,1,-->
R6) 0,0,2,2,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,2,: 0,1,1,:
LEN=4) 0,0,2,2,:
Number new nodes in level n is given by : 1,2,2,1,  DONE

```

-----Class

```

648-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][010][012][101][102][120][210]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->0,1,1,--
R4) 0,0,2,-->0,1,--0,0,2,2,--
R5) 0,1,1,-->
R6) 0,0,2,2,-->0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,2,: 0,1,1,:
LEN=4) 0,0,2,2,:

```

Number new nodes in level n is given by : 1,2,2,1, DONE

-----Class

649-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][101][102][201][210]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,1,--0,0,2,--
- R3) 0,1,-->0,1,1,--
- R4) 0,0,2,-->0,1,--0,0,2,2,--
- R5) 0,1,1,-->
- R6) 0,0,2,2,-->0,1,--

List of different nodes in T[L]

- LEN=1) 0,:
- LEN=2) 0,0,: 0,1,:
- LEN=3) 0,0,2,: 0,1,1,:
- LEN=4) 0,0,2,2,:

Number new nodes in level n is given by : 1,2,2,1, DONE

-----Class

650-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][101][110][120][201]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,1,--0,0,2,--
- R3) 0,1,-->0,1,1,--
- R4) 0,0,2,-->0,1,--0,1,1,--
- R5) 0,1,1,-->

List of different nodes in T[L]

- LEN=1) 0,:
- LEN=2) 0,0,: 0,1,:
- LEN=3) 0,0,2,: 0,1,1,:

Number new nodes in level n is given by : 1,2,2, DONE

-----Class

651-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][101][110][120][210]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,1,--0,0,2,--
- R3) 0,1,-->0,1,1,--
- R4) 0,0,2,-->0,1,--0,1,1,--
- R5) 0,1,1,-->

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,2, : 0,1,1, :
Number new nodes in level n is given by : 1,2,2, DONE

-----Class

652-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][101][110][201][210]]$

--
Rules of T[L]:
R1) 0, -->0,0, --0,1, --
R2) 0,0, -->0,1, --0,0,2, --
R3) 0,1, -->0,1,1, --
R4) 0,0,2, -->0,1, --0,1,1, --
R5) 0,1,1, -->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,2, : 0,1,1, :
Number new nodes in level n is given by : 1,2,2, DONE

-----Class

653-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][101][120][201][210]]$

--
Rules of T[L]:
R1) 0, -->0,0, --0,1, --
R2) 0,0, -->0,1, --0,0,2, --
R3) 0,1, -->0,1,1, --
R4) 0,0,2, -->0,1, --0,0,2,2, --
R5) 0,1,1, -->
R6) 0,0,2,2, -->0,1, --
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,2, : 0,1,1, :
LEN=4) 0,0,2,2, :
Number new nodes in level n is given by : 1,2,2,1, DONE

-----Class

654-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][102][110][120][201]]$

--
Rules of T[L]:
R1) 0, -->0,0, --0,1, --
R2) 0,0, -->0,1, --0,0,2, --
R3) 0,1, -->0,1,1, --

R4) 0,0,2,-->0,1,--0,1,1,--
R5) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,2, : 0,1,1, :
Number new nodes in level n is given by : 1,2,2, DONE

-----Class

655-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][102][110][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->0,1,1,--
R4) 0,0,2,-->0,1,--0,1,1,--
R5) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,2, : 0,1,1, :
Number new nodes in level n is given by : 1,2,2, DONE

-----Class

656-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][102][110][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--
R3) 0,1,-->0,1,1,--
R4) 0,0,2,-->0,1,--0,1,1,--
R5) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,2, : 0,1,1, :
Number new nodes in level n is given by : 1,2,2, DONE

-----Class

657-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][012][102][120][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,1,--0,0,2,--

R3) 0,1,-->0,1,1,--
 R4) 0,0,2,-->0,1,--0,0,2,2,--
 R5) 0,1,1,-->
 R6) 0,0,2,2,-->0,1,--

List of different nodes in T[L]

LEN=1) 0, :
 LEN=2) 0,0, : 0,1, :
 LEN=3) 0,0,2, : 0,1,1, :
 LEN=4) 0,0,2,2, :

Number new nodes in level n is given by : 1,2,2,1, DONE

-----Class

658-----

Inversion Sequences ($I_n=(n+1)!$) avoiding L=[[000][010][012][110][120][201][210]]

--
 Rules of T[L]:

R1) 0,-->0,0,--0,1,--
 R2) 0,0,-->0,1,--0,0,2,--
 R3) 0,1,-->0,1,1,--
 R4) 0,0,2,-->0,1,--0,1,1,--
 R5) 0,1,1,-->

List of different nodes in T[L]

LEN=1) 0, :
 LEN=2) 0,0, : 0,1, :
 LEN=3) 0,0,2, : 0,1,1, :

Number new nodes in level n is given by : 1,2,2, DONE

-----Class

659-----

Inversion Sequences ($I_n=(n+1)!$) avoiding L=[[000][010][021][100][101][102][110]]

--
 Rules of T[L]:

R1) 0,-->0,0,--0,--
 R2) 0,0,-->0,0,1,--0,--
 R3) 0,0,1,-->0,0,1,1,--0,0,1,--0,--
 R4) 0,0,1,1,-->0,0,1,1,2,--0,0,1,--0,--
 R5) 0,0,1,1,2,-->0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,--0,--
 R6) 0,0,1,1,2,2,-->0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
 R7) 0,0,1,1,2,2,3,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
 R8) 0,0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
 R9)
 0,0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,
 1,1,2,--0,0,1,--0,--
 R10)
 0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--
 0,0,1,1,2,--0,0,1,--0,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0,:
 LEN=3) 0,0,1,:
 LEN=4) 0,0,1,1,:
 LEN=5) 0,0,1,1,2,:
 LEN=6) 0,0,1,1,2,2,:
 LEN=7) 0,0,1,1,2,2,3,:
 LEN=8) 0,0,1,1,2,2,3,3,:
 LEN=9) 0,0,1,1,2,2,3,3,4,:
 LEN=10) 0,0,1,1,2,2,3,3,4,4,:
 LEN=11) 0,0,1,1,2,2,3,3,4,4,5,:
 Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,

-----Class

660-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][021][100][101][102][120]]$

--
 Rules of T[L]:

- R1) 0,-->0,0,--0,--
- R2) 0,0,-->0,0,1,--0,--
- R3) 0,0,1,-->0,0,1,1,--0,0,1,--0,--
- R4) 0,0,1,1,-->0,0,1,1,2,--0,0,1,--0,--
- R5) 0,0,1,1,2,-->0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,--0,--
- R6) 0,0,1,1,2,2,-->0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
- R7) 0,0,1,1,2,2,3,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
- R8) 0,0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
- R9) 0,0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
- R10) 0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--

List of different nodes in T[L]

LEN=1) 0,:
 LEN=2) 0,0,:
 LEN=3) 0,0,1,:
 LEN=4) 0,0,1,1,:
 LEN=5) 0,0,1,1,2,:
 LEN=6) 0,0,1,1,2,2,:
 LEN=7) 0,0,1,1,2,2,3,:
 LEN=8) 0,0,1,1,2,2,3,3,:
 LEN=9) 0,0,1,1,2,2,3,3,4,:
 LEN=10) 0,0,1,1,2,2,3,3,4,4,:
 LEN=11) 0,0,1,1,2,2,3,3,4,4,5,:
 Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,

-----Class

661-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][021][100][101][102][201]]$

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, :
- LEN=3) 0,0,1, :
- LEN=4) 0,0,1,1, :
- LEN=5) 0,0,1,1,2, :
- LEN=6) 0,0,1,1,2,2, :
- LEN=7) 0,0,1,1,2,2,3, :
- LEN=8) 0,0,1,1,2,2,3,3, :
- LEN=9) 0,0,1,1,2,2,3,3,4, :
- LEN=10) 0,0,1,1,2,2,3,3,4,4, :
- LEN=11) 0,0,1,1,2,2,3,3,4,4,5, :

Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,

-----Class

663-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][010][021][100][101][110][120]]

--

Rules of T[L]:

- R1) 0, -->0,0, --0, --
- R2) 0,0, -->0,0,1, --0, --
- R3) 0,0,1, -->0,0,1,1, --0,0,1, --0, --
- R4) 0,0,1,1, -->0,0,1,1,2, --0,0,1, --0, --
- R5) 0,0,1,1,2, -->0,0,1,1,2,2, --0,0,1,1,2, --0,0,1, --0, --
- R6) 0,0,1,1,2,2, -->0,0,1,1,2,2,3, --0,0,1,1,2, --0,0,1, --0, --
- R7) 0,0,1,1,2,2,3, -->0,0,1,1,2,2,3,3, --0,0,1,1,2,2,3, --0,0,1,1,2, --0,0,1, --0, --
- R8) 0,0,1,1,2,2,3,3, -->0,0,1,1,2,2,3,3,4, --0,0,1,1,2,2,3, --0,0,1,1,2, --0,0,1, --0, --
- R9) 0,0,1,1,2,2,3,3,4, -->0,0,1,1,2,2,3,3,4,4, --0,0,1,1,2,2,3,3,4, --0,0,1,1,2,2,3, --0,0,1,1,2, --0,0,1, --0, --
- R10) 0,0,1,1,2,2,3,3,4,4, -->0,0,1,1,2,2,3,3,4,4,5, --0,0,1,1,2,2,3,3,4, --0,0,1,1,2,2,3, --0,0,1,1,2, --0,0,1, --0, --

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, :
- LEN=3) 0,0,1, :
- LEN=4) 0,0,1,1, :
- LEN=5) 0,0,1,1,2, :
- LEN=6) 0,0,1,1,2,2, :
- LEN=7) 0,0,1,1,2,2,3, :
- LEN=8) 0,0,1,1,2,2,3,3, :
- LEN=9) 0,0,1,1,2,2,3,3,4, :
- LEN=10) 0,0,1,1,2,2,3,3,4,4, :
- LEN=11) 0,0,1,1,2,2,3,3,4,4,5, :

Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,

-----Class

664-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][021][100][101][110][201]]$

--

Rules of $T[L]$:

R1) $0, \rightarrow 0, 0, \rightarrow 0, \rightarrow$

R2) $0, 0, \rightarrow 0, 0, 1, \rightarrow 0, \rightarrow$

R3) $0, 0, 1, \rightarrow 0, 0, 1, 1, \rightarrow 0, 0, 1, \rightarrow 0, \rightarrow$

R4) $0, 0, 1, 1, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, \rightarrow$

R5) $0, 0, 1, 1, 2, \rightarrow 0, 0, 1, 1, 2, 2, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, \rightarrow$

R6) $0, 0, 1, 1, 2, 2, \rightarrow 0, 0, 1, 1, 2, 2, 3, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, \rightarrow$

R7) $0, 0, 1, 1, 2, 2, 3, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, \rightarrow 0, 0, 1, 1, 2, 2, 3, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, \rightarrow$

R8) $0, 0, 1, 1, 2, 2, 3, 3, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, \rightarrow 0, 0, 1, 1, 2, 2, 3, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, \rightarrow$

R9)

$0, 0, 1, 1, 2, 2, 3, 3, 4, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, 4, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, \rightarrow 0, 0, 1, 1, 2, 2, 3, \rightarrow 0, 0,$

$1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, \rightarrow$

R10)

$0, 0, 1, 1, 2, 2, 3, 3, 4, 4, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, 4, 5, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, \rightarrow 0, 0, 1, 1, 2, 2, 3, \rightarrow$

$0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, \rightarrow$

List of different nodes in $T[L]$

LEN=1) $0, :$

LEN=2) $0, 0, :$

LEN=3) $0, 0, 1, :$

LEN=4) $0, 0, 1, 1, :$

LEN=5) $0, 0, 1, 1, 2, :$

LEN=6) $0, 0, 1, 1, 2, 2, :$

LEN=7) $0, 0, 1, 1, 2, 2, 3, :$

LEN=8) $0, 0, 1, 1, 2, 2, 3, 3, :$

LEN=9) $0, 0, 1, 1, 2, 2, 3, 3, 4, :$

LEN=10) $0, 0, 1, 1, 2, 2, 3, 3, 4, 4, :$

LEN=11) $0, 0, 1, 1, 2, 2, 3, 3, 4, 4, 5, :$

Number new nodes in level n is given by : $1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,$

-----Class

665-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][021][100][101][110][210]]$

--

Rules of $T[L]$:

R1) $0, \rightarrow 0, 0, \rightarrow 0, \rightarrow$

R2) $0, 0, \rightarrow 0, 0, 1, \rightarrow 0, \rightarrow$

R3) $0, 0, 1, \rightarrow 0, 0, 1, 1, \rightarrow 0, 0, 1, \rightarrow 0, \rightarrow$

R4) $0, 0, 1, 1, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, \rightarrow$

R5) $0, 0, 1, 1, 2, \rightarrow 0, 0, 1, 1, 2, 2, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, \rightarrow$

R6) $0, 0, 1, 1, 2, 2, \rightarrow 0, 0, 1, 1, 2, 2, 3, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, \rightarrow$

R7) $0, 0, 1, 1, 2, 2, 3, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, \rightarrow 0, 0, 1, 1, 2, 2, 3, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, \rightarrow$

R8) $0, 0, 1, 1, 2, 2, 3, 3, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, \rightarrow 0, 0, 1, 1, 2, 2, 3, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, \rightarrow$

R9)

$0, 0, 1, 1, 2, 2, 3, 3, 4, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, 4, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, \rightarrow 0, 0, 1, 1, 2, 2, 3, \rightarrow 0, 0,$

$1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, \rightarrow$

R10)

0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--
0,0,1,1,2,--0,0,1,--0,--

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, :
- LEN=3) 0,0,1, :
- LEN=4) 0,0,1,1, :
- LEN=5) 0,0,1,1,2, :
- LEN=6) 0,0,1,1,2,2, :
- LEN=7) 0,0,1,1,2,2,3, :
- LEN=8) 0,0,1,1,2,2,3,3, :
- LEN=9) 0,0,1,1,2,2,3,3,4, :
- LEN=10) 0,0,1,1,2,2,3,3,4,4, :
- LEN=11) 0,0,1,1,2,2,3,3,4,4,5, :

Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,1,

-----Class

666-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][021][100][101][120][201]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,--
- R2) 0,0,-->0,0,1,--0,--
- R3) 0,0,1,-->0,0,1,1,--0,0,1,--0,--
- R4) 0,0,1,1,-->0,0,1,1,2,--0,0,1,--0,--
- R5) 0,0,1,1,2,-->0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,--0,--
- R6) 0,0,1,1,2,2,-->0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
- R7) 0,0,1,1,2,2,3,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
- R8) 0,0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
- R9) 0,0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
- R10) 0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, :
- LEN=3) 0,0,1, :
- LEN=4) 0,0,1,1, :
- LEN=5) 0,0,1,1,2, :
- LEN=6) 0,0,1,1,2,2, :
- LEN=7) 0,0,1,1,2,2,3, :
- LEN=8) 0,0,1,1,2,2,3,3, :
- LEN=9) 0,0,1,1,2,2,3,3,4, :
- LEN=10) 0,0,1,1,2,2,3,3,4,4, :
- LEN=11) 0,0,1,1,2,2,3,3,4,4,5, :

Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,1,

-----Class

667-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][021][100][101][120][210]]$

--

Rules of $T[L]$:

R1) $0, -->0,0, --0, --$

R2) $0,0, -->0,0,1, --0, --$

R3) $0,0,1, -->0,0,1,1, --0,0,1, --0, --$

R4) $0,0,1,1, -->0,0,1,1,2, --0,0,1, --0, --$

R5) $0,0,1,1,2, -->0,0,1,1,2,2, --0,0,1,1,2, --0,0,1, --0, --$

R6) $0,0,1,1,2,2, -->0,0,1,1,2,2,3, --0,0,1,1,2, --0,0,1, --0, --$

R7) $0,0,1,1,2,2,3, -->0,0,1,1,2,2,3,3, --0,0,1,1,2,2,3, --0,0,1,1,2, --0,0,1, --0, --$

R8) $0,0,1,1,2,2,3,3, -->0,0,1,1,2,2,3,3,4, --0,0,1,1,2,2,3, --0,0,1,1,2, --0,0,1, --0, --$

R9)

$0,0,1,1,2,2,3,3,4, -->0,0,1,1,2,2,3,3,4,4, --0,0,1,1,2,2,3,3,4, --0,0,1,1,2,2,3, --0,0,1,1,2, --0,0,1, --0, --$

R10)

$0,0,1,1,2,2,3,3,4,4, -->0,0,1,1,2,2,3,3,4,4,5, --0,0,1,1,2,2,3,3,4, --0,0,1,1,2,2,3, --0,0,1,1,2, --0,0,1, --0, --$

List of different nodes in $T[L]$

LEN=1) $0, :$

LEN=2) $0,0, :$

LEN=3) $0,0,1, :$

LEN=4) $0,0,1,1, :$

LEN=5) $0,0,1,1,2, :$

LEN=6) $0,0,1,1,2,2, :$

LEN=7) $0,0,1,1,2,2,3, :$

LEN=8) $0,0,1,1,2,2,3,3, :$

LEN=9) $0,0,1,1,2,2,3,3,4, :$

LEN=10) $0,0,1,1,2,2,3,3,4,4, :$

LEN=11) $0,0,1,1,2,2,3,3,4,4,5, :$

Number new nodes in level n is given by : $1,1,1,1,1,1,1,1,1,1,1,1,$

-----Class

668-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][021][100][101][201][210]]$

--

Rules of $T[L]$:

R1) $0, -->0,0, --0, --$

R2) $0,0, -->0,0,1, --0, --$

R3) $0,0,1, -->0,0,1,1, --0,0,1, --0, --$

R4) $0,0,1,1, -->0,0,1,1,2, --0,0,1, --0, --$

R5) $0,0,1,1,2, -->0,0,1,1,2,2, --0,0,1,1,2, --0,0,1, --0, --$

R6) $0,0,1,1,2,2, -->0,0,1,1,2,2,3, --0,0,1,1,2, --0,0,1, --0, --$

R7) $0,0,1,1,2,2,3, -->0,0,1,1,2,2,3,3, --0,0,1,1,2,2,3, --0,0,1,1,2, --0,0,1, --0, --$

R8) $0,0,1,1,2,2,3,3, -->0,0,1,1,2,2,3,3,4, --0,0,1,1,2,2,3, --0,0,1,1,2, --0,0,1, --0, --$

R9)

$0,0,1,1,2,2,3,3,4, -->0,0,1,1,2,2,3,3,4,4, --0,0,1,1,2,2,3,3,4, --0,0,1,1,2,2,3, --0,0,$

1,1,2,--0,0,1,--0,--
R10)
0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--
0,0,1,1,2,--0,0,1,--0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
LEN=3) 0,0,1, :
LEN=4) 0,0,1,1, :
LEN=5) 0,0,1,1,2, :
LEN=6) 0,0,1,1,2,2, :
LEN=7) 0,0,1,1,2,2,3, :
LEN=8) 0,0,1,1,2,2,3,3, :
LEN=9) 0,0,1,1,2,2,3,3,4, :
LEN=10) 0,0,1,1,2,2,3,3,4,4, :
LEN=11) 0,0,1,1,2,2,3,3,4,4,5, :
Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,

-----Class

669-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][021][100][102][110][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,1,--0,--
R3) 0,0,1,-->0,0,1,1,--0,0,1,--0,--
R4) 0,0,1,1,-->0,0,1,1,2,--0,0,1,--0,--
R5) 0,0,1,1,2,-->0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,--0,--
R6) 0,0,1,1,2,2,-->0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
R7) 0,0,1,1,2,2,3,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
R8) 0,0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
R9)
0,0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,
1,1,2,--0,0,1,--0,--
R10)
0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--
0,0,1,1,2,--0,0,1,--0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
LEN=3) 0,0,1, :
LEN=4) 0,0,1,1, :
LEN=5) 0,0,1,1,2, :
LEN=6) 0,0,1,1,2,2, :
LEN=7) 0,0,1,1,2,2,3, :
LEN=8) 0,0,1,1,2,2,3,3, :
LEN=9) 0,0,1,1,2,2,3,3,4, :
LEN=10) 0,0,1,1,2,2,3,3,4,4, :
LEN=11) 0,0,1,1,2,2,3,3,4,4,5, :

Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,

-----Class

670-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][021][100][102][110][201]]$

Rules of T[L]:

R1) 0,-->0,0,--0,--

R2) 0,0,-->0,0,1,--0,--

R3) 0,0,1,-->0,0,1,1,--0,0,1,--0,--

R4) 0,0,1,1,-->0,0,1,1,2,--0,0,1,--0,--

R5) 0,0,1,1,2,-->0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,--0,--

R6) 0,0,1,1,2,2,-->0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--

R7) 0,0,1,1,2,2,3,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--

R8) 0,0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--

R9)

0,0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--

R10)

0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, :

LEN=3) 0,0,1, :

LEN=4) 0,0,1,1, :

LEN=5) 0,0,1,1,2, :

LEN=6) 0,0,1,1,2,2, :

LEN=7) 0,0,1,1,2,2,3, :

LEN=8) 0,0,1,1,2,2,3,3, :

LEN=9) 0,0,1,1,2,2,3,3,4, :

LEN=10) 0,0,1,1,2,2,3,3,4,4, :

LEN=11) 0,0,1,1,2,2,3,3,4,4,5, :

Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,

-----Class

671-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][021][100][102][110][210]]$

Rules of T[L]:

R1) 0,-->0,0,--0,--

R2) 0,0,-->0,0,1,--0,--

R3) 0,0,1,-->0,0,1,1,--0,0,1,--0,--

R4) 0,0,1,1,-->0,0,1,1,2,--0,0,1,--0,--

R5) 0,0,1,1,2,-->0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,--0,--

R6) 0,0,1,1,2,2,-->0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--

R7) 0,0,1,1,2,2,3,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--

R8) 0,0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--

R9)
 0,0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,
 1,1,2,--0,0,1,--0,--

R10)
 0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--
 0,0,1,1,2,--0,0,1,--0,--

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, :
- LEN=3) 0,0,1, :
- LEN=4) 0,0,1,1, :
- LEN=5) 0,0,1,1,2, :
- LEN=6) 0,0,1,1,2,2, :
- LEN=7) 0,0,1,1,2,2,3, :
- LEN=8) 0,0,1,1,2,2,3,3, :
- LEN=9) 0,0,1,1,2,2,3,3,4, :
- LEN=10) 0,0,1,1,2,2,3,3,4,4, :
- LEN=11) 0,0,1,1,2,2,3,3,4,4,5, :

Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,1,

-----Class

672-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][021][100][102][120][201]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,--
- R2) 0,0,-->0,0,1,--0,--
- R3) 0,0,1,-->0,0,1,1,--0,0,1,--0,--
- R4) 0,0,1,1,-->0,0,1,1,2,--0,0,1,--0,--
- R5) 0,0,1,1,2,-->0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,--0,--
- R6) 0,0,1,1,2,2,-->0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
- R7) 0,0,1,1,2,2,3,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
- R8) 0,0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
- R9)
 0,0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,
 1,1,2,--0,0,1,--0,--
- R10)
 0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--
 0,0,1,1,2,--0,0,1,--0,--

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, :
- LEN=3) 0,0,1, :
- LEN=4) 0,0,1,1, :
- LEN=5) 0,0,1,1,2, :
- LEN=6) 0,0,1,1,2,2, :
- LEN=7) 0,0,1,1,2,2,3, :
- LEN=8) 0,0,1,1,2,2,3,3, :
- LEN=9) 0,0,1,1,2,2,3,3,4, :

LEN=10) 0,0,1,1,2,2,3,3,4,4, :
LEN=11) 0,0,1,1,2,2,3,3,4,4,5, :
Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,

-----Class

673-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][021][100][102][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,1,--0,--
R3) 0,0,1,-->0,0,1,1,--0,0,1,--0,--
R4) 0,0,1,1,-->0,0,1,1,2,--0,0,1,--0,--
R5) 0,0,1,1,2,-->0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,--0,--
R6) 0,0,1,1,2,2,-->0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
R7) 0,0,1,1,2,2,3,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
R8) 0,0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
R9)
0,0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,
1,1,2,--0,0,1,--0,--
R10)
0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--
0,0,1,1,2,--0,0,1,--0,--

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, :
LEN=3) 0,0,1, :
LEN=4) 0,0,1,1, :
LEN=5) 0,0,1,1,2, :
LEN=6) 0,0,1,1,2,2, :
LEN=7) 0,0,1,1,2,2,3, :
LEN=8) 0,0,1,1,2,2,3,3, :
LEN=9) 0,0,1,1,2,2,3,3,4, :
LEN=10) 0,0,1,1,2,2,3,3,4,4, :
LEN=11) 0,0,1,1,2,2,3,3,4,4,5, :
Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,

-----Class

674-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][021][100][102][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,1,--0,--
R3) 0,0,1,-->0,0,1,1,--0,0,1,--0,--
R4) 0,0,1,1,-->0,0,1,1,2,--0,0,1,--0,--
R5) 0,0,1,1,2,-->0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,--0,--
R6) 0,0,1,1,2,2,-->0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--

R7) 0,0,1,1,2,2,3,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
 R8) 0,0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
 R9) 0,0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,
 1,1,2,--0,0,1,--0,--
 R10) 0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--
 0,0,1,1,2,--0,0,1,--0,--
 List of different nodes in T[L]
 LEN=1) 0, :
 LEN=2) 0,0, :
 LEN=3) 0,0,1, :
 LEN=4) 0,0,1,1, :
 LEN=5) 0,0,1,1,2, :
 LEN=6) 0,0,1,1,2,2, :
 LEN=7) 0,0,1,1,2,2,3, :
 LEN=8) 0,0,1,1,2,2,3,3, :
 LEN=9) 0,0,1,1,2,2,3,3,4, :
 LEN=10) 0,0,1,1,2,2,3,3,4,4, :
 LEN=11) 0,0,1,1,2,2,3,3,4,4,5, :
 Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,

-----Class

675-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][021][100][110][120][201]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,--
 R2) 0,0,-->0,0,1,--0,--
 R3) 0,0,1,-->0,0,1,1,--0,0,1,--0,--
 R4) 0,0,1,1,-->0,0,1,1,2,--0,0,1,--0,--
 R5) 0,0,1,1,2,-->0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,--0,--
 R6) 0,0,1,1,2,2,-->0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
 R7) 0,0,1,1,2,2,3,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
 R8) 0,0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
 R9) 0,0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,
 1,1,2,--0,0,1,--0,--
 R10) 0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--
 0,0,1,1,2,--0,0,1,--0,--
 List of different nodes in T[L]
 LEN=1) 0, :
 LEN=2) 0,0, :
 LEN=3) 0,0,1, :
 LEN=4) 0,0,1,1, :
 LEN=5) 0,0,1,1,2, :
 LEN=6) 0,0,1,1,2,2, :
 LEN=7) 0,0,1,1,2,2,3, :

LEN=8) 0,0,1,1,2,2,3,3, :
 LEN=9) 0,0,1,1,2,2,3,3,4, :
 LEN=10) 0,0,1,1,2,2,3,3,4,4, :
 LEN=11) 0,0,1,1,2,2,3,3,4,4,5, :
 Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,

-----Class

676-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][021][100][110][120][210]]$

 --

Rules of T[L]:

- R1) 0,-->0,0,--0,--
- R2) 0,0,-->0,0,1,--0,--
- R3) 0,0,1,-->0,0,1,1,--0,0,1,--0,--
- R4) 0,0,1,1,-->0,0,1,1,2,--0,0,1,--0,--
- R5) 0,0,1,1,2,-->0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,--0,--
- R6) 0,0,1,1,2,2,-->0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
- R7) 0,0,1,1,2,2,3,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
- R8) 0,0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
- R9) 0,0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
- R10) 0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, :
- LEN=3) 0,0,1, :
- LEN=4) 0,0,1,1, :
- LEN=5) 0,0,1,1,2, :
- LEN=6) 0,0,1,1,2,2, :
- LEN=7) 0,0,1,1,2,2,3, :
- LEN=8) 0,0,1,1,2,2,3,3, :
- LEN=9) 0,0,1,1,2,2,3,3,4, :
- LEN=10) 0,0,1,1,2,2,3,3,4,4, :
- LEN=11) 0,0,1,1,2,2,3,3,4,4,5, :
 Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,

-----Class

677-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][021][100][110][201][210]]$

 --

Rules of T[L]:

- R1) 0,-->0,0,--0,--
- R2) 0,0,-->0,0,1,--0,--
- R3) 0,0,1,-->0,0,1,1,--0,0,1,--0,--
- R4) 0,0,1,1,-->0,0,1,1,2,--0,0,1,--0,--

R5) 0,0,1,1,2,-->0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,--0,--
R6) 0,0,1,1,2,2,-->0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
R7) 0,0,1,1,2,2,3,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
R8) 0,0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
R9)
0,0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,
1,1,2,--0,0,1,--0,--
R10)
0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--
0,0,1,1,2,--0,0,1,--0,--

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, :
LEN=3) 0,0,1, :
LEN=4) 0,0,1,1, :
LEN=5) 0,0,1,1,2, :
LEN=6) 0,0,1,1,2,2, :
LEN=7) 0,0,1,1,2,2,3, :
LEN=8) 0,0,1,1,2,2,3,3, :
LEN=9) 0,0,1,1,2,2,3,3,4, :
LEN=10) 0,0,1,1,2,2,3,3,4,4, :
LEN=11) 0,0,1,1,2,2,3,3,4,4,5, :

Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,

-----Class

678-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][021][100][120][201][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,1,--0,--
R3) 0,0,1,-->0,0,1,1,--0,0,1,--0,--
R4) 0,0,1,1,-->0,0,1,1,2,--0,0,1,--0,--
R5) 0,0,1,1,2,-->0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,--0,--
R6) 0,0,1,1,2,2,-->0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
R7) 0,0,1,1,2,2,3,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
R8) 0,0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
R9)
0,0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,
1,1,2,--0,0,1,--0,--
R10)
0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--
0,0,1,1,2,--0,0,1,--0,--

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, :
LEN=3) 0,0,1, :
LEN=4) 0,0,1,1, :
LEN=5) 0,0,1,1,2, :

LEN=6) 0,0,1,1,2,2, :
 LEN=7) 0,0,1,1,2,2,3, :
 LEN=8) 0,0,1,1,2,2,3,3, :
 LEN=9) 0,0,1,1,2,2,3,3,4, :
 LEN=10) 0,0,1,1,2,2,3,3,4,4, :
 LEN=11) 0,0,1,1,2,2,3,3,4,4,5, :
 Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,

-----Class

679-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][021][101][102][110][120]]$

--
 Rules of $T[L]$:

- R1) 0, -->0,0,--0,--
- R2) 0,0, -->0,0,1,--0,--
- R3) 0,0,1, -->0,0,1,1,--0,0,1,--0,--
- R4) 0,0,1,1, -->0,0,1,1,2,--0,0,1,--0,--
- R5) 0,0,1,1,2, -->0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,--0,--
- R6) 0,0,1,1,2,2, -->0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
- R7) 0,0,1,1,2,2,3, -->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
- R8) 0,0,1,1,2,2,3,3, -->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
- R9) 0,0,1,1,2,2,3,3,4, -->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
- R10) 0,0,1,1,2,2,3,3,4,4, -->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--

List of different nodes in $T[L]$

- LEN=1) 0, :
- LEN=2) 0,0, :
- LEN=3) 0,0,1, :
- LEN=4) 0,0,1,1, :
- LEN=5) 0,0,1,1,2, :
- LEN=6) 0,0,1,1,2,2, :
- LEN=7) 0,0,1,1,2,2,3, :
- LEN=8) 0,0,1,1,2,2,3,3, :
- LEN=9) 0,0,1,1,2,2,3,3,4, :
- LEN=10) 0,0,1,1,2,2,3,3,4,4, :
- LEN=11) 0,0,1,1,2,2,3,3,4,4,5, :

Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,

-----Class

680-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][021][101][102][110][201]]$

--
 Rules of $T[L]$:

- R1) 0, -->0,0,--0,--
- R2) 0,0, -->0,0,1,--0,--

R3) 0,0,1,-->0,0,1,1,--0,0,1,--0,--
R4) 0,0,1,1,-->0,0,1,1,2,--0,0,1,--0,--
R5) 0,0,1,1,2,-->0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,--0,--
R6) 0,0,1,1,2,2,-->0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
R7) 0,0,1,1,2,2,3,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
R8) 0,0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
R9)
0,0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,
1,1,2,--0,0,1,--0,--
R10)
0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--
0,0,1,1,2,--0,0,1,--0,--

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, :
LEN=3) 0,0,1, :
LEN=4) 0,0,1,1, :
LEN=5) 0,0,1,1,2, :
LEN=6) 0,0,1,1,2,2, :
LEN=7) 0,0,1,1,2,2,3, :
LEN=8) 0,0,1,1,2,2,3,3, :
LEN=9) 0,0,1,1,2,2,3,3,4, :
LEN=10) 0,0,1,1,2,2,3,3,4,4, :
LEN=11) 0,0,1,1,2,2,3,3,4,4,5, :
Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,

-----Class

681-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][021][101][102][110][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,1,--0,--
R3) 0,0,1,-->0,0,1,1,--0,0,1,--0,--
R4) 0,0,1,1,-->0,0,1,1,2,--0,0,1,--0,--
R5) 0,0,1,1,2,-->0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,--0,--
R6) 0,0,1,1,2,2,-->0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
R7) 0,0,1,1,2,2,3,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
R8) 0,0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
R9)
0,0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,
1,1,2,--0,0,1,--0,--
R10)
0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--
0,0,1,1,2,--0,0,1,--0,--

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, :
LEN=3) 0,0,1, :

LEN=4) 0,0,1,1,:
 LEN=5) 0,0,1,1,2,:
 LEN=6) 0,0,1,1,2,2,:
 LEN=7) 0,0,1,1,2,2,3,:
 LEN=8) 0,0,1,1,2,2,3,3,:
 LEN=9) 0,0,1,1,2,2,3,3,4,:
 LEN=10) 0,0,1,1,2,2,3,3,4,4,:
 LEN=11) 0,0,1,1,2,2,3,3,4,4,5,:
 Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,

-----Class

682-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][021][101][102][120][201]]$

--
 Rules of T[L]:
 R1) 0,-->0,0,--0,--
 R2) 0,0,-->0,0,1,--0,--
 R3) 0,0,1,-->0,0,1,1,--0,0,1,--0,--
 R4) 0,0,1,1,-->0,0,1,1,2,--0,0,1,--0,--
 R5) 0,0,1,1,2,-->0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,--0,--
 R6) 0,0,1,1,2,2,-->0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
 R7) 0,0,1,1,2,2,3,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
 R8) 0,0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
 R9) 0,0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
 R10) 0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--

List of different nodes in T[L]

LEN=1) 0,:
 LEN=2) 0,0,:
 LEN=3) 0,0,1,:
 LEN=4) 0,0,1,1,:
 LEN=5) 0,0,1,1,2,:
 LEN=6) 0,0,1,1,2,2,:
 LEN=7) 0,0,1,1,2,2,3,:
 LEN=8) 0,0,1,1,2,2,3,3,:
 LEN=9) 0,0,1,1,2,2,3,3,4,:
 LEN=10) 0,0,1,1,2,2,3,3,4,4,:
 LEN=11) 0,0,1,1,2,2,3,3,4,4,5,:
 Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,

-----Class

683-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][021][101][102][120][210]]$

--
 Rules of T[L]:

- R1) 0,-->0,0,--0,--
- R2) 0,0,-->0,0,1,--0,--
- R3) 0,0,1,-->0,0,1,1,--0,0,1,--0,--
- R4) 0,0,1,1,-->0,0,1,1,2,--0,0,1,--0,--
- R5) 0,0,1,1,2,-->0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,--0,--
- R6) 0,0,1,1,2,2,-->0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
- R7) 0,0,1,1,2,2,3,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
- R8) 0,0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
- R9) 0,0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
- R10) 0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, :
- LEN=3) 0,0,1, :
- LEN=4) 0,0,1,1, :
- LEN=5) 0,0,1,1,2, :
- LEN=6) 0,0,1,1,2,2, :
- LEN=7) 0,0,1,1,2,2,3, :
- LEN=8) 0,0,1,1,2,2,3,3, :
- LEN=9) 0,0,1,1,2,2,3,3,4, :
- LEN=10) 0,0,1,1,2,2,3,3,4,4, :
- LEN=11) 0,0,1,1,2,2,3,3,4,4,5, :

Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,

-----Class

684-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][021][101][102][201][210]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,--
- R2) 0,0,-->0,0,1,--0,--
- R3) 0,0,1,-->0,0,1,1,--0,0,1,--0,--
- R4) 0,0,1,1,-->0,0,1,1,2,--0,0,1,--0,--
- R5) 0,0,1,1,2,-->0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,--0,--
- R6) 0,0,1,1,2,2,-->0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
- R7) 0,0,1,1,2,2,3,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
- R8) 0,0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
- R9) 0,0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
- R10) 0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--

List of different nodes in T[L]

- LEN=1) 0, :

LEN=2) 0,0,:
 LEN=3) 0,0,1,:
 LEN=4) 0,0,1,1,:
 LEN=5) 0,0,1,1,2,:
 LEN=6) 0,0,1,1,2,2,:
 LEN=7) 0,0,1,1,2,2,3,:
 LEN=8) 0,0,1,1,2,2,3,3,:
 LEN=9) 0,0,1,1,2,2,3,3,4,:
 LEN=10) 0,0,1,1,2,2,3,3,4,4,:
 LEN=11) 0,0,1,1,2,2,3,3,4,4,5,:
 Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,

-----Class

685-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][021][101][110][120][201]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,--
- R2) 0,0,-->0,0,1,--0,--
- R3) 0,0,1,-->0,0,1,1,--0,0,1,--0,--
- R4) 0,0,1,1,-->0,0,1,1,2,--0,0,1,--0,--
- R5) 0,0,1,1,2,-->0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,--0,--
- R6) 0,0,1,1,2,2,-->0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
- R7) 0,0,1,1,2,2,3,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
- R8) 0,0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
- R9) 0,0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
- R10) 0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--

List of different nodes in T[L]

LEN=1) 0,:
 LEN=2) 0,0,:
 LEN=3) 0,0,1,:
 LEN=4) 0,0,1,1,:
 LEN=5) 0,0,1,1,2,:
 LEN=6) 0,0,1,1,2,2,:
 LEN=7) 0,0,1,1,2,2,3,:
 LEN=8) 0,0,1,1,2,2,3,3,:
 LEN=9) 0,0,1,1,2,2,3,3,4,:
 LEN=10) 0,0,1,1,2,2,3,3,4,4,:
 LEN=11) 0,0,1,1,2,2,3,3,4,4,5,:
 Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,

-----Class

686-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][021][101][110][120][210]]$

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, :
- LEN=3) 0,0,1, :
- LEN=4) 0,0,1,1, :
- LEN=5) 0,0,1,1,2, :
- LEN=6) 0,0,1,1,2,2, :
- LEN=7) 0,0,1,1,2,2,3, :
- LEN=8) 0,0,1,1,2,2,3,3, :
- LEN=9) 0,0,1,1,2,2,3,3,4, :
- LEN=10) 0,0,1,1,2,2,3,3,4,4, :
- LEN=11) 0,0,1,1,2,2,3,3,4,4,5, :

Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,

-----Class

688-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][021][101][120][201][210]]$

--

Rules of T[L]:

- R1) 0, -->0,0, --0, --
- R2) 0,0, -->0,0,1, --0, --
- R3) 0,0,1, -->0,0,1,1, --0,0,1, --0, --
- R4) 0,0,1,1, -->0,0,1,1,2, --0,0,1, --0, --
- R5) 0,0,1,1,2, -->0,0,1,1,2,2, --0,0,1,1,2, --0,0,1, --0, --
- R6) 0,0,1,1,2,2, -->0,0,1,1,2,2,3, --0,0,1,1,2, --0,0,1, --0, --
- R7) 0,0,1,1,2,2,3, -->0,0,1,1,2,2,3,3, --0,0,1,1,2,2,3, --0,0,1,1,2, --0,0,1, --0, --
- R8) 0,0,1,1,2,2,3,3, -->0,0,1,1,2,2,3,3,4, --0,0,1,1,2,2,3, --0,0,1,1,2, --0,0,1, --0, --
- R9) 0,0,1,1,2,2,3,3,4, -->0,0,1,1,2,2,3,3,4,4, --0,0,1,1,2,2,3,3,4, --0,0,1,1,2,2,3, --0,0,1,1,2, --0,0,1, --0, --
- R10) 0,0,1,1,2,2,3,3,4,4, -->0,0,1,1,2,2,3,3,4,4,5, --0,0,1,1,2,2,3,3,4, --0,0,1,1,2,2,3, --0,0,1,1,2, --0,0,1, --0, --

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, :
- LEN=3) 0,0,1, :
- LEN=4) 0,0,1,1, :
- LEN=5) 0,0,1,1,2, :
- LEN=6) 0,0,1,1,2,2, :
- LEN=7) 0,0,1,1,2,2,3, :
- LEN=8) 0,0,1,1,2,2,3,3, :
- LEN=9) 0,0,1,1,2,2,3,3,4, :
- LEN=10) 0,0,1,1,2,2,3,3,4,4, :
- LEN=11) 0,0,1,1,2,2,3,3,4,4,5, :

Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,

-----Class

689-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][021][102][110][120][201]]$

--

Rules of $T[L]$:

R1) $0, -- \rightarrow 0, 0, -- 0, --$

R2) $0, 0, -- \rightarrow 0, 0, 1, -- 0, --$

R3) $0, 0, 1, -- \rightarrow 0, 0, 1, 1, -- 0, 0, 1, -- 0, --$

R4) $0, 0, 1, 1, -- \rightarrow 0, 0, 1, 1, 2, -- 0, 0, 1, -- 0, --$

R5) $0, 0, 1, 1, 2, -- \rightarrow 0, 0, 1, 1, 2, 2, -- 0, 0, 1, 1, 2, -- 0, 0, 1, -- 0, --$

R6) $0, 0, 1, 1, 2, 2, -- \rightarrow 0, 0, 1, 1, 2, 2, 3, -- 0, 0, 1, 1, 2, -- 0, 0, 1, -- 0, --$

R7) $0, 0, 1, 1, 2, 2, 3, -- \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, -- 0, 0, 1, 1, 2, 2, 3, -- 0, 0, 1, 1, 2, -- 0, 0, 1, -- 0, --$

R8) $0, 0, 1, 1, 2, 2, 3, 3, -- \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, -- 0, 0, 1, 1, 2, 2, 3, -- 0, 0, 1, 1, 2, -- 0, 0, 1, -- 0, --$

R9)

$0, 0, 1, 1, 2, 2, 3, 3, 4, -- \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, 4, -- 0, 0, 1, 1, 2, 2, 3, 3, 4, -- 0, 0, 1, 1, 2, 2, 3, -- 0, 0,$

$1, 1, 2, -- 0, 0, 1, -- 0, --$

R10)

$0, 0, 1, 1, 2, 2, 3, 3, 4, 4, -- \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, 4, 5, -- 0, 0, 1, 1, 2, 2, 3, 3, 4, -- 0, 0, 1, 1, 2, 2, 3, --$

$0, 0, 1, 1, 2, -- 0, 0, 1, -- 0, --$

List of different nodes in $T[L]$

LEN=1) $0, :$

LEN=2) $0, 0, :$

LEN=3) $0, 0, 1, :$

LEN=4) $0, 0, 1, 1, :$

LEN=5) $0, 0, 1, 1, 2, :$

LEN=6) $0, 0, 1, 1, 2, 2, :$

LEN=7) $0, 0, 1, 1, 2, 2, 3, :$

LEN=8) $0, 0, 1, 1, 2, 2, 3, 3, :$

LEN=9) $0, 0, 1, 1, 2, 2, 3, 3, 4, :$

LEN=10) $0, 0, 1, 1, 2, 2, 3, 3, 4, 4, :$

LEN=11) $0, 0, 1, 1, 2, 2, 3, 3, 4, 4, 5, :$

Number new nodes in level n is given by : $1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,$

-----Class

690-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][021][102][110][120][210]]$

--

Rules of $T[L]$:

R1) $0, -- \rightarrow 0, 0, -- 0, --$

R2) $0, 0, -- \rightarrow 0, 0, 1, -- 0, --$

R3) $0, 0, 1, -- \rightarrow 0, 0, 1, 1, -- 0, 0, 1, -- 0, --$

R4) $0, 0, 1, 1, -- \rightarrow 0, 0, 1, 1, 2, -- 0, 0, 1, -- 0, --$

R5) $0, 0, 1, 1, 2, -- \rightarrow 0, 0, 1, 1, 2, 2, -- 0, 0, 1, 1, 2, -- 0, 0, 1, -- 0, --$

R6) $0, 0, 1, 1, 2, 2, -- \rightarrow 0, 0, 1, 1, 2, 2, 3, -- 0, 0, 1, 1, 2, -- 0, 0, 1, -- 0, --$

R7) $0, 0, 1, 1, 2, 2, 3, -- \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, -- 0, 0, 1, 1, 2, 2, 3, -- 0, 0, 1, 1, 2, -- 0, 0, 1, -- 0, --$

R8) $0, 0, 1, 1, 2, 2, 3, 3, -- \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, -- 0, 0, 1, 1, 2, 2, 3, -- 0, 0, 1, 1, 2, -- 0, 0, 1, -- 0, --$

R9)

$0, 0, 1, 1, 2, 2, 3, 3, 4, -- \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, 4, -- 0, 0, 1, 1, 2, 2, 3, 3, 4, -- 0, 0, 1, 1, 2, 2, 3, -- 0, 0,$

$1, 1, 2, -- 0, 0, 1, -- 0, --$

R10)

0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--
0,0,1,1,2,--0,0,1,--0,--

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, :
- LEN=3) 0,0,1, :
- LEN=4) 0,0,1,1, :
- LEN=5) 0,0,1,1,2, :
- LEN=6) 0,0,1,1,2,2, :
- LEN=7) 0,0,1,1,2,2,3, :
- LEN=8) 0,0,1,1,2,2,3,3, :
- LEN=9) 0,0,1,1,2,2,3,3,4, :
- LEN=10) 0,0,1,1,2,2,3,3,4,4, :
- LEN=11) 0,0,1,1,2,2,3,3,4,4,5, :

Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,1,

-----Class

691-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][021][102][110][201][210]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,--
- R2) 0,0,-->0,0,1,--0,--
- R3) 0,0,1,-->0,0,1,1,--0,0,1,--0,--
- R4) 0,0,1,1,-->0,0,1,1,2,--0,0,1,--0,--
- R5) 0,0,1,1,2,-->0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,--0,--
- R6) 0,0,1,1,2,2,-->0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
- R7) 0,0,1,1,2,2,3,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
- R8) 0,0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
- R9) 0,0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--
- R10) 0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,--

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, :
- LEN=3) 0,0,1, :
- LEN=4) 0,0,1,1, :
- LEN=5) 0,0,1,1,2, :
- LEN=6) 0,0,1,1,2,2, :
- LEN=7) 0,0,1,1,2,2,3, :
- LEN=8) 0,0,1,1,2,2,3,3, :
- LEN=9) 0,0,1,1,2,2,3,3,4, :
- LEN=10) 0,0,1,1,2,2,3,3,4,4, :
- LEN=11) 0,0,1,1,2,2,3,3,4,4,5, :

Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,1,

-----Class

692-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][021][102][120][201][210]]$

--

Rules of $T[L]$:

R1) $0, \rightarrow 0, 0, \rightarrow 0, \rightarrow$

R2) $0, 0, \rightarrow 0, 0, 1, \rightarrow 0, \rightarrow$

R3) $0, 0, 1, \rightarrow 0, 0, 1, 1, \rightarrow 0, 0, 1, \rightarrow 0, \rightarrow$

R4) $0, 0, 1, 1, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, \rightarrow$

R5) $0, 0, 1, 1, 2, \rightarrow 0, 0, 1, 1, 2, 2, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, \rightarrow$

R6) $0, 0, 1, 1, 2, 2, \rightarrow 0, 0, 1, 1, 2, 2, 3, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, \rightarrow$

R7) $0, 0, 1, 1, 2, 2, 3, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, \rightarrow 0, 0, 1, 1, 2, 2, 3, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, \rightarrow$

R8) $0, 0, 1, 1, 2, 2, 3, 3, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, \rightarrow 0, 0, 1, 1, 2, 2, 3, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, \rightarrow$

R9)

$0, 0, 1, 1, 2, 2, 3, 3, 4, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, 4, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, \rightarrow 0, 0, 1, 1, 2, 2, 3, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, \rightarrow$

R10)

$0, 0, 1, 1, 2, 2, 3, 3, 4, 4, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, 4, 5, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, \rightarrow 0, 0, 1, 1, 2, 2, 3, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, \rightarrow$

List of different nodes in $T[L]$

LEN=1) $0, :$

LEN=2) $0, 0, :$

LEN=3) $0, 0, 1, :$

LEN=4) $0, 0, 1, 1, :$

LEN=5) $0, 0, 1, 1, 2, :$

LEN=6) $0, 0, 1, 1, 2, 2, :$

LEN=7) $0, 0, 1, 1, 2, 2, 3, :$

LEN=8) $0, 0, 1, 1, 2, 2, 3, 3, :$

LEN=9) $0, 0, 1, 1, 2, 2, 3, 3, 4, :$

LEN=10) $0, 0, 1, 1, 2, 2, 3, 3, 4, 4, :$

LEN=11) $0, 0, 1, 1, 2, 2, 3, 3, 4, 4, 5, :$

Number new nodes in level n is given by : $1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,$

-----Class

693-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][021][110][120][201][210]]$

--

Rules of $T[L]$:

R1) $0, \rightarrow 0, 0, \rightarrow 0, \rightarrow$

R2) $0, 0, \rightarrow 0, 0, 1, \rightarrow 0, \rightarrow$

R3) $0, 0, 1, \rightarrow 0, 0, 1, 1, \rightarrow 0, 0, 1, \rightarrow 0, \rightarrow$

R4) $0, 0, 1, 1, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, \rightarrow$

R5) $0, 0, 1, 1, 2, \rightarrow 0, 0, 1, 1, 2, 2, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, \rightarrow$

R6) $0, 0, 1, 1, 2, 2, \rightarrow 0, 0, 1, 1, 2, 2, 3, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, \rightarrow$

R7) $0, 0, 1, 1, 2, 2, 3, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, \rightarrow 0, 0, 1, 1, 2, 2, 3, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, \rightarrow$

R8) $0, 0, 1, 1, 2, 2, 3, 3, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, \rightarrow 0, 0, 1, 1, 2, 2, 3, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, \rightarrow$

R9)

$0, 0, 1, 1, 2, 2, 3, 3, 4, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, 4, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, \rightarrow 0, 0, 1, 1, 2, 2, 3, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, \rightarrow$

1,1,2,--0,0,1,--0,--
R10)
0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--
0,0,1,1,2,--0,0,1,--0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
LEN=3) 0,0,1, :
LEN=4) 0,0,1,1, :
LEN=5) 0,0,1,1,2, :
LEN=6) 0,0,1,1,2,2, :
LEN=7) 0,0,1,1,2,2,3, :
LEN=8) 0,0,1,1,2,2,3,3, :
LEN=9) 0,0,1,1,2,2,3,3,4, :
LEN=10) 0,0,1,1,2,2,3,3,4,4, :
LEN=11) 0,0,1,1,2,2,3,3,4,4,5, :
Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,1,

-----Class

694-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][100][101][102][110][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,1,--0,0,2,--
R3) 0,0,1,-->0,0,1,1,--0,0,1,--0,0,2,--
R4) 0,0,2,-->0,0,2,1,--0,0,--0,--
R5) 0,0,1,1,-->0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--
R6) 0,0,2,1,-->
R7) 0,0,1,1,2,-->0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--
R8) 0,0,1,1,3,-->0,0,2,1,--0,0,1,1,--0,0,1,--0,0,2,--
R9) 0,0,1,1,4,-->0,0,1,1,4,2,--0,0,1,1,4,2,--0,0,--0,--
R10)
0,0,1,1,2,2,-->0,0,1,1,2,2,3,--0,0,1,1,2,2,4,--0,0,1,1,2,2,5,--0,0,1,1,2,2,6,--
R11) 0,0,1,1,4,2,-->0,0,2,1,--
R12)
0,0,1,1,2,2,3,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,2,4,--0,0,1,1,2,2,5,--
0,0,1,1,2,2,6,--
R13) 0,0,1,1,2,2,4,-->0,0,2,1,--0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--
R14) 0,0,1,1,2,2,5,-->0,0,1,1,4,2,--0,0,1,1,4,2,--0,0,1,1,--0,0,1,--0,0,2,--
R15)
0,0,1,1,2,2,6,-->0,0,1,1,2,2,6,3,--0,0,1,1,2,2,6,4,--0,0,1,1,2,2,6,3,--0,0,--0,--
R16)
0,0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,3,5,--0,0,1,1,2,2,3,3,6,--0,0,
1,1,2,2,3,3,7,--0,0,1,1,2,2,3,3,8,--
R17) 0,0,1,1,2,2,6,3,-->0,0,1,1,4,2,--0,0,1,1,4,2,--
R18) 0,0,1,1,2,2,6,4,-->0,0,2,1,--0,0,2,1,--
R19)
0,0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,3,5,--

0,0,1,1,2,2,3,3,6,--0,0,1,1,2,2,3,3,7,--0,0,1,1,2,2,3,3,8,--
 R20)
 0,0,1,1,2,2,3,3,5,-->0,0,2,1,--0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,2,4,--0,
 0,1,1,2,2,5,--0,0,1,1,2,2,6,--
 R21)
 0,0,1,1,2,2,3,3,6,-->0,0,1,1,4,2,--0,0,1,1,4,2,--0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,1,
 3,--0,0,1,1,4,--
 R22)
 0,0,1,1,2,2,3,3,7,-->0,0,1,1,2,2,6,3,--0,0,1,1,2,2,6,4,--0,0,1,1,2,2,6,3,--0,0,1,1,
 --0,0,1,--0,0,2,--
 R23)
 0,0,1,1,2,2,3,3,8,-->0,0,1,1,2,2,3,3,8,4,--0,0,1,1,2,2,3,3,8,5,--0,0,1,1,2,2,3,3,8,
 6,--0,0,1,1,2,2,3,3,8,4,--0,0,--0,--
 R24)
 0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,4,6,--0,0,1,1,2,2,
 3,3,4,4,7,--0,0,1,1,2,2,3,3,4,4,8,--0,0,1,1,2,2,3,3,4,4,9,--0,0,1,1,2,2,3,3,4,4,10,
 --
 R25) 0,0,1,1,2,2,3,3,8,4,-->0,0,1,1,2,2,6,3,--0,0,1,1,2,2,6,4,--0,0,1,1,2,2,6,3,--
 R26) 0,0,1,1,2,2,3,3,8,5,-->0,0,2,1,--0,0,1,1,4,2,--0,0,1,1,4,2,--
 R27) 0,0,1,1,2,2,3,3,8,6,-->0,0,1,1,4,2,--0,0,1,1,4,2,--0,0,2,1,--

List of different nodes in T[L]

LEN=1) 0, :
 LEN=2) 0,0, :
 LEN=3) 0,0,1, : 0,0,2, :
 LEN=4) 0,0,1,1, : 0,0,2,1, :
 LEN=5) 0,0,1,1,2, : 0,0,1,1,3, : 0,0,1,1,4, :
 LEN=6) 0,0,1,1,2,2, : 0,0,1,1,4,2, :
 LEN=7) 0,0,1,1,2,2,3, : 0,0,1,1,2,2,4, : 0,0,1,1,2,2,5, : 0,0,1,1,2,2,6, :
 LEN=8) 0,0,1,1,2,2,3,3, : 0,0,1,1,2,2,6,3, : 0,0,1,1,2,2,6,4, :
 LEN=9) 0,0,1,1,2,2,3,3,4, : 0,0,1,1,2,2,3,3,5, : 0,0,1,1,2,2,3,3,6, :
 0,0,1,1,2,2,3,3,7, : 0,0,1,1,2,2,3,3,8, :
 LEN=10) 0,0,1,1,2,2,3,3,4,4, : 0,0,1,1,2,2,3,3,8,4, : 0,0,1,1,2,2,3,3,8,5, :
 0,0,1,1,2,2,3,3,8,6, :
 LEN=11) 0,0,1,1,2,2,3,3,4,4,5, : 0,0,1,1,2,2,3,3,4,4,6, : 0,0,1,1,2,2,3,3,4,4,7, :
 0,0,1,1,2,2,3,3,4,4,8, : 0,0,1,1,2,2,3,3,4,4,9, : 0,0,1,1,2,2,3,3,4,4,10, :
 Number new nodes in level n is given by : 1,1,2,2,3,2,4,3,5,4,6,

-----Class

695-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][100][101][102][110][201]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,--
 R2) 0,0,-->0,0,1,--0,0,2,--
 R3) 0,0,1,-->0,0,1,1,--0,0,1,--0,0,2,--
 R4) 0,0,2,-->0,0,2,1,--0,0,--0,0,2,--
 R5) 0,0,1,1,-->0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--
 R6) 0,0,2,1,-->
 R7) 0,0,1,1,2,-->0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--

R8) 0,0,1,1,3,-->0,0,2,1,--0,0,1,1,--0,0,1,1,3,--0,0,1,1,4,--
 R9) 0,0,1,1,4,-->0,0,2,1,--0,0,1,1,4,3,--0,0,--0,0,1,1,4,--
 R10)
 0,0,1,1,2,2,-->0,0,1,1,2,2,3,--0,0,1,1,2,2,4,--0,0,1,1,2,2,5,--0,0,1,1,2,2,6,--
 R11) 0,0,1,1,4,3,-->0,0,2,1,--
 R12)
 0,0,1,1,2,2,3,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,2,4,--0,0,1,1,2,2,5,--
 0,0,1,1,2,2,6,--
 R13)
 0,0,1,1,2,2,4,-->0,0,2,1,--0,0,1,1,2,2,--0,0,1,1,2,2,4,--0,0,1,1,2,2,5,--0,0,1,1,2,
 2,6,--
 R14)
 0,0,1,1,2,2,5,-->0,0,2,1,--0,0,1,1,4,3,--0,0,1,1,--0,0,1,1,2,2,5,--0,0,1,1,2,2,6,--
 R15)
 0,0,1,1,2,2,6,-->0,0,2,1,--0,0,1,1,4,3,--0,0,1,1,2,2,6,5,--0,0,--0,0,1,1,2,2,6,--
 R16)
 0,0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,3,5,--0,0,1,1,2,2,3,3,6,--0,0,
 1,1,2,2,3,3,7,--0,0,1,1,2,2,3,3,8,--
 R17) 0,0,1,1,2,2,6,5,-->0,0,2,1,--0,0,1,1,4,3,--
 R18)
 0,0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,3,5,--
 0,0,1,1,2,2,3,3,6,--0,0,1,1,2,2,3,3,7,--0,0,1,1,2,2,3,3,8,--
 R19)
 0,0,1,1,2,2,3,3,5,-->0,0,2,1,--0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,3,5,--0,0,1,1,2,2,3,
 3,6,--0,0,1,1,2,2,3,3,7,--0,0,1,1,2,2,3,3,8,--
 R20)
 0,0,1,1,2,2,3,3,6,-->0,0,2,1,--0,0,1,1,4,3,--0,0,1,1,2,2,--0,0,1,1,2,2,3,3,6,--0,0,
 1,1,2,2,3,3,7,--0,0,1,1,2,2,3,3,8,--
 R21)
 0,0,1,1,2,2,3,3,7,-->0,0,2,1,--0,0,1,1,4,3,--0,0,1,1,2,2,6,5,--0,0,1,1,--0,0,1,1,2,
 2,3,3,7,--0,0,1,1,2,2,3,3,8,--
 R22)
 0,0,1,1,2,2,3,3,8,-->0,0,2,1,--0,0,1,1,4,3,--0,0,1,1,2,2,6,5,--0,0,1,1,2,2,3,3,8,7,
 --0,0,--0,0,1,1,2,2,3,3,8,--
 R23)
 0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,4,6,--0,0,1,1,2,2,
 3,3,4,4,7,--0,0,1,1,2,2,3,3,4,4,8,--0,0,1,1,2,2,3,3,4,4,9,--0,0,1,1,2,2,3,3,4,4,10,
 --
 R24) 0,0,1,1,2,2,3,3,8,7,-->0,0,2,1,--0,0,1,1,4,3,--0,0,1,1,2,2,6,5,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,:

LEN=3) 0,0,1,: 0,0,2,:

LEN=4) 0,0,1,1,: 0,0,2,1,:

LEN=5) 0,0,1,1,2,: 0,0,1,1,3,: 0,0,1,1,4,:

LEN=6) 0,0,1,1,2,2,: 0,0,1,1,4,3,:

LEN=7) 0,0,1,1,2,2,3,: 0,0,1,1,2,2,4,: 0,0,1,1,2,2,5,: 0,0,1,1,2,2,6,:

LEN=8) 0,0,1,1,2,2,3,3,: 0,0,1,1,2,2,6,5,:

LEN=9) 0,0,1,1,2,2,3,3,4,: 0,0,1,1,2,2,3,3,5,: 0,0,1,1,2,2,3,3,6,:

0,0,1,1,2,2,3,3,7,: 0,0,1,1,2,2,3,3,8,:

LEN=10) 0,0,1,1,2,2,3,3,4,4,: 0,0,1,1,2,2,3,3,8,7,:
 LEN=11) 0,0,1,1,2,2,3,3,4,4,5,: 0,0,1,1,2,2,3,3,4,4,6,: 0,0,1,1,2,2,3,3,4,4,7,:
 0,0,1,1,2,2,3,3,4,4,8,: 0,0,1,1,2,2,3,3,4,4,9,: 0,0,1,1,2,2,3,3,4,4,10,:
 Number new nodes in level n is given by : 1,1,2,2,3,2,4,2,5,2,6,

-----Class

696-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][100][101][102][110][210]]$

 --

Rules of T[L]:

- R1) 0,-->0,0,--0,--
- R2) 0,0,-->0,0,1,--0,0,2,--
- R3) 0,0,1,-->0,0,1,1,--0,0,1,--0,0,2,--
- R4) 0,0,2,-->0,0,2,1,--0,0,--0,0,2,--
- R5) 0,0,1,1,-->0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--
- R6) 0,0,2,1,-->
- R7) 0,0,1,1,2,-->0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--
- R8) 0,0,1,1,3,-->0,0,2,1,--0,0,1,1,--0,0,1,1,3,--0,0,1,1,3,5,--
- R9) 0,0,1,1,4,-->0,0,1,1,4,2,--0,0,2,1,--0,0,--0,0,1,1,4,--
- R10)
- 0,0,1,1,2,2,-->0,0,1,1,2,2,3,--0,0,1,1,2,2,4,--0,0,1,1,2,2,5,--0,0,1,1,2,2,6,--
- R11) 0,0,1,1,3,5,-->0,0,2,1,--0,0,2,1,--0,0,--0,0,1,1,3,5,--
- R12) 0,0,1,1,4,2,-->0,0,2,1,--
- R13)
- 0,0,1,1,2,2,3,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,2,4,--0,0,1,1,2,2,5,--
- 0,0,1,1,2,2,6,--
- R14)
- 0,0,1,1,2,2,4,-->0,0,2,1,--0,0,1,1,2,2,--0,0,1,1,2,2,4,--0,0,1,1,2,2,4,6,--0,0,1,1,
- 2,2,4,7,--
- R15)
- 0,0,1,1,2,2,5,-->0,0,1,1,4,2,--0,0,2,1,--0,0,1,1,--0,0,1,1,2,2,5,--0,0,1,1,2,2,5,7,
-
- R16)
- 0,0,1,1,2,2,6,-->0,0,1,1,2,2,6,3,--0,0,1,1,4,2,--0,0,2,1,--0,0,--0,0,1,1,2,2,6,--
- R17)
- 0,0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,3,5,--0,0,1,1,2,2,3,3,6,--0,0,
- 1,1,2,2,3,3,7,--0,0,1,1,2,2,3,3,8,--
- R18)
- 0,0,1,1,2,2,4,6,-->0,0,2,1,--0,0,2,1,--0,0,1,1,--0,0,1,1,2,2,4,6,--0,0,1,1,2,2,4,6,
- 8,--
- R19) 0,0,1,1,2,2,4,7,-->0,0,2,1,--0,0,1,1,4,2,--0,0,2,1,--0,0,--0,0,1,1,2,2,4,7,--
- R20) 0,0,1,1,2,2,5,7,-->0,0,1,1,4,2,--0,0,2,1,--0,0,2,1,--0,0,--0,0,1,1,2,2,5,7,--
- R21) 0,0,1,1,2,2,6,3,-->0,0,1,1,4,2,--0,0,2,1,--
- R22)
- 0,0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,3,5,--
- 0,0,1,1,2,2,3,3,6,--0,0,1,1,2,2,3,3,7,--0,0,1,1,2,2,3,3,8,--
- R23)
- 0,0,1,1,2,2,3,3,5,-->0,0,2,1,--0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,3,5,--0,0,1,1,2,2,3,
- 3,5,7,--0,0,1,1,2,2,3,3,5,8,--0,0,1,1,2,2,3,3,5,9,--

R24)

0,0,1,1,2,2,3,3,6,-->0,0,1,1,4,2,--0,0,2,1,--0,0,1,1,2,2,--0,0,1,1,2,2,3,3,6,--0,0,
1,1,2,2,3,3,6,8,--0,0,1,1,2,2,3,3,6,9,--

R25)

0,0,1,1,2,2,3,3,7,-->0,0,1,1,2,2,6,3,--0,0,1,1,4,2,--0,0,2,1,--0,0,1,1,--0,0,1,1,2,
2,3,3,7,--0,0,1,1,2,2,3,3,7,9,--

R26)

0,0,1,1,2,2,3,3,8,-->0,0,1,1,2,2,3,3,8,4,--0,0,1,1,2,2,6,3,--0,0,1,1,4,2,--0,0,2,1,
--0,0,--0,0,1,1,2,2,3,3,8,--

R27) 0,0,1,1,2,2,4,6,8,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,--0,0,1,1,2,2,4,6,8,--

R28)

0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,4,6,--0,0,1,1,2,2,
3,3,4,4,7,--0,0,1,1,2,2,3,3,4,4,8,--0,0,1,1,2,2,3,3,4,4,9,--0,0,1,1,2,2,3,3,4,4,10,
--

R29)

0,0,1,1,2,2,3,3,5,7,-->0,0,2,1,--0,0,2,1,--0,0,1,1,2,2,--0,0,1,1,2,2,3,3,5,7,--0,0,
1,1,2,2,3,3,5,7,9,--0,0,1,1,2,2,3,3,5,7,10,--

R30)

0,0,1,1,2,2,3,3,5,8,-->0,0,2,1,--0,0,1,1,4,2,--0,0,2,1,--0,0,1,1,--0,0,1,1,2,2,3,3,
5,8,--0,0,1,1,2,2,3,3,5,8,10,--

R31)

0,0,1,1,2,2,3,3,5,9,-->0,0,2,1,--0,0,1,1,2,2,6,3,--0,0,1,1,4,2,--0,0,2,1,--0,0,--0,
0,1,1,2,2,3,3,5,9,--

R32)

0,0,1,1,2,2,3,3,6,8,-->0,0,1,1,4,2,--0,0,2,1,--0,0,2,1,--0,0,1,1,--0,0,1,1,2,2,3,3,
6,8,--0,0,1,1,2,2,3,3,6,8,10,--

R33)

0,0,1,1,2,2,3,3,6,9,-->0,0,1,1,4,2,--0,0,2,1,--0,0,1,1,4,2,--0,0,2,1,--0,0,--0,0,1,
1,2,2,3,3,6,9,--

R34)

0,0,1,1,2,2,3,3,7,9,-->0,0,1,1,2,2,6,3,--0,0,1,1,4,2,--0,0,2,1,--0,0,2,1,--0,0,--0,
0,1,1,2,2,3,3,7,9,--

R35) 0,0,1,1,2,2,3,3,8,4,-->0,0,1,1,2,2,6,3,--0,0,1,1,4,2,--0,0,2,1,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,:

LEN=3) 0,0,1,: 0,0,2,:

LEN=4) 0,0,1,1,: 0,0,2,1,:

LEN=5) 0,0,1,1,2,: 0,0,1,1,3,: 0,0,1,1,4,:

LEN=6) 0,0,1,1,2,2,: 0,0,1,1,3,5,: 0,0,1,1,4,2,:

LEN=7) 0,0,1,1,2,2,3,: 0,0,1,1,2,2,4,: 0,0,1,1,2,2,5,: 0,0,1,1,2,2,6,:

LEN=8) 0,0,1,1,2,2,3,3,: 0,0,1,1,2,2,4,6,: 0,0,1,1,2,2,4,7,: 0,0,1,1,2,2,5,7,:

0,0,1,1,2,2,6,3,:

LEN=9) 0,0,1,1,2,2,3,3,4,: 0,0,1,1,2,2,3,3,5,: 0,0,1,1,2,2,3,3,6,:

0,0,1,1,2,2,3,3,7,: 0,0,1,1,2,2,3,3,8,: 0,0,1,1,2,2,4,6,8,:

LEN=10) 0,0,1,1,2,2,3,3,4,4,: 0,0,1,1,2,2,3,3,5,7,: 0,0,1,1,2,2,3,3,5,8,:

0,0,1,1,2,2,3,3,5,9,: 0,0,1,1,2,2,3,3,6,8,: 0,0,1,1,2,2,3,3,6,9,:

0,0,1,1,2,2,3,3,7,9,: 0,0,1,1,2,2,3,3,8,4,:

LEN=11) 0,0,1,1,2,2,3,3,4,4,5,: 0,0,1,1,2,2,3,3,4,4,6,: 0,0,1,1,2,2,3,3,4,4,7,:

0,0,1,1,2,2,3,3,4,4,8,: 0,0,1,1,2,2,3,3,4,4,9,: 0,0,1,1,2,2,3,3,4,4,10,:

0,0,1,1,2,2,3,3,5,7,9, : 0,0,1,1,2,2,3,3,5,7,10, : 0,0,1,1,2,2,3,3,5,8,10, :
0,0,1,1,2,2,3,3,6,8,10, :

Number new nodes in level n is given by : 1,1,2,2,3,3,4,5,6,8,10,

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Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][100][101][102][120][201]]$

--

Rules of $T[L]$:

R1) 0, -->0,0,--0,--

R2) 0,0, -->0,0,1,--0,0,2,--

R3) 0,0,1, -->0,0,1,1,--0,0,1,--0,0,2,--

R4) 0,0,2, -->0,0,2,1,--0,0,2,2,--0,--

R5) 0,0,1,1, -->0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--

R6) 0,0,2,1, -->

R7) 0,0,2,2, -->0,0,2,1,--0,0,1,--0,0,2,--

R8) 0,0,1,1,2, -->0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--

R9) 0,0,1,1,3, -->0,0,2,1,--0,0,1,1,3,3,--0,0,1,--0,0,2,--

R10) 0,0,1,1,4, -->0,0,2,1,--0,0,1,1,4,3,--0,0,1,1,4,4,--0,--

R11)

0,0,1,1,2,2, -->0,0,1,1,2,2,3,--0,0,1,1,2,2,4,--0,0,1,1,2,2,5,--0,0,1,1,2,2,6,--

R12) 0,0,1,1,3,3, -->0,0,2,1,--0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--

R13) 0,0,1,1,4,3, -->0,0,2,1,--

R14) 0,0,1,1,4,4, -->0,0,2,1,--0,0,1,1,4,3,--0,0,1,--0,0,2,--

R15)

0,0,1,1,2,2,3, -->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,2,4,--0,0,1,1,2,2,5,--
0,0,1,1,2,2,6,--

R16)

0,0,1,1,2,2,4, -->0,0,2,1,--0,0,1,1,2,2,4,4,--0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--

R17) 0,0,1,1,2,2,5, -->0,0,2,1,--0,0,1,1,4,3,--0,0,1,1,2,2,5,5,--0,0,1,--0,0,2,--

R18)

0,0,1,1,2,2,6, -->0,0,2,1,--0,0,1,1,4,3,--0,0,1,1,2,2,6,5,--0,0,1,1,2,2,6,6,--0,--

R19)

0,0,1,1,2,2,3,3, -->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,3,5,--0,0,1,1,2,2,3,3,6,--0,0,
1,1,2,2,3,3,7,--0,0,1,1,2,2,3,3,8,--

R20)

0,0,1,1,2,2,4,4, -->0,0,2,1,--0,0,1,1,2,2,3,--0,0,1,1,2,2,4,--0,0,1,1,2,2,5,--0,0,1,
1,2,2,6,--

R21)

0,0,1,1,2,2,5,5, -->0,0,2,1,--0,0,1,1,4,3,--0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--

R22) 0,0,1,1,2,2,6,5, -->0,0,2,1,--0,0,1,1,4,3,--

R23) 0,0,1,1,2,2,6,6, -->0,0,2,1,--0,0,1,1,4,3,--0,0,1,1,2,2,6,5,--0,0,1,--0,0,2,--

R24)

0,0,1,1,2,2,3,3,4, -->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,3,5,--
0,0,1,1,2,2,3,3,6,--0,0,1,1,2,2,3,3,7,--0,0,1,1,2,2,3,3,8,--

R25)

0,0,1,1,2,2,3,3,5, -->0,0,2,1,--0,0,1,1,2,2,3,3,5,5,--0,0,1,1,2,2,3,--0,0,1,1,2,2,4,
--0,0,1,1,2,2,5,--0,0,1,1,2,2,6,--

R26)

0,0,1,1,2,2,3,3,6,-->0,0,2,1,--0,0,1,1,4,3,--0,0,1,1,2,2,3,3,6,6,--0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--

R27)

0,0,1,1,2,2,3,3,7,-->0,0,2,1,--0,0,1,1,4,3,--0,0,1,1,2,2,6,5,--0,0,1,1,2,2,3,3,7,7,--0,0,1,--0,0,2,--

R28)

0,0,1,1,2,2,3,3,8,-->0,0,2,1,--0,0,1,1,4,3,--0,0,1,1,2,2,6,5,--0,0,1,1,2,2,3,3,8,7,--0,0,1,1,2,2,3,3,8,8,--0,--

R29)

0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,4,6,--0,0,1,1,2,2,3,3,4,4,7,--0,0,1,1,2,2,3,3,4,4,8,--0,0,1,1,2,2,3,3,4,4,9,--0,0,1,1,2,2,3,3,4,4,10,--

R30)

0,0,1,1,2,2,3,3,5,5,-->0,0,2,1,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,3,5,--0,0,1,1,2,2,3,3,6,--0,0,1,1,2,2,3,3,7,--0,0,1,1,2,2,3,3,8,--

R31)

0,0,1,1,2,2,3,3,6,6,-->0,0,2,1,--0,0,1,1,4,3,--0,0,1,1,2,2,3,--0,0,1,1,2,2,4,--0,0,1,1,2,2,5,--0,0,1,1,2,2,6,--

R32)

0,0,1,1,2,2,3,3,7,7,-->0,0,2,1,--0,0,1,1,4,3,--0,0,1,1,2,2,6,5,--0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--

R33) 0,0,1,1,2,2,3,3,8,7,-->0,0,2,1,--0,0,1,1,4,3,--0,0,1,1,2,2,6,5,--

R34)

0,0,1,1,2,2,3,3,8,8,-->0,0,2,1,--0,0,1,1,4,3,--0,0,1,1,2,2,6,5,--0,0,1,1,2,2,3,3,8,7,--0,0,1,--0,0,2,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,:

LEN=3) 0,0,1,: 0,0,2,:

LEN=4) 0,0,1,1,: 0,0,2,1,: 0,0,2,2,:

LEN=5) 0,0,1,1,2,: 0,0,1,1,3,: 0,0,1,1,4,:

LEN=6) 0,0,1,1,2,2,: 0,0,1,1,3,3,: 0,0,1,1,4,3,: 0,0,1,1,4,4,:

LEN=7) 0,0,1,1,2,2,3,: 0,0,1,1,2,2,4,: 0,0,1,1,2,2,5,: 0,0,1,1,2,2,6,:

LEN=8) 0,0,1,1,2,2,3,3,: 0,0,1,1,2,2,4,4,: 0,0,1,1,2,2,5,5,: 0,0,1,1,2,2,6,5,:

0,0,1,1,2,2,6,6,:

LEN=9) 0,0,1,1,2,2,3,3,4,: 0,0,1,1,2,2,3,3,5,: 0,0,1,1,2,2,3,3,6,:

0,0,1,1,2,2,3,3,7,: 0,0,1,1,2,2,3,3,8,:

LEN=10) 0,0,1,1,2,2,3,3,4,4,: 0,0,1,1,2,2,3,3,5,5,: 0,0,1,1,2,2,3,3,6,6,:

0,0,1,1,2,2,3,3,7,7,: 0,0,1,1,2,2,3,3,8,7,: 0,0,1,1,2,2,3,3,8,8,:

LEN=11) 0,0,1,1,2,2,3,3,4,4,5,: 0,0,1,1,2,2,3,3,4,4,6,: 0,0,1,1,2,2,3,3,4,4,7,:

0,0,1,1,2,2,3,3,4,4,8,: 0,0,1,1,2,2,3,3,4,4,9,: 0,0,1,1,2,2,3,3,4,4,10,:

Number new nodes in level n is given by : 1,1,2,3,3,4,4,5,5,6,6,

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Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][010][100][101][102][120][210]]

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Rules of T[L]:

R1) 0,-->0,0,--0,--

R2) 0,0,-->0,0,1,--0,0,2,--
R3) 0,0,1,-->0,0,1,1,--0,0,1,--0,0,2,--
R4) 0,0,2,-->0,0,2,1,--0,0,2,2,--0,--
R5) 0,0,1,1,-->0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--
R6) 0,0,2,1,-->
R7) 0,0,2,2,-->0,0,2,1,--0,0,1,--0,0,2,--
R8) 0,0,1,1,2,-->0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--
R9) 0,0,1,1,3,-->0,0,2,1,--0,0,1,1,3,3,--0,0,1,--0,0,2,--
R10) 0,0,1,1,4,-->0,0,1,1,4,2,--0,0,2,1,--0,0,1,1,4,4,--0,--
R11)
0,0,1,1,2,2,-->0,0,1,1,2,2,3,--0,0,1,1,2,2,4,--0,0,1,1,2,2,5,--0,0,1,1,2,2,6,--
R12) 0,0,1,1,3,3,-->0,0,2,1,--0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--
R13) 0,0,1,1,4,2,-->0,0,2,1,--
R14) 0,0,1,1,4,4,-->0,0,1,1,4,2,--0,0,2,1,--0,0,1,--0,0,2,--
R15)
0,0,1,1,2,2,3,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,2,4,--0,0,1,1,2,2,5,--
0,0,1,1,2,2,6,--
R16)
0,0,1,1,2,2,4,-->0,0,2,1,--0,0,1,1,2,2,4,4,--0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--
R17) 0,0,1,1,2,2,5,-->0,0,1,1,4,2,--0,0,2,1,--0,0,1,1,2,2,5,5,--0,0,1,--0,0,2,--
R18)
0,0,1,1,2,2,6,-->0,0,1,1,2,2,6,3,--0,0,1,1,4,2,--0,0,2,1,--0,0,1,1,2,2,6,6,--0,--
R19)
0,0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,3,5,--0,0,1,1,2,2,3,3,6,--0,0,
1,1,2,2,3,3,7,--0,0,1,1,2,2,3,3,8,--
R20)
0,0,1,1,2,2,4,4,-->0,0,2,1,--0,0,1,1,2,2,3,--0,0,1,1,2,2,4,--0,0,1,1,2,2,5,--0,0,1,
1,2,2,6,--
R21)
0,0,1,1,2,2,5,5,-->0,0,1,1,4,2,--0,0,2,1,--0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--
R22) 0,0,1,1,2,2,6,3,-->0,0,1,1,4,2,--0,0,2,1,--
R23) 0,0,1,1,2,2,6,6,-->0,0,1,1,2,2,6,3,--0,0,1,1,4,2,--0,0,2,1,--0,0,1,--0,0,2,--
R24)
0,0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,3,5,--
0,0,1,1,2,2,3,3,6,--0,0,1,1,2,2,3,3,7,--0,0,1,1,2,2,3,3,8,--
R25)
0,0,1,1,2,2,3,3,5,-->0,0,2,1,--0,0,1,1,2,2,3,3,5,5,--0,0,1,1,2,2,3,--0,0,1,1,2,2,4,
--0,0,1,1,2,2,5,--0,0,1,1,2,2,6,--
R26)
0,0,1,1,2,2,3,3,6,-->0,0,1,1,4,2,--0,0,2,1,--0,0,1,1,2,2,3,3,6,6,--0,0,1,1,2,--0,0,
1,1,3,--0,0,1,1,4,--
R27)
0,0,1,1,2,2,3,3,7,-->0,0,1,1,2,2,6,3,--0,0,1,1,4,2,--0,0,2,1,--0,0,1,1,2,2,3,3,7,7,
--0,0,1,--0,0,2,--
R28)
0,0,1,1,2,2,3,3,8,-->0,0,1,1,2,2,3,3,8,4,--0,0,1,1,2,2,6,3,--0,0,1,1,4,2,--0,0,2,1,
--0,0,1,1,2,2,3,3,8,8,--0,--
R29)
0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,4,6,--0,0,1,1,2,2,
3,3,4,4,7,--0,0,1,1,2,2,3,3,4,4,8,--0,0,1,1,2,2,3,3,4,4,9,--0,0,1,1,2,2,3,3,4,4,10,

--
R30) $0,0,1,1,2,2,3,3,5,5, \rightarrow 0,0,2,1, \rightarrow 0,0,1,1,2,2,3,3,4, \rightarrow 0,0,1,1,2,2,3,3,5, \rightarrow 0,0,1,1,2,2,3,3,6, \rightarrow 0,0,1,1,2,2,3,3,7, \rightarrow 0,0,1,1,2,2,3,3,8, \rightarrow$
R31) $0,0,1,1,2,2,3,3,6,6, \rightarrow 0,0,1,1,4,2, \rightarrow 0,0,2,1, \rightarrow 0,0,1,1,2,2,3, \rightarrow 0,0,1,1,2,2,4, \rightarrow 0,0,1,1,2,2,5, \rightarrow 0,0,1,1,2,2,6, \rightarrow$
R32) $0,0,1,1,2,2,3,3,7,7, \rightarrow 0,0,1,1,2,2,6,3, \rightarrow 0,0,1,1,4,2, \rightarrow 0,0,2,1, \rightarrow 0,0,1,1,2, \rightarrow 0,0,1,1,3, \rightarrow 0,0,1,1,4, \rightarrow$
R33) $0,0,1,1,2,2,3,3,8,4, \rightarrow 0,0,1,1,2,2,6,3, \rightarrow 0,0,1,1,4,2, \rightarrow 0,0,2,1, \rightarrow$
R34) $0,0,1,1,2,2,3,3,8,8, \rightarrow 0,0,1,1,2,2,3,3,8,4, \rightarrow 0,0,1,1,2,2,6,3, \rightarrow 0,0,1,1,4,2, \rightarrow 0,0,2,1, \rightarrow 0,0,1, \rightarrow 0,0,2, \rightarrow$

List of different nodes in $T[L]$

LEN=1) $0, :$
LEN=2) $0,0, :$
LEN=3) $0,0,1, : 0,0,2, :$
LEN=4) $0,0,1,1, : 0,0,2,1, : 0,0,2,2, :$
LEN=5) $0,0,1,1,2, : 0,0,1,1,3, : 0,0,1,1,4, :$
LEN=6) $0,0,1,1,2,2, : 0,0,1,1,3,3, : 0,0,1,1,4,2, : 0,0,1,1,4,4, :$
LEN=7) $0,0,1,1,2,2,3, : 0,0,1,1,2,2,4, : 0,0,1,1,2,2,5, : 0,0,1,1,2,2,6, :$
LEN=8) $0,0,1,1,2,2,3,3, : 0,0,1,1,2,2,4,4, : 0,0,1,1,2,2,5,5, : 0,0,1,1,2,2,6,3, : 0,0,1,1,2,2,6,6, :$
LEN=9) $0,0,1,1,2,2,3,3,4, : 0,0,1,1,2,2,3,3,5, : 0,0,1,1,2,2,3,3,6, : 0,0,1,1,2,2,3,3,7, : 0,0,1,1,2,2,3,3,8, :$
LEN=10) $0,0,1,1,2,2,3,3,4,4, : 0,0,1,1,2,2,3,3,5,5, : 0,0,1,1,2,2,3,3,6,6, : 0,0,1,1,2,2,3,3,7,7, : 0,0,1,1,2,2,3,3,8,4, : 0,0,1,1,2,2,3,3,8,8, :$
LEN=11) $0,0,1,1,2,2,3,3,4,4,5, : 0,0,1,1,2,2,3,3,4,4,6, : 0,0,1,1,2,2,3,3,4,4,7, : 0,0,1,1,2,2,3,3,4,4,8, : 0,0,1,1,2,2,3,3,4,4,9, : 0,0,1,1,2,2,3,3,4,4,10, :$
Number new nodes in level n is given by : $1,1,2,3,3,4,4,5,5,6,6,$

-----Class

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Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][100][101][102][201][210]]$

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Rules of $T[L]$:

R1) $0, \rightarrow 0,0, \rightarrow 0, \rightarrow$
R2) $0,0, \rightarrow 0,0,1, \rightarrow 0,0,2, \rightarrow$
R3) $0,0,1, \rightarrow 0,0,1,1, \rightarrow 0,0,1, \rightarrow 0,0,2, \rightarrow$
R4) $0,0,2, \rightarrow 0,0,2,1, \rightarrow 0,0,2,2, \rightarrow 0,0,2, \rightarrow$
R5) $0,0,1,1, \rightarrow 0,0,1,1,2, \rightarrow 0,0,1,1,3, \rightarrow 0,0,1,1,4, \rightarrow$
R6) $0,0,2,1, \rightarrow$
R7) $0,0,2,2, \rightarrow 0,0,2,1, \rightarrow 0,0,1,1,3, \rightarrow 0,0,1,1,4, \rightarrow$
R8) $0,0,1,1,2, \rightarrow 0,0,1,1,2,2, \rightarrow 0,0,1,1,2, \rightarrow 0,0,1,1,3, \rightarrow 0,0,1,1,4, \rightarrow$
R9) $0,0,1,1,3, \rightarrow 0,0,2,1, \rightarrow 0,0,1,1,3,3, \rightarrow 0,0,1,1,3, \rightarrow 0,0,1,1,4, \rightarrow$
R10) $0,0,1,1,4, \rightarrow 0,0,2,1, \rightarrow 0,0,2,1, \rightarrow 0,0,1,1,4,4, \rightarrow 0,0,1,1,4, \rightarrow$
R11) $0,0,1,1,2,2, \rightarrow 0,0,1,1,2,2,3, \rightarrow 0,0,1,1,2,2,4, \rightarrow 0,0,1,1,2,2,5, \rightarrow 0,0,1,1,2,2,6, \rightarrow$

R12) 0,0,1,1,3,3,-->0,0,2,1,--0,0,1,1,2,2,4,--0,0,1,1,2,2,5,--0,0,1,1,2,2,6,--
R13) 0,0,1,1,4,4,-->0,0,2,1,--0,0,2,1,--0,0,1,1,2,2,5,--0,0,1,1,2,2,6,--
R14)
0,0,1,1,2,2,3,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,2,4,--0,0,1,1,2,2,5,--
0,0,1,1,2,2,6,--
R15)
0,0,1,1,2,2,4,-->0,0,2,1,--0,0,1,1,2,2,4,4,--0,0,1,1,2,2,4,--0,0,1,1,2,2,5,--0,0,1,
1,2,2,6,--
R16)
0,0,1,1,2,2,5,-->0,0,2,1,--0,0,2,1,--0,0,1,1,2,2,5,5,--0,0,1,1,2,2,5,--0,0,1,1,2,2,
6,--
R17)
0,0,1,1,2,2,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,1,1,2,2,6,6,--0,0,1,1,2,2,6,--
R18)
0,0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,3,5,--0,0,1,1,2,2,3,3,6,--0,0,
1,1,2,2,3,3,7,--0,0,1,1,2,2,3,3,8,--
R19)
0,0,1,1,2,2,4,4,-->0,0,2,1,--0,0,1,1,2,2,3,3,5,--0,0,1,1,2,2,3,3,6,--0,0,1,1,2,2,3,
3,7,--0,0,1,1,2,2,3,3,8,--
R20)
0,0,1,1,2,2,5,5,-->0,0,2,1,--0,0,2,1,--0,0,1,1,2,2,3,3,6,--0,0,1,1,2,2,3,3,7,--0,0,
1,1,2,2,3,3,8,--
R21)
0,0,1,1,2,2,6,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,1,1,2,2,3,3,7,--0,0,1,1,2,2,3,
3,8,--
R22)
0,0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,3,5,--
0,0,1,1,2,2,3,3,6,--0,0,1,1,2,2,3,3,7,--0,0,1,1,2,2,3,3,8,--
R23)
0,0,1,1,2,2,3,3,5,-->0,0,2,1,--0,0,1,1,2,2,3,3,5,5,--0,0,1,1,2,2,3,3,5,--0,0,1,1,2,
2,3,3,6,--0,0,1,1,2,2,3,3,7,--0,0,1,1,2,2,3,3,8,--
R24)
0,0,1,1,2,2,3,3,6,-->0,0,2,1,--0,0,2,1,--0,0,1,1,2,2,3,3,6,6,--0,0,1,1,2,2,3,3,6,--
0,0,1,1,2,2,3,3,7,--0,0,1,1,2,2,3,3,8,--
R25)
0,0,1,1,2,2,3,3,7,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,1,1,2,2,3,3,7,7,--0,0,1,1,2,
2,3,3,7,--0,0,1,1,2,2,3,3,8,--
R26)
0,0,1,1,2,2,3,3,8,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,1,1,2,2,3,3,8,8,--
0,0,1,1,2,2,3,3,8,--
R27)
0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,4,6,--0,0,1,1,2,2,
3,3,4,4,7,--0,0,1,1,2,2,3,3,4,4,8,--0,0,1,1,2,2,3,3,4,4,9,--0,0,1,1,2,2,3,3,4,4,10,
--
R28)
0,0,1,1,2,2,3,3,5,5,-->0,0,2,1,--0,0,1,1,2,2,3,3,4,4,6,--0,0,1,1,2,2,3,3,4,4,7,--0,
0,1,1,2,2,3,3,4,4,8,--0,0,1,1,2,2,3,3,4,4,9,--0,0,1,1,2,2,3,3,4,4,10,--
R29)
0,0,1,1,2,2,3,3,6,6,-->0,0,2,1,--0,0,2,1,--0,0,1,1,2,2,3,3,4,4,7,--0,0,1,1,2,2,3,3,
4,4,8,--0,0,1,1,2,2,3,3,4,4,9,--0,0,1,1,2,2,3,3,4,4,10,--

R30)
0,0,1,1,2,2,3,3,7,7,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,1,1,2,2,3,3,4,4,8,--0,0,1,
1,2,2,3,3,4,4,9,--0,0,1,1,2,2,3,3,4,4,10,--

R31)
0,0,1,1,2,2,3,3,8,8,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,1,1,2,2,3,3,4,4,
9,--0,0,1,1,2,2,3,3,4,4,10,--

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, :
LEN=3) 0,0,1, : 0,0,2, :
LEN=4) 0,0,1,1, : 0,0,2,1, : 0,0,2,2, :
LEN=5) 0,0,1,1,2, : 0,0,1,1,3, : 0,0,1,1,4, :
LEN=6) 0,0,1,1,2,2, : 0,0,1,1,3,3, : 0,0,1,1,4,4, :
LEN=7) 0,0,1,1,2,2,3, : 0,0,1,1,2,2,4, : 0,0,1,1,2,2,5, : 0,0,1,1,2,2,6, :
LEN=8) 0,0,1,1,2,2,3,3, : 0,0,1,1,2,2,4,4, : 0,0,1,1,2,2,5,5, : 0,0,1,1,2,2,6,6, :
LEN=9) 0,0,1,1,2,2,3,3,4, : 0,0,1,1,2,2,3,3,5, : 0,0,1,1,2,2,3,3,6, :
0,0,1,1,2,2,3,3,7, : 0,0,1,1,2,2,3,3,8, :
LEN=10) 0,0,1,1,2,2,3,3,4,4, : 0,0,1,1,2,2,3,3,5,5, : 0,0,1,1,2,2,3,3,6,6, :
0,0,1,1,2,2,3,3,7,7, : 0,0,1,1,2,2,3,3,8,8, :
LEN=11) 0,0,1,1,2,2,3,3,4,4,5, : 0,0,1,1,2,2,3,3,4,4,6, : 0,0,1,1,2,2,3,3,4,4,7, :
0,0,1,1,2,2,3,3,4,4,8, : 0,0,1,1,2,2,3,3,4,4,9, : 0,0,1,1,2,2,3,3,4,4,10, :
Number new nodes in level n is given by : 1,1,2,3,3,3,4,4,5,5,6,

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Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][100][101][110][120][201]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,1,--0,0,2,--
R3) 0,0,1,-->0,0,1,1,--0,0,1,--0,0,2,--
R4) 0,0,2,-->0,0,--0,0,--0,--
R5) 0,0,1,1,-->0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--
R6) 0,0,1,1,2,-->0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--
R7) 0,0,1,1,3,-->0,0,1,1,--0,0,1,1,--0,0,1,--0,0,2,--
R8) 0,0,1,1,4,-->0,0,--0,0,1,--0,0,--0,--
R9) 0,0,1,1,2,2,-->0,0,1,1,2,2,3,--0,0,1,1,2,2,4,--0,0,1,1,2,2,5,--0,0,1,1,2,2,6,--
R10)
0,0,1,1,2,2,3,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,2,4,--0,0,1,1,2,2,5,--
0,0,1,1,2,2,6,--
R11)
0,0,1,1,2,2,4,-->0,0,1,1,2,2,--0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--
R12) 0,0,1,1,2,2,5,-->0,0,1,1,--0,0,1,1,2,--0,0,1,1,--0,0,1,--0,0,2,--
R13) 0,0,1,1,2,2,6,-->0,0,--0,0,1,--0,0,1,1,2,2,6,5,--0,0,--0,--
R14)
0,0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,3,5,--0,0,1,1,2,2,3,3,6,--0,0,
1,1,2,2,3,3,7,--0,0,1,1,2,2,3,3,8,--
R15) 0,0,1,1,2,2,6,5,-->0,0,1,1,--0,0,1,1,2,--0,0,1,--0,0,2,--
R16)

$0,0,1,1,2,2,3,3,4, \rightarrow 0,0,1,1,2,2,3,3,4,4, \rightarrow 0,0,1,1,2,2,3,3,4, \rightarrow 0,0,1,1,2,2,3,3,5, \rightarrow$
 $0,0,1,1,2,2,3,3,6, \rightarrow 0,0,1,1,2,2,3,3,7, \rightarrow 0,0,1,1,2,2,3,3,8, \rightarrow$
R17)
 $0,0,1,1,2,2,3,3,5, \rightarrow 0,0,1,1,2,2,3,3, \rightarrow 0,0,1,1,2,2,3,3, \rightarrow 0,0,1,1,2,2,3, \rightarrow 0,0,1,1,2,$
 $2,4, \rightarrow 0,0,1,1,2,2,5, \rightarrow 0,0,1,1,2,2,6, \rightarrow$
R18)
 $0,0,1,1,2,2,3,3,6, \rightarrow 0,0,1,1,2,2, \rightarrow 0,0,1,1,2,2,3, \rightarrow 0,0,1,1,2,2, \rightarrow 0,0,1,1,2, \rightarrow 0,0,1,$
 $1,3, \rightarrow 0,0,1,1,4, \rightarrow$
R19)
 $0,0,1,1,2,2,3,3,7, \rightarrow 0,0,1,1, \rightarrow 0,0,1,1,2, \rightarrow 0,0,1,1,2,2,3,3,7,6, \rightarrow 0,0,1,1, \rightarrow 0,0,1, \rightarrow$
 $0,0,2, \rightarrow$
R20)
 $0,0,1,1,2,2,3,3,8, \rightarrow 0,0, \rightarrow 0,0,1, \rightarrow 0,0,1,1,2,2,6,5, \rightarrow 0,0,1,1,2,2,3,3,8,7, \rightarrow 0,0, \rightarrow 0,$
 \rightarrow
R21)
 $0,0,1,1,2,2,3,3,4,4, \rightarrow 0,0,1,1,2,2,3,3,4,4,5, \rightarrow 0,0,1,1,2,2,3,3,4,4,6, \rightarrow 0,0,1,1,2,2,$
 $3,3,4,4,7, \rightarrow 0,0,1,1,2,2,3,3,4,4,8, \rightarrow 0,0,1,1,2,2,3,3,4,4,9, \rightarrow 0,0,1,1,2,2,3,3,4,4,10,$
 \rightarrow
R22)
 $0,0,1,1,2,2,3,3,7,6, \rightarrow 0,0,1,1,2,2, \rightarrow 0,0,1,1,2,2,3, \rightarrow 0,0,1,1,2, \rightarrow 0,0,1,1,3, \rightarrow 0,0,1,$
 $1,4, \rightarrow$
R23)
 $0,0,1,1,2,2,3,3,8,7, \rightarrow 0,0,1,1, \rightarrow 0,0,1,1,2, \rightarrow 0,0,1,1,2,2,3,3,7,6, \rightarrow 0,0,1, \rightarrow 0,0,2, \rightarrow$
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
LEN=3) 0,0,1, : 0,0,2, :
LEN=4) 0,0,1,1, :
LEN=5) 0,0,1,1,2, : 0,0,1,1,3, : 0,0,1,1,4, :
LEN=6) 0,0,1,1,2,2, :
LEN=7) 0,0,1,1,2,2,3, : 0,0,1,1,2,2,4, : 0,0,1,1,2,2,5, : 0,0,1,1,2,2,6, :
LEN=8) 0,0,1,1,2,2,3,3, : 0,0,1,1,2,2,6,5, :
LEN=9) 0,0,1,1,2,2,3,3,4, : 0,0,1,1,2,2,3,3,5, : 0,0,1,1,2,2,3,3,6, :
 $0,0,1,1,2,2,3,3,7, : 0,0,1,1,2,2,3,3,8, :$
LEN=10) $0,0,1,1,2,2,3,3,4,4, : 0,0,1,1,2,2,3,3,7,6, : 0,0,1,1,2,2,3,3,8,7, :$
LEN=11) $0,0,1,1,2,2,3,3,4,4,5, : 0,0,1,1,2,2,3,3,4,4,6, : 0,0,1,1,2,2,3,3,4,4,7, :$
 $0,0,1,1,2,2,3,3,4,4,8, : 0,0,1,1,2,2,3,3,4,4,9, : 0,0,1,1,2,2,3,3,4,4,10, :$
Number new nodes in level n is given by : 1,1,2,1,3,1,4,2,5,3,6,

-----Class
701-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][100][101][110][120][210]]$

--
Rules of T[L]:
R1) $0, \rightarrow 0,0, \rightarrow 0, \rightarrow$
R2) $0,0, \rightarrow 0,0,1, \rightarrow 0,0,2, \rightarrow$
R3) $0,0,1, \rightarrow 0,0,1,1, \rightarrow 0,0,1, \rightarrow 0,0,2, \rightarrow$
R4) $0,0,2, \rightarrow 0,0, \rightarrow 0,0, \rightarrow 0, \rightarrow$
R5) $0,0,1,1, \rightarrow 0,0,1,1,2, \rightarrow 0,0,1,1,3, \rightarrow 0,0,1,1,4, \rightarrow$

R6) 0,0,1,1,2,-->0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--
R7) 0,0,1,1,3,-->0,0,1,1,--0,0,1,1,--0,0,1,--0,0,2,--
R8) 0,0,1,1,4,-->0,0,1,--0,0,--0,0,--0,--
R9) 0,0,1,1,2,2,-->0,0,1,1,2,2,3,--0,0,1,1,2,2,4,--0,0,1,1,2,2,5,--0,0,1,1,2,2,6,--
R10) 0,0,1,1,2,2,3,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,2,4,--0,0,1,1,2,2,5,--
0,0,1,1,2,2,6,--
R11) 0,0,1,1,2,2,4,-->0,0,1,1,2,2,--0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--
R12) 0,0,1,1,2,2,5,-->0,0,1,1,2,--0,0,1,1,--0,0,1,1,--0,0,1,--0,0,2,--
R13) 0,0,1,1,2,2,6,-->0,0,1,1,2,2,6,3,--0,0,1,--0,0,--0,0,--0,--
R14) 0,0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,3,5,--0,0,1,1,2,2,3,3,6,--0,0,
1,1,2,2,3,3,7,--0,0,1,1,2,2,3,3,8,--
R15) 0,0,1,1,2,2,6,3,-->0,0,1,1,2,--0,0,1,1,--0,0,1,--0,0,2,--
R16) 0,0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,3,5,--
0,0,1,1,2,2,3,3,6,--0,0,1,1,2,2,3,3,7,--0,0,1,1,2,2,3,3,8,--
R17) 0,0,1,1,2,2,3,3,5,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,
2,4,--0,0,1,1,2,2,5,--0,0,1,1,2,2,6,--
R18) 0,0,1,1,2,2,3,3,6,-->0,0,1,1,2,2,3,--0,0,1,1,2,2,--0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,
1,3,--0,0,1,1,4,--
R19) 0,0,1,1,2,2,3,3,7,-->0,0,1,1,2,2,3,3,7,4,--0,0,1,1,2,--0,0,1,1,--0,0,1,1,--0,0,1,--
0,0,2,--
R20) 0,0,1,1,2,2,3,3,8,-->0,0,1,1,2,2,3,3,8,4,--0,0,1,1,2,2,6,3,--0,0,1,--0,0,--0,0,--0,
--
R21) 0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,4,6,--0,0,1,1,2,2,
3,3,4,4,7,--0,0,1,1,2,2,3,3,4,4,8,--0,0,1,1,2,2,3,3,4,4,9,--0,0,1,1,2,2,3,3,4,4,10,
--
R22) 0,0,1,1,2,2,3,3,7,4,-->0,0,1,1,2,2,3,--0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,1,3,--0,0,1,
1,4,--
R23) 0,0,1,1,2,2,3,3,8,4,-->0,0,1,1,2,2,3,3,7,4,--0,0,1,1,2,--0,0,1,1,--0,0,1,--0,0,2,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
LEN=3) 0,0,1, : 0,0,2, :
LEN=4) 0,0,1,1, :
LEN=5) 0,0,1,1,2, : 0,0,1,1,3, : 0,0,1,1,4, :
LEN=6) 0,0,1,1,2,2, :
LEN=7) 0,0,1,1,2,2,3, : 0,0,1,1,2,2,4, : 0,0,1,1,2,2,5, : 0,0,1,1,2,2,6, :
LEN=8) 0,0,1,1,2,2,3,3, : 0,0,1,1,2,2,6,3, :
LEN=9) 0,0,1,1,2,2,3,3,4, : 0,0,1,1,2,2,3,3,5, : 0,0,1,1,2,2,3,3,6, :
0,0,1,1,2,2,3,3,7, : 0,0,1,1,2,2,3,3,8, :

LEN=10) 0,0,1,1,2,2,3,3,4,4,: 0,0,1,1,2,2,3,3,7,4,: 0,0,1,1,2,2,3,3,8,4,:
 LEN=11) 0,0,1,1,2,2,3,3,4,4,5,: 0,0,1,1,2,2,3,3,4,4,6,: 0,0,1,1,2,2,3,3,4,4,7,:
 0,0,1,1,2,2,3,3,4,4,8,: 0,0,1,1,2,2,3,3,4,4,9,: 0,0,1,1,2,2,3,3,4,4,10,:
 Number new nodes in level n is given by : 1,1,2,1,3,1,4,2,5,3,6,

-----Class

702-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][100][101][110][201][210]]$

--
 Rules of T[L]:

- R1) 0,-->0,0,--0,--
- R2) 0,0,-->0,0,1,--0,0,2,--
- R3) 0,0,1,-->0,0,1,1,--0,0,1,--0,0,2,--
- R4) 0,0,2,-->0,0,--0,0,--0,0,2,--
- R5) 0,0,1,1,-->0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--
- R6) 0,0,1,1,2,-->0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--
- R7) 0,0,1,1,3,-->0,0,1,1,--0,0,1,1,--0,0,1,1,3,--0,0,1,1,4,--
- R8) 0,0,1,1,4,-->0,0,--0,0,--0,0,--0,0,1,1,4,--
- R9) 0,0,1,1,2,2,-->0,0,1,1,2,2,3,--0,0,1,1,2,2,4,--0,0,1,1,2,2,5,--0,0,1,1,2,2,6,--
- R10) 0,0,1,1,2,2,3,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,2,4,--0,0,1,1,2,2,5,--0,0,1,1,2,2,6,--
- R11) 0,0,1,1,2,2,4,-->0,0,1,1,2,2,--0,0,1,1,2,2,--0,0,1,1,2,2,4,--0,0,1,1,2,2,5,--0,0,1,1,2,2,6,--
- R12) 0,0,1,1,2,2,5,-->0,0,1,1,--0,0,1,1,--0,0,1,1,--0,0,1,1,2,2,5,--0,0,1,1,2,2,6,--
- R13) 0,0,1,1,2,2,6,-->0,0,--0,0,--0,0,--0,0,--0,0,1,1,2,2,6,--
- R14) 0,0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,3,5,--0,0,1,1,2,2,3,3,6,--0,0,1,1,2,2,3,3,7,--0,0,1,1,2,2,3,3,8,--
- R15) 0,0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,3,5,--0,0,1,1,2,2,3,3,6,--0,0,1,1,2,2,3,3,7,--0,0,1,1,2,2,3,3,8,--
- R16) 0,0,1,1,2,2,3,3,5,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,3,5,--0,0,1,1,2,2,3,3,6,--0,0,1,1,2,2,3,3,7,--0,0,1,1,2,2,3,3,8,--
- R17) 0,0,1,1,2,2,3,3,6,-->0,0,1,1,2,2,--0,0,1,1,2,2,--0,0,1,1,2,2,--0,0,1,1,2,2,3,3,6,--0,0,1,1,2,2,3,3,7,--0,0,1,1,2,2,3,3,8,--
- R18) 0,0,1,1,2,2,3,3,7,-->0,0,1,1,--0,0,1,1,--0,0,1,1,--0,0,1,1,--0,0,1,1,2,2,3,3,7,--0,0,1,1,2,2,3,3,8,--
- R19) 0,0,1,1,2,2,3,3,8,-->0,0,--0,0,--0,0,--0,0,--0,0,--0,0,1,1,2,2,3,3,8,--
- R20) 0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,4,6,--0,0,1,1,2,2,3,3,4,4,7,--0,0,1,1,2,2,3,3,4,4,8,--0,0,1,1,2,2,3,3,4,4,9,--0,0,1,1,2,2,3,3,4,4,10,--

--
 List of different nodes in T[L]

LEN=1) 0, :
 LEN=2) 0,0, :
 LEN=3) 0,0,1, : 0,0,2, :
 LEN=4) 0,0,1,1, :
 LEN=5) 0,0,1,1,2, : 0,0,1,1,3, : 0,0,1,1,4, :
 LEN=6) 0,0,1,1,2,2, :
 LEN=7) 0,0,1,1,2,2,3, : 0,0,1,1,2,2,4, : 0,0,1,1,2,2,5, : 0,0,1,1,2,2,6, :
 LEN=8) 0,0,1,1,2,2,3,3, :
 LEN=9) 0,0,1,1,2,2,3,3,4, : 0,0,1,1,2,2,3,3,5, : 0,0,1,1,2,2,3,3,6, :
 0,0,1,1,2,2,3,3,7, : 0,0,1,1,2,2,3,3,8, :
 LEN=10) 0,0,1,1,2,2,3,3,4,4, :
 LEN=11) 0,0,1,1,2,2,3,3,4,4,5, : 0,0,1,1,2,2,3,3,4,4,6, : 0,0,1,1,2,2,3,3,4,4,7, :
 0,0,1,1,2,2,3,3,4,4,8, : 0,0,1,1,2,2,3,3,4,4,9, : 0,0,1,1,2,2,3,3,4,4,10, :
 Number new nodes in level n is given by : 1,1,2,1,3,1,4,1,5,1,6,

-----Class

703-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[000][010][100][101][120][201][210]$

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Rules of $T[L]$:

R1) 0, -->0,0, --0, --
 R2) 0,0, -->0,0,1, --0,0,2, --
 R3) 0,0,1, -->0,0,1,1, --0,0,1, --0,0,2, --
 R4) 0,0,2, -->0,0, --0,0,1, --0, --
 R5) 0,0,1,1, -->0,0,1,1,2, --0,0,1,1,3, --0,0,1,1,4, --
 R6) 0,0,1,1,2, -->0,0,1,1,2,2, --0,0,1,1,2, --0,0,1,1,3, --0,0,1,1,4, --
 R7) 0,0,1,1,3, -->0,0,1,1, --0,0,1,1,2, --0,0,1, --0,0,2, --
 R8) 0,0,1,1,4, -->0,0, --0,0, --0,0,1,1,4,4, --0, --
 R9) 0,0,1,1,2,2, -->0,0,1,1,2,2,3, --0,0,1,1,2,2,4, --0,0,1,1,2,2,5, --0,0,1,1,2,2,6, --
 R10) 0,0,1,1,4,4, -->0,0,1,1, --0,0,1,1, --0,0,1, --0,0,2, --
 R11)
 0,0,1,1,2,2,3, -->0,0,1,1,2,2,3,3, --0,0,1,1,2,2,3, --0,0,1,1,2,2,4, --0,0,1,1,2,2,5, --
 0,0,1,1,2,2,6, --
 R12)
 0,0,1,1,2,2,4, -->0,0,1,1,2,2, --0,0,1,1,2,2,3, --0,0,1,1,2, --0,0,1,1,3, --0,0,1,1,4, --
 R13) 0,0,1,1,2,2,5, -->0,0,1,1, --0,0,1,1, --0,0,1,1,2,2,5,5, --0,0,1, --0,0,2, --
 R14) 0,0,1,1,2,2,6, -->0,0, --0,0, --0,0, --0,0,1,1,2,2,6,6, --0, --
 R15)
 0,0,1,1,2,2,3,3, -->0,0,1,1,2,2,3,3,4, --0,0,1,1,2,2,3,3,5, --0,0,1,1,2,2,3,3,6, --0,0,
 1,1,2,2,3,3,7, --0,0,1,1,2,2,3,3,8, --
 R16)
 0,0,1,1,2,2,5,5, -->0,0,1,1,2,2, --0,0,1,1,2,2, --0,0,1,1,2, --0,0,1,1,3, --0,0,1,1,4, --
 R17) 0,0,1,1,2,2,6,6, -->0,0,1,1, --0,0,1,1, --0,0,1,1, --0,0,1, --0,0,2, --
 R18)
 0,0,1,1,2,2,3,3,4, -->0,0,1,1,2,2,3,3,4,4, --0,0,1,1,2,2,3,3,4, --0,0,1,1,2,2,3,3,5, --
 0,0,1,1,2,2,3,3,6, --0,0,1,1,2,2,3,3,7, --0,0,1,1,2,2,3,3,8, --
 R19)
 0,0,1,1,2,2,3,3,5, -->0,0,1,1,2,2,3,3, --0,0,1,1,2,2,3,3,4, --0,0,1,1,2,2,3, --0,0,1,1,
 2,2,4, --0,0,1,1,2,2,5, --0,0,1,1,2,2,6, --

R20)
0,0,1,1,2,2,3,3,6,-->0,0,1,1,2,2,--0,0,1,1,2,2,--0,0,1,1,2,2,3,3,6,6,--0,0,1,1,2,2,--
0,0,1,1,3,--0,0,1,1,4,--

R21)
0,0,1,1,2,2,3,3,7,-->0,0,1,1,--0,0,1,1,--0,0,1,1,--0,0,1,1,2,2,3,3,7,7,--0,0,1,--0,
0,2,--

R22) 0,0,1,1,2,2,3,3,8,-->0,0,--0,0,--0,0,--0,0,--0,0,1,1,2,2,3,3,8,8,--0,--

R23)
0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,4,6,--0,0,1,1,2,2,
3,3,4,4,7,--0,0,1,1,2,2,3,3,4,4,8,--0,0,1,1,2,2,3,3,4,4,9,--0,0,1,1,2,2,3,3,4,4,10,
--

R24)
0,0,1,1,2,2,3,3,6,6,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,
2,2,4,--0,0,1,1,2,2,5,--0,0,1,1,2,2,6,--

R25)
0,0,1,1,2,2,3,3,7,7,-->0,0,1,1,2,2,--0,0,1,1,2,2,--0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,
1,3,--0,0,1,1,4,--

R26)
0,0,1,1,2,2,3,3,8,8,-->0,0,1,1,--0,0,1,1,--0,0,1,1,--0,0,1,1,--0,0,1,--0,0,2,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,:

LEN=3) 0,0,1,: 0,0,2,:

LEN=4) 0,0,1,1,:

LEN=5) 0,0,1,1,2,: 0,0,1,1,3,: 0,0,1,1,4,:

LEN=6) 0,0,1,1,2,2,: 0,0,1,1,4,4,:

LEN=7) 0,0,1,1,2,2,3,: 0,0,1,1,2,2,4,: 0,0,1,1,2,2,5,: 0,0,1,1,2,2,6,:

LEN=8) 0,0,1,1,2,2,3,3,: 0,0,1,1,2,2,5,5,: 0,0,1,1,2,2,6,6,:

LEN=9) 0,0,1,1,2,2,3,3,4,: 0,0,1,1,2,2,3,3,5,: 0,0,1,1,2,2,3,3,6,:

0,0,1,1,2,2,3,3,7,: 0,0,1,1,2,2,3,3,8,:

LEN=10) 0,0,1,1,2,2,3,3,4,4,: 0,0,1,1,2,2,3,3,6,6,: 0,0,1,1,2,2,3,3,7,7,:

0,0,1,1,2,2,3,3,8,8,:

LEN=11) 0,0,1,1,2,2,3,3,4,4,5,: 0,0,1,1,2,2,3,3,4,4,6,: 0,0,1,1,2,2,3,3,4,4,7,:

0,0,1,1,2,2,3,3,4,4,8,: 0,0,1,1,2,2,3,3,4,4,9,: 0,0,1,1,2,2,3,3,4,4,10,:

Number new nodes in level n is given by : 1,1,2,1,3,2,4,3,5,4,6,

-----Class

704-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][100][102][110][120][201]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,--

R2) 0,0,-->0,0,1,--0,0,2,--

R3) 0,0,1,-->0,0,1,1,--0,0,1,--0,0,2,--

R4) 0,0,2,-->0,0,2,1,--0,0,--0,--

R5) 0,0,1,1,-->0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--

R6) 0,0,2,1,-->0,0,2,1,2,--

R7) 0,0,1,1,2,-->0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--

R8) 0,0,1,1,3,-->0,0,2,1,--0,0,1,1,--0,0,1,--0,0,2,--

R9) 0,0,1,1,4,-->0,0,2,1,--0,0,1,1,4,3,--0,0,--0,--
R10) 0,0,2,1,2,-->
R11)
0,0,1,1,2,2,-->0,0,1,1,2,2,3,--0,0,1,1,2,2,4,--0,0,1,1,2,2,5,--0,0,1,1,2,2,6,--
R12) 0,0,1,1,4,3,-->0,0,2,1,2,--0,0,2,1,2,--
R13)
0,0,1,1,2,2,3,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,2,4,--0,0,1,1,2,2,5,--
0,0,1,1,2,2,6,--
R14) 0,0,1,1,2,2,4,-->0,0,2,1,--0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--
R15) 0,0,1,1,2,2,5,-->0,0,2,1,--0,0,1,1,4,3,--0,0,1,1,--0,0,1,--0,0,2,--
R16) 0,0,1,1,2,2,6,-->0,0,2,1,--0,0,1,1,4,3,--0,0,1,1,2,2,6,5,--0,0,--0,--
R17)
0,0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,3,5,--0,0,1,1,2,2,3,3,6,--0,0,
1,1,2,2,3,3,7,--0,0,1,1,2,2,3,3,8,--
R18) 0,0,1,1,2,2,6,5,-->0,0,2,1,2,--0,0,2,1,--0,0,2,1,2,--
R19)
0,0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,3,5,--
0,0,1,1,2,2,3,3,6,--0,0,1,1,2,2,3,3,7,--0,0,1,1,2,2,3,3,8,--
R20)
0,0,1,1,2,2,3,3,5,-->0,0,2,1,--0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,2,4,--0,
0,1,1,2,2,5,--0,0,1,1,2,2,6,--
R21)
0,0,1,1,2,2,3,3,6,-->0,0,2,1,--0,0,1,1,4,3,--0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,1,3,--
0,0,1,1,4,--
R22)
0,0,1,1,2,2,3,3,7,-->0,0,2,1,--0,0,1,1,4,3,--0,0,1,1,2,2,6,5,--0,0,1,1,--0,0,1,--0,
0,2,--
R23)
0,0,1,1,2,2,3,3,8,-->0,0,2,1,--0,0,1,1,4,3,--0,0,1,1,2,2,6,5,--0,0,1,1,2,2,3,3,8,7,
--0,0,--0,--
R24)
0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,4,6,--0,0,1,1,2,2,
3,3,4,4,7,--0,0,1,1,2,2,3,3,4,4,8,--0,0,1,1,2,2,3,3,4,4,9,--0,0,1,1,2,2,3,3,4,4,10,
--
R25)
0,0,1,1,2,2,3,3,8,7,-->0,0,2,1,2,--0,0,2,1,--0,0,1,1,2,2,3,3,8,7,6,--0,0,2,1,2,--

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, :
LEN=3) 0,0,1, : 0,0,2, :
LEN=4) 0,0,1,1, : 0,0,2,1, :
LEN=5) 0,0,1,1,2, : 0,0,1,1,3, : 0,0,1,1,4, : 0,0,2,1,2, :
LEN=6) 0,0,1,1,2,2, : 0,0,1,1,4,3, :
LEN=7) 0,0,1,1,2,2,3, : 0,0,1,1,2,2,4, : 0,0,1,1,2,2,5, : 0,0,1,1,2,2,6, :
LEN=8) 0,0,1,1,2,2,3,3, : 0,0,1,1,2,2,6,5, :
LEN=9) 0,0,1,1,2,2,3,3,4, : 0,0,1,1,2,2,3,3,5, : 0,0,1,1,2,2,3,3,6, :
0,0,1,1,2,2,3,3,7, : 0,0,1,1,2,2,3,3,8, :
LEN=10) 0,0,1,1,2,2,3,3,4,4, : 0,0,1,1,2,2,3,3,8,7, :
LEN=11) 0,0,1,1,2,2,3,3,4,4,5, : 0,0,1,1,2,2,3,3,4,4,6, : 0,0,1,1,2,2,3,3,4,4,7, :
0,0,1,1,2,2,3,3,4,4,8, : 0,0,1,1,2,2,3,3,4,4,9, : 0,0,1,1,2,2,3,3,4,4,10, :

--
R25) 0,0,1,1,2,2,3,3,8,4,-->0,0,1,1,2,2,6,3,--0,0,1,1,4,2,--0,0,2,1,--0,0,2,1,2,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
LEN=3) 0,0,1, : 0,0,2, :
LEN=4) 0,0,1,1, : 0,0,2,1, :
LEN=5) 0,0,1,1,2, : 0,0,1,1,3, : 0,0,1,1,4, : 0,0,2,1,2, :
LEN=6) 0,0,1,1,2,2, : 0,0,1,1,4,2, :
LEN=7) 0,0,1,1,2,2,3, : 0,0,1,1,2,2,4, : 0,0,1,1,2,2,5, : 0,0,1,1,2,2,6, :
LEN=8) 0,0,1,1,2,2,3,3, : 0,0,1,1,2,2,6,3, :
LEN=9) 0,0,1,1,2,2,3,3,4, : 0,0,1,1,2,2,3,3,5, : 0,0,1,1,2,2,3,3,6, :
0,0,1,1,2,2,3,3,7, : 0,0,1,1,2,2,3,3,8, :
LEN=10) 0,0,1,1,2,2,3,3,4,4, : 0,0,1,1,2,2,3,3,8,4, :
LEN=11) 0,0,1,1,2,2,3,3,4,4,5, : 0,0,1,1,2,2,3,3,4,4,6, : 0,0,1,1,2,2,3,3,4,4,7, :
0,0,1,1,2,2,3,3,4,4,8, : 0,0,1,1,2,2,3,3,4,4,9, : 0,0,1,1,2,2,3,3,4,4,10, :
Number new nodes in level n is given by : 1,1,2,2,4,2,4,2,5,2,6,

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706-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][100][102][110][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,1,--0,0,2,--
R3) 0,0,1,-->0,0,1,1,--0,0,1,--0,0,2,--
R4) 0,0,2,-->0,0,2,1,--0,0,--0,0,2,3,--
R5) 0,0,1,1,-->0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--
R6) 0,0,2,1,-->0,0,2,1,2,--
R7) 0,0,2,3,-->0,0,2,1,2,--0,0,--0,0,2,3,--
R8) 0,0,1,1,2,-->0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--
R9) 0,0,1,1,3,-->0,0,2,1,--0,0,1,1,--0,0,1,1,3,4,--0,0,1,1,3,5,--
R10) 0,0,1,1,4,-->0,0,2,1,--0,0,2,1,--0,0,--0,0,1,1,4,5,--
R11) 0,0,2,1,2,-->
R12)
0,0,1,1,2,2,-->0,0,1,1,2,2,3,--0,0,1,1,2,2,4,--0,0,1,1,2,2,5,--0,0,1,1,2,2,6,--
R13) 0,0,1,1,3,4,-->0,0,2,1,2,--0,0,1,1,--0,0,1,1,3,4,--0,0,1,1,3,5,--
R14) 0,0,1,1,3,5,-->0,0,2,1,2,--0,0,2,1,--0,0,--0,0,1,1,4,5,--
R15) 0,0,1,1,4,5,-->0,0,2,1,2,--0,0,2,1,2,--0,0,--0,0,1,1,4,5,--
R16)
0,0,1,1,2,2,3,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,2,4,--0,0,1,1,2,2,5,--
0,0,1,1,2,2,6,--
R17)
0,0,1,1,2,2,4,-->0,0,2,1,--0,0,1,1,2,2,--0,0,1,1,2,2,4,5,--0,0,1,1,2,2,4,6,--0,0,1,
1,2,2,4,7,--
R18)
0,0,1,1,2,2,5,-->0,0,2,1,--0,0,2,1,--0,0,1,1,--0,0,1,1,2,2,5,6,--0,0,1,1,2,2,5,7,--
R19) 0,0,1,1,2,2,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,--0,0,1,1,2,2,6,7,--
R20)

0,0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,3,5,--0,0,1,1,2,2,3,3,6,--0,0,1,1,2,2,3,3,7,--0,0,1,1,2,2,3,3,8,--

R21)

0,0,1,1,2,2,4,5,-->0,0,2,1,2,--0,0,1,1,2,2,--0,0,1,1,2,2,4,5,--0,0,1,1,2,2,4,6,--0,0,1,1,2,2,4,7,--

R22)

0,0,1,1,2,2,4,6,-->0,0,2,1,2,--0,0,2,1,--0,0,1,1,--0,0,1,1,2,2,5,6,--0,0,1,1,2,2,5,7,--

R23) 0,0,1,1,2,2,4,7,-->0,0,2,1,2,--0,0,2,1,--0,0,2,1,--0,0,--0,0,1,1,2,2,6,7,--

R24)

0,0,1,1,2,2,5,6,-->0,0,2,1,2,--0,0,2,1,2,--0,0,1,1,--0,0,1,1,2,2,5,6,--0,0,1,1,2,2,5,7,--

R25) 0,0,1,1,2,2,5,7,-->0,0,2,1,2,--0,0,2,1,2,--0,0,2,1,--0,0,--0,0,1,1,2,2,6,7,--

R26)

0,0,1,1,2,2,6,7,-->0,0,2,1,2,--0,0,2,1,2,--0,0,2,1,2,--0,0,--0,0,1,1,2,2,6,7,--

R27)

0,0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,3,5,--0,0,1,1,2,2,3,3,6,--0,0,1,1,2,2,3,3,7,--0,0,1,1,2,2,3,3,8,--

R28)

0,0,1,1,2,2,3,3,5,-->0,0,2,1,--0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,3,5,6,--0,0,1,1,2,2,3,3,5,7,--0,0,1,1,2,2,3,3,5,8,--0,0,1,1,2,2,3,3,5,9,--

R29)

0,0,1,1,2,2,3,3,6,-->0,0,2,1,--0,0,2,1,--0,0,1,1,2,2,--0,0,1,1,2,2,3,3,6,7,--0,0,1,1,2,2,3,3,6,8,--0,0,1,1,2,2,3,3,6,9,--

R30)

0,0,1,1,2,2,3,3,7,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,1,1,--0,0,1,1,2,2,3,3,7,8,--0,0,1,1,2,2,3,3,7,9,--

R31)

0,0,1,1,2,2,3,3,8,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,--0,0,1,1,2,2,3,3,8,9,--

R32)

0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,4,6,--0,0,1,1,2,2,3,3,4,4,7,--0,0,1,1,2,2,3,3,4,4,8,--0,0,1,1,2,2,3,3,4,4,9,--0,0,1,1,2,2,3,3,4,4,10,--

R33)

0,0,1,1,2,2,3,3,5,6,-->0,0,2,1,2,--0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,3,5,6,--0,0,1,1,2,2,3,3,5,7,--0,0,1,1,2,2,3,3,5,8,--0,0,1,1,2,2,3,3,5,9,--

R34)

0,0,1,1,2,2,3,3,5,7,-->0,0,2,1,2,--0,0,2,1,--0,0,1,1,2,2,--0,0,1,1,2,2,3,3,6,7,--0,0,1,1,2,2,3,3,6,8,--0,0,1,1,2,2,3,3,6,9,--

R35)

0,0,1,1,2,2,3,3,5,8,-->0,0,2,1,2,--0,0,2,1,--0,0,2,1,--0,0,1,1,--0,0,1,1,2,2,3,3,7,8,--0,0,1,1,2,2,3,3,7,9,--

R36)

0,0,1,1,2,2,3,3,5,9,-->0,0,2,1,2,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,--0,0,1,1,2,2,3,3,8,9,--

R37)

0,0,1,1,2,2,3,3,6,7,-->0,0,2,1,2,--0,0,2,1,2,--0,0,1,1,2,2,--0,0,1,1,2,2,3,3,6,7,--0,0,1,1,2,2,3,3,6,8,--0,0,1,1,2,2,3,3,6,9,--

R38)

0,0,1,1,2,2,3,3,6,8,-->0,0,2,1,2,--0,0,2,1,2,--0,0,2,1,--0,0,1,1,--0,0,1,1,2,2,3,3,7,8,--0,0,1,1,2,2,3,3,7,9,--

R39)

0,0,1,1,2,2,3,3,6,9,-->0,0,2,1,2,--0,0,2,1,2,--0,0,2,1,--0,0,2,1,--0,0,--0,0,1,1,2,2,3,3,8,9,--

R40)

0,0,1,1,2,2,3,3,7,8,-->0,0,2,1,2,--0,0,2,1,2,--0,0,2,1,2,--0,0,1,1,--0,0,1,1,2,2,3,3,7,8,--0,0,1,1,2,2,3,3,7,9,--

R41)

0,0,1,1,2,2,3,3,7,9,-->0,0,2,1,2,--0,0,2,1,2,--0,0,2,1,2,--0,0,2,1,--0,0,--0,0,1,1,2,2,3,3,8,9,--

R42)

0,0,1,1,2,2,3,3,8,9,-->0,0,2,1,2,--0,0,2,1,2,--0,0,2,1,2,--0,0,2,1,2,--0,0,--0,0,1,1,2,2,3,3,8,9,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, :

LEN=3) 0,0,1, : 0,0,2, :

LEN=4) 0,0,1,1, : 0,0,2,1, : 0,0,2,3, :

LEN=5) 0,0,1,1,2, : 0,0,1,1,3, : 0,0,1,1,4, : 0,0,2,1,2, :

LEN=6) 0,0,1,1,2,2, : 0,0,1,1,3,4, : 0,0,1,1,3,5, : 0,0,1,1,4,5, :

LEN=7) 0,0,1,1,2,2,3, : 0,0,1,1,2,2,4, : 0,0,1,1,2,2,5, : 0,0,1,1,2,2,6, :

LEN=8) 0,0,1,1,2,2,3,3, : 0,0,1,1,2,2,4,5, : 0,0,1,1,2,2,4,6, : 0,0,1,1,2,2,4,7, :

0,0,1,1,2,2,5,6, : 0,0,1,1,2,2,5,7, : 0,0,1,1,2,2,6,7, :

LEN=9) 0,0,1,1,2,2,3,3,4, : 0,0,1,1,2,2,3,3,5, : 0,0,1,1,2,2,3,3,6, :

0,0,1,1,2,2,3,3,7, : 0,0,1,1,2,2,3,3,8, :

LEN=10) 0,0,1,1,2,2,3,3,4,4, : 0,0,1,1,2,2,3,3,5,6, : 0,0,1,1,2,2,3,3,5,7, :

0,0,1,1,2,2,3,3,5,8, : 0,0,1,1,2,2,3,3,5,9, : 0,0,1,1,2,2,3,3,6,7, :

0,0,1,1,2,2,3,3,6,8, : 0,0,1,1,2,2,3,3,6,9, : 0,0,1,1,2,2,3,3,7,8, :

0,0,1,1,2,2,3,3,7,9, : 0,0,1,1,2,2,3,3,8,9, :

LEN=11) 0,0,1,1,2,2,3,3,4,4,5, : 0,0,1,1,2,2,3,3,4,4,6, : 0,0,1,1,2,2,3,3,4,4,7, :

0,0,1,1,2,2,3,3,4,4,8, : 0,0,1,1,2,2,3,3,4,4,9, : 0,0,1,1,2,2,3,3,4,4,10, :

Number new nodes in level n is given by : 1,1,2,3,4,4,4,7,5,11,6,

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707-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][100][102][120][201][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,--

R2) 0,0,-->0,0,1,--0,0,2,--

R3) 0,0,1,-->0,0,1,1,--0,0,1,--0,0,2,--

R4) 0,0,2,-->0,0,2,1,--0,0,2,2,--0,--

R5) 0,0,1,1,-->0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--

R6) 0,0,2,1,-->0,0,2,1,2,--

R7) 0,0,2,2,-->0,0,2,1,2,--0,0,1,--0,0,2,--

R8) 0,0,1,1,2,-->0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--

R9) 0,0,1,1,3,-->0,0,2,1,--0,0,1,1,3,3,--0,0,1,--0,0,2,--

R10) 0,0,1,1,4,-->0,0,2,1,--0,0,2,1,--0,0,1,1,4,4,--0,--

R11) 0,0,2,1,2,-->
R12)
0,0,1,1,2,2,-->0,0,1,1,2,2,3,--0,0,1,1,2,2,4,--0,0,1,1,2,2,5,--0,0,1,1,2,2,6,--
R13) 0,0,1,1,3,3,-->0,0,2,1,2,--0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--
R14) 0,0,1,1,4,4,-->0,0,2,1,2,--0,0,2,1,2,--0,0,1,--0,0,2,--
R15)
0,0,1,1,2,2,3,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,2,4,--0,0,1,1,2,2,5,--
0,0,1,1,2,2,6,--
R16)
0,0,1,1,2,2,4,-->0,0,2,1,--0,0,1,1,2,2,4,4,--0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--
R17) 0,0,1,1,2,2,5,-->0,0,2,1,--0,0,2,1,--0,0,1,1,2,2,5,5,--0,0,1,--0,0,2,--
R18) 0,0,1,1,2,2,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,1,1,2,2,6,6,--0,--
R19)
0,0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,3,5,--0,0,1,1,2,2,3,3,6,--0,0,
1,1,2,2,3,3,7,--0,0,1,1,2,2,3,3,8,--
R20)
0,0,1,1,2,2,4,4,-->0,0,2,1,2,--0,0,1,1,2,2,3,--0,0,1,1,2,2,4,--0,0,1,1,2,2,5,--0,0,
1,1,2,2,6,--
R21)
0,0,1,1,2,2,5,5,-->0,0,2,1,2,--0,0,2,1,2,--0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--
R22) 0,0,1,1,2,2,6,6,-->0,0,2,1,2,--0,0,2,1,2,--0,0,2,1,2,--0,0,1,--0,0,2,--
R23)
0,0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,3,5,--
0,0,1,1,2,2,3,3,6,--0,0,1,1,2,2,3,3,7,--0,0,1,1,2,2,3,3,8,--
R24)
0,0,1,1,2,2,3,3,5,-->0,0,2,1,--0,0,1,1,2,2,3,3,5,5,--0,0,1,1,2,2,3,--0,0,1,1,2,2,4,
--0,0,1,1,2,2,5,--0,0,1,1,2,2,6,--
R25)
0,0,1,1,2,2,3,3,6,-->0,0,2,1,--0,0,2,1,--0,0,1,1,2,2,3,3,6,6,--0,0,1,1,2,--0,0,1,1,
3,--0,0,1,1,4,--
R26)
0,0,1,1,2,2,3,3,7,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,1,1,2,2,3,3,7,7,--0,0,1,--0,
0,2,--
R27)
0,0,1,1,2,2,3,3,8,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,1,1,2,2,3,3,8,8,--
0,--
R28)
0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,4,6,--0,0,1,1,2,2,
3,3,4,4,7,--0,0,1,1,2,2,3,3,4,4,8,--0,0,1,1,2,2,3,3,4,4,9,--0,0,1,1,2,2,3,3,4,4,10,
--
R29)
0,0,1,1,2,2,3,3,5,5,-->0,0,2,1,2,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,3,5,--0,0,1,1,
2,2,3,3,6,--0,0,1,1,2,2,3,3,7,--0,0,1,1,2,2,3,3,8,--
R30)
0,0,1,1,2,2,3,3,6,6,-->0,0,2,1,2,--0,0,2,1,2,--0,0,1,1,2,2,3,--0,0,1,1,2,2,4,--0,0,
1,1,2,2,5,--0,0,1,1,2,2,6,--
R31)
0,0,1,1,2,2,3,3,7,7,-->0,0,2,1,2,--0,0,2,1,2,--0,0,2,1,2,--0,0,1,1,2,--0,0,1,1,3,--
0,0,1,1,4,--
R32)

0,0,1,1,2,2,3,3,8,8,-->0,0,2,1,2,--0,0,2,1,2,--0,0,2,1,2,--0,0,2,1,2,--0,0,1,--0,0,2,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, :

LEN=3) 0,0,1, : 0,0,2, :

LEN=4) 0,0,1,1, : 0,0,2,1, : 0,0,2,2, :

LEN=5) 0,0,1,1,2, : 0,0,1,1,3, : 0,0,1,1,4, : 0,0,2,1,2, :

LEN=6) 0,0,1,1,2,2, : 0,0,1,1,3,3, : 0,0,1,1,4,4, :

LEN=7) 0,0,1,1,2,2,3, : 0,0,1,1,2,2,4, : 0,0,1,1,2,2,5, : 0,0,1,1,2,2,6, :

LEN=8) 0,0,1,1,2,2,3,3, : 0,0,1,1,2,2,4,4, : 0,0,1,1,2,2,5,5, : 0,0,1,1,2,2,6,6, :

LEN=9) 0,0,1,1,2,2,3,3,4, : 0,0,1,1,2,2,3,3,5, : 0,0,1,1,2,2,3,3,6, :

0,0,1,1,2,2,3,3,7, : 0,0,1,1,2,2,3,3,8, :

LEN=10) 0,0,1,1,2,2,3,3,4,4, : 0,0,1,1,2,2,3,3,5,5, : 0,0,1,1,2,2,3,3,6,6, :

0,0,1,1,2,2,3,3,7,7, : 0,0,1,1,2,2,3,3,8,8, :

LEN=11) 0,0,1,1,2,2,3,3,4,4,5, : 0,0,1,1,2,2,3,3,4,4,6, : 0,0,1,1,2,2,3,3,4,4,7, :

0,0,1,1,2,2,3,3,4,4,8, : 0,0,1,1,2,2,3,3,4,4,9, : 0,0,1,1,2,2,3,3,4,4,10, :

Number new nodes in level n is given by : 1,1,2,3,4,3,4,4,5,5,6,

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Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][100][110][120][201][210]]$

--

Rules of T[L]:

R1) 0, -->0,0,--0,--

R2) 0,0, -->0,0,1,--0,0,2,--

R3) 0,0,1, -->0,0,1,1,--0,0,1,--0,0,2,--

R4) 0,0,2, -->0,0,1,--0,0,--0,--

R5) 0,0,1,1, -->0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--

R6) 0,0,1,1,2, -->0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--

R7) 0,0,1,1,3, -->0,0,1,1,2,--0,0,1,1,--0,0,1,--0,0,2,--

R8) 0,0,1,1,4, -->0,0,1,--0,0,1,--0,0,--0,--

R9) 0,0,1,1,2,2, -->0,0,1,1,2,2,3,--0,0,1,1,2,2,4,--0,0,1,1,2,2,5,--0,0,1,1,2,2,6,--

R10)

0,0,1,1,2,2,3, -->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,2,4,--0,0,1,1,2,2,5,--

0,0,1,1,2,2,6,--

R11)

0,0,1,1,2,2,4, -->0,0,1,1,2,2,3,--0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--

R12) 0,0,1,1,2,2,5, -->0,0,1,1,2,--0,0,1,1,2,--0,0,1,1,--0,0,1,--0,0,2,--

R13) 0,0,1,1,2,2,6, -->0,0,1,--0,0,1,--0,0,1,--0,0,--0,--

R14)

0,0,1,1,2,2,3,3, -->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,3,5,--0,0,1,1,2,2,3,3,6,--0,0,

1,1,2,2,3,3,7,--0,0,1,1,2,2,3,3,8,--

R15)

0,0,1,1,2,2,3,3,4, -->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,3,5,--

0,0,1,1,2,2,3,3,6,--0,0,1,1,2,2,3,3,7,--0,0,1,1,2,2,3,3,8,--

R16)

0,0,1,1,2,2,3,3,5, -->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,

2,2,4,--0,0,1,1,2,2,5,--0,0,1,1,2,2,6,--

R16) 0,0,1,1,2,2,6,-->0,0,2,1,--0,0,1,1,4,3,--0,0,1,1,2,2,6,5,--0,0,--0,--
R17)
0,0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,3,5,--0,0,1,1,2,2,3,3,6,--0,0,
1,1,2,2,3,3,7,--0,0,1,1,2,2,3,3,8,--
R18) 0,0,1,1,2,2,6,5,-->0,0,2,1,--0,0,1,1,4,3,--0,0,2,1,1,--
R19)
0,0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,3,5,--
0,0,1,1,2,2,3,3,6,--0,0,1,1,2,2,3,3,7,--0,0,1,1,2,2,3,3,8,--
R20)
0,0,1,1,2,2,3,3,5,-->0,0,2,1,--0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,2,4,--0,
0,1,1,2,2,5,--0,0,1,1,2,2,6,--
R21)
0,0,1,1,2,2,3,3,6,-->0,0,2,1,--0,0,1,1,4,3,--0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,1,3,--
0,0,1,1,4,--
R22)
0,0,1,1,2,2,3,3,7,-->0,0,2,1,--0,0,1,1,4,3,--0,0,1,1,2,2,6,5,--0,0,1,1,--0,0,1,--0,
0,2,--
R23)
0,0,1,1,2,2,3,3,8,-->0,0,2,1,--0,0,1,1,4,3,--0,0,1,1,2,2,6,5,--0,0,1,1,2,2,3,3,8,7,
--0,0,--0,--
R24)
0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,4,6,--0,0,1,1,2,2,
3,3,4,4,7,--0,0,1,1,2,2,3,3,4,4,8,--0,0,1,1,2,2,3,3,4,4,9,--0,0,1,1,2,2,3,3,4,4,10,
--
R25) 0,0,1,1,2,2,3,3,8,7,-->0,0,2,1,--0,0,1,1,4,3,--0,0,1,1,2,2,6,5,--0,0,2,1,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
LEN=3) 0,0,1, : 0,0,2, :
LEN=4) 0,0,1,1, : 0,0,2,1, :
LEN=5) 0,0,1,1,2, : 0,0,1,1,3, : 0,0,1,1,4, : 0,0,2,1,1, :
LEN=6) 0,0,1,1,2,2, : 0,0,1,1,4,3, :
LEN=7) 0,0,1,1,2,2,3, : 0,0,1,1,2,2,4, : 0,0,1,1,2,2,5, : 0,0,1,1,2,2,6, :
LEN=8) 0,0,1,1,2,2,3,3, : 0,0,1,1,2,2,6,5, :
LEN=9) 0,0,1,1,2,2,3,3,4, : 0,0,1,1,2,2,3,3,5, : 0,0,1,1,2,2,3,3,6, :
0,0,1,1,2,2,3,3,7, : 0,0,1,1,2,2,3,3,8, :
LEN=10) 0,0,1,1,2,2,3,3,4,4, : 0,0,1,1,2,2,3,3,8,7, :
LEN=11) 0,0,1,1,2,2,3,3,4,4,5, : 0,0,1,1,2,2,3,3,4,4,6, : 0,0,1,1,2,2,3,3,4,4,7, :
0,0,1,1,2,2,3,3,4,4,8, : 0,0,1,1,2,2,3,3,4,4,9, : 0,0,1,1,2,2,3,3,4,4,10, :
Number new nodes in level n is given by : 1,1,2,2,4,2,4,2,5,2,6,

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710-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][101][102][110][120][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,--

R2) 0,0,-->0,0,1,--0,0,2,--

R3) 0,0,1,-->0,0,1,1,--0,0,1,--0,0,2,--

R4) 0,0,2,-->0,0,2,1,--0,0,--0,--
R5) 0,0,1,1,-->0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--
R6) 0,0,2,1,-->0,0,2,1,1,--
R7) 0,0,1,1,2,-->0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--
R8) 0,0,1,1,3,-->0,0,2,1,--0,0,1,1,--0,0,1,--0,0,2,--
R9) 0,0,1,1,4,-->0,0,1,1,4,2,--0,0,2,1,--0,0,--0,--
R10) 0,0,2,1,1,-->
R11)
0,0,1,1,2,2,-->0,0,1,1,2,2,3,--0,0,1,1,2,2,4,--0,0,1,1,2,2,5,--0,0,1,1,2,2,6,--
R12) 0,0,1,1,4,2,-->0,0,1,1,4,2,2,--0,0,2,1,--
R13)
0,0,1,1,2,2,3,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,2,4,--0,0,1,1,2,2,5,--
0,0,1,1,2,2,6,--
R14) 0,0,1,1,2,2,4,-->0,0,2,1,--0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--
R15) 0,0,1,1,2,2,5,-->0,0,1,1,4,2,--0,0,2,1,--0,0,1,1,--0,0,1,--0,0,2,--
R16) 0,0,1,1,2,2,6,-->0,0,1,1,2,2,6,3,--0,0,1,1,4,2,--0,0,2,1,--0,0,--0,--
R17) 0,0,1,1,4,2,2,-->0,0,2,1,--
R18)
0,0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,3,5,--0,0,1,1,2,2,3,3,6,--0,0,
1,1,2,2,3,3,7,--0,0,1,1,2,2,3,3,8,--
R19) 0,0,1,1,2,2,6,3,-->0,0,1,1,2,2,6,3,3,--0,0,1,1,4,2,--0,0,2,1,--
R20)
0,0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,3,5,--
0,0,1,1,2,2,3,3,6,--0,0,1,1,2,2,3,3,7,--0,0,1,1,2,2,3,3,8,--
R21)
0,0,1,1,2,2,3,3,5,-->0,0,2,1,--0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,2,4,--0,
0,1,1,2,2,5,--0,0,1,1,2,2,6,--
R22)
0,0,1,1,2,2,3,3,6,-->0,0,1,1,4,2,--0,0,2,1,--0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,1,3,--
0,0,1,1,4,--
R23)
0,0,1,1,2,2,3,3,7,-->0,0,1,1,2,2,6,3,--0,0,1,1,4,2,--0,0,2,1,--0,0,1,1,--0,0,1,--0,
0,2,--
R24)
0,0,1,1,2,2,3,3,8,-->0,0,1,1,2,2,3,3,8,4,--0,0,1,1,2,2,6,3,--0,0,1,1,4,2,--0,0,2,1,
--0,0,--0,--
R25) 0,0,1,1,2,2,6,3,3,-->0,0,1,1,4,2,--0,0,2,1,--
R26)
0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,4,6,--0,0,1,1,2,2,
3,3,4,4,7,--0,0,1,1,2,2,3,3,4,4,8,--0,0,1,1,2,2,3,3,4,4,9,--0,0,1,1,2,2,3,3,4,4,10,
--
R27)
0,0,1,1,2,2,3,3,8,4,-->0,0,1,1,2,2,3,3,8,4,4,--0,0,1,1,2,2,6,3,--0,0,1,1,4,2,--0,0,
2,1,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, :

LEN=3) 0,0,1, : 0,0,2, :

LEN=4) 0,0,1,1, : 0,0,2,1, :

LEN=5) 0,0,1,1,2, : 0,0,1,1,3, : 0,0,1,1,4, : 0,0,2,1,1, :

LEN=6) 0,0,1,1,2,2,: 0,0,1,1,4,2,:
 LEN=7) 0,0,1,1,2,2,3,: 0,0,1,1,2,2,4,: 0,0,1,1,2,2,5,: 0,0,1,1,2,2,6,:
 0,0,1,1,4,2,2,:
 LEN=8) 0,0,1,1,2,2,3,3,: 0,0,1,1,2,2,6,3,:
 LEN=9) 0,0,1,1,2,2,3,3,4,: 0,0,1,1,2,2,3,3,5,: 0,0,1,1,2,2,3,3,6,:
 0,0,1,1,2,2,3,3,7,: 0,0,1,1,2,2,3,3,8,: 0,0,1,1,2,2,6,3,3,:
 LEN=10) 0,0,1,1,2,2,3,3,4,4,: 0,0,1,1,2,2,3,3,8,4,:
 LEN=11) 0,0,1,1,2,2,3,3,4,4,5,: 0,0,1,1,2,2,3,3,4,4,6,: 0,0,1,1,2,2,3,3,4,4,7,:
 0,0,1,1,2,2,3,3,4,4,8,: 0,0,1,1,2,2,3,3,4,4,9,: 0,0,1,1,2,2,3,3,4,4,10,:
 0,0,1,1,2,2,3,3,8,4,4,:
 Number new nodes in level n is given by : 1,1,2,2,4,2,5,2,6,2,7,

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711-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][101][102][110][201][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,--

R2) 0,0,-->0,0,1,--0,0,2,--

R3) 0,0,1,-->0,0,1,1,--0,0,1,--0,0,2,--

R4) 0,0,2,-->0,0,2,1,--0,0,--0,0,2,--

R5) 0,0,1,1,-->0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--

R6) 0,0,2,1,-->0,0,2,1,1,--

R7) 0,0,1,1,2,-->0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--

R8) 0,0,1,1,3,-->0,0,2,1,--0,0,1,1,--0,0,1,1,3,--0,0,1,1,4,--

R9) 0,0,1,1,4,-->0,0,2,1,--0,0,2,1,--0,0,--0,0,1,1,4,--

R10) 0,0,2,1,1,-->

R11)

0,0,1,1,2,2,-->0,0,1,1,2,2,3,--0,0,1,1,2,2,4,--0,0,1,1,2,2,5,--0,0,1,1,2,2,6,--

R12)

0,0,1,1,2,2,3,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,2,4,--0,0,1,1,2,2,5,--

0,0,1,1,2,2,6,--

R13)

0,0,1,1,2,2,4,-->0,0,2,1,--0,0,1,1,2,2,--0,0,1,1,2,2,4,--0,0,1,1,2,2,5,--0,0,1,1,2,

2,6,--

R14)

0,0,1,1,2,2,5,-->0,0,2,1,--0,0,2,1,--0,0,1,1,--0,0,1,1,2,2,5,--0,0,1,1,2,2,6,--

R15) 0,0,1,1,2,2,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,--0,0,1,1,2,2,6,--

R16)

0,0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,3,5,--0,0,1,1,2,2,3,3,6,--0,0,

1,1,2,2,3,3,7,--0,0,1,1,2,2,3,3,8,--

R17)

0,0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,3,5,--

0,0,1,1,2,2,3,3,6,--0,0,1,1,2,2,3,3,7,--0,0,1,1,2,2,3,3,8,--

R18)

0,0,1,1,2,2,3,3,5,-->0,0,2,1,--0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,3,5,--0,0,1,1,2,2,3,

3,6,--0,0,1,1,2,2,3,3,7,--0,0,1,1,2,2,3,3,8,--

R19)

0,0,1,1,2,2,3,3,6,-->0,0,2,1,--0,0,2,1,--0,0,1,1,2,2,--0,0,1,1,2,2,3,3,6,--0,0,1,1,

2,2,3,3,7,--0,0,1,1,2,2,3,3,8,--
R20)
0,0,1,1,2,2,3,3,7,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,1,1,--0,0,1,1,2,2,3,3,7,--0,
0,1,1,2,2,3,3,8,--
R21)
0,0,1,1,2,2,3,3,8,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,--0,0,1,1,2,2,3,3,
8,--
R22)
0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,4,6,--0,0,1,1,2,2,
3,3,4,4,7,--0,0,1,1,2,2,3,3,4,4,8,--0,0,1,1,2,2,3,3,4,4,9,--0,0,1,1,2,2,3,3,4,4,10,
--

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, :
LEN=3) 0,0,1, : 0,0,2, :
LEN=4) 0,0,1,1, : 0,0,2,1, :
LEN=5) 0,0,1,1,2, : 0,0,1,1,3, : 0,0,1,1,4, : 0,0,2,1,1, :
LEN=6) 0,0,1,1,2,2, :
LEN=7) 0,0,1,1,2,2,3, : 0,0,1,1,2,2,4, : 0,0,1,1,2,2,5, : 0,0,1,1,2,2,6, :
LEN=8) 0,0,1,1,2,2,3,3, :
LEN=9) 0,0,1,1,2,2,3,3,4, : 0,0,1,1,2,2,3,3,5, : 0,0,1,1,2,2,3,3,6, :
0,0,1,1,2,2,3,3,7, : 0,0,1,1,2,2,3,3,8, :
LEN=10) 0,0,1,1,2,2,3,3,4,4, :
LEN=11) 0,0,1,1,2,2,3,3,4,4,5, : 0,0,1,1,2,2,3,3,4,4,6, : 0,0,1,1,2,2,3,3,4,4,7, :
0,0,1,1,2,2,3,3,4,4,8, : 0,0,1,1,2,2,3,3,4,4,9, : 0,0,1,1,2,2,3,3,4,4,10, :
Number new nodes in level n is given by : 1,1,2,2,4,1,4,1,5,1,6,

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712-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][101][102][120][201][210]]$

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Rules of T[L]:

R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,1,--0,0,2,--
R3) 0,0,1,-->0,0,1,1,--0,0,1,--0,0,2,--
R4) 0,0,2,-->0,0,2,1,--0,0,2,2,--0,--
R5) 0,0,1,1,-->0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--
R6) 0,0,2,1,-->0,0,2,1,1,--
R7) 0,0,2,2,-->0,0,2,1,--0,0,1,--0,0,2,--
R8) 0,0,1,1,2,-->0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--
R9) 0,0,1,1,3,-->0,0,2,1,--0,0,1,1,3,3,--0,0,1,--0,0,2,--
R10) 0,0,1,1,4,-->0,0,2,1,--0,0,2,1,--0,0,1,1,4,4,--0,--
R11) 0,0,2,1,1,-->
R12)
0,0,1,1,2,2,-->0,0,1,1,2,2,3,--0,0,1,1,2,2,4,--0,0,1,1,2,2,5,--0,0,1,1,2,2,6,--
R13) 0,0,1,1,3,3,-->0,0,2,1,--0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--
R14) 0,0,1,1,4,4,-->0,0,2,1,--0,0,2,1,--0,0,1,--0,0,2,--
R15)
0,0,1,1,2,2,3,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,2,4,--0,0,1,1,2,2,5,--

0,0,1,1,2,2,6,--
 R16)
 0,0,1,1,2,2,4,-->0,0,2,1,--0,0,1,1,2,2,4,4,--0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--
 R17) 0,0,1,1,2,2,5,-->0,0,2,1,--0,0,2,1,--0,0,1,1,2,2,5,5,--0,0,1,--0,0,2,--
 R18) 0,0,1,1,2,2,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,1,1,2,2,6,6,--0,--
 R19)
 0,0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,3,5,--0,0,1,1,2,2,3,3,6,--0,0,
 1,1,2,2,3,3,7,--0,0,1,1,2,2,3,3,8,--
 R20)
 0,0,1,1,2,2,4,4,-->0,0,2,1,--0,0,1,1,2,2,3,--0,0,1,1,2,2,4,--0,0,1,1,2,2,5,--0,0,1,
 1,2,2,6,--
 R21) 0,0,1,1,2,2,5,5,-->0,0,2,1,--0,0,2,1,--0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--
 R22) 0,0,1,1,2,2,6,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,1,--0,0,2,--
 R23)
 0,0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,3,5,--
 0,0,1,1,2,2,3,3,6,--0,0,1,1,2,2,3,3,7,--0,0,1,1,2,2,3,3,8,--
 R24)
 0,0,1,1,2,2,3,3,5,-->0,0,2,1,--0,0,1,1,2,2,3,3,5,5,--0,0,1,1,2,2,3,--0,0,1,1,2,2,4,
 --0,0,1,1,2,2,5,--0,0,1,1,2,2,6,--
 R25)
 0,0,1,1,2,2,3,3,6,-->0,0,2,1,--0,0,2,1,--0,0,1,1,2,2,3,3,6,6,--0,0,1,1,2,--0,0,1,1,
 3,--0,0,1,1,4,--
 R26)
 0,0,1,1,2,2,3,3,7,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,1,1,2,2,3,3,7,7,--0,0,1,--0,
 0,2,--
 R27)
 0,0,1,1,2,2,3,3,8,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,1,1,2,2,3,3,8,8,--
 0,--
 R28)
 0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,4,6,--0,0,1,1,2,2,
 3,3,4,4,7,--0,0,1,1,2,2,3,3,4,4,8,--0,0,1,1,2,2,3,3,4,4,9,--0,0,1,1,2,2,3,3,4,4,10,
 --
 R29)
 0,0,1,1,2,2,3,3,5,5,-->0,0,2,1,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,3,5,--0,0,1,1,2,
 2,3,3,6,--0,0,1,1,2,2,3,3,7,--0,0,1,1,2,2,3,3,8,--
 R30)
 0,0,1,1,2,2,3,3,6,6,-->0,0,2,1,--0,0,2,1,--0,0,1,1,2,2,3,--0,0,1,1,2,2,4,--0,0,1,1,
 2,2,5,--0,0,1,1,2,2,6,--
 R31)
 0,0,1,1,2,2,3,3,7,7,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,1,1,2,--0,0,1,1,3,--0,0,1,
 1,4,--
 R32)
 0,0,1,1,2,2,3,3,8,8,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,1,--0,0,2,--
 List of different nodes in T[L]
 LEN=1) 0, :
 LEN=2) 0,0, :
 LEN=3) 0,0,1, : 0,0,2, :
 LEN=4) 0,0,1,1, : 0,0,2,1, : 0,0,2,2, :
 LEN=5) 0,0,1,1,2, : 0,0,1,1,3, : 0,0,1,1,4, : 0,0,2,1,1, :
 LEN=6) 0,0,1,1,2,2, : 0,0,1,1,3,3, : 0,0,1,1,4,4, :

LEN=7) 0,0,1,1,2,2,3, : 0,0,1,1,2,2,4, : 0,0,1,1,2,2,5, : 0,0,1,1,2,2,6, :
 LEN=8) 0,0,1,1,2,2,3,3, : 0,0,1,1,2,2,4,4, : 0,0,1,1,2,2,5,5, : 0,0,1,1,2,2,6,6, :
 LEN=9) 0,0,1,1,2,2,3,3,4, : 0,0,1,1,2,2,3,3,5, : 0,0,1,1,2,2,3,3,6, :
 0,0,1,1,2,2,3,3,7, : 0,0,1,1,2,2,3,3,8, :
 LEN=10) 0,0,1,1,2,2,3,3,4,4, : 0,0,1,1,2,2,3,3,5,5, : 0,0,1,1,2,2,3,3,6,6, :
 0,0,1,1,2,2,3,3,7,7, : 0,0,1,1,2,2,3,3,8,8, :
 LEN=11) 0,0,1,1,2,2,3,3,4,4,5, : 0,0,1,1,2,2,3,3,4,4,6, : 0,0,1,1,2,2,3,3,4,4,7, :
 0,0,1,1,2,2,3,3,4,4,8, : 0,0,1,1,2,2,3,3,4,4,9, : 0,0,1,1,2,2,3,3,4,4,10, :
 Number new nodes in level n is given by : 1,1,2,3,4,3,4,4,5,5,6,

-----Class

713-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][101][110][120][201][210]]$

--

Rules of $T[L]$:

- R1) 0, -->0,0, --0, --
- R2) 0,0, -->0,0,1, --0,0,2, --
- R3) 0,0,1, -->0,0,1,1, --0,0,1, --0,0,2, --
- R4) 0,0,2, -->0,0,1, --0,0, --0, --
- R5) 0,0,1,1, -->0,0,1,1,2, --0,0,1,1,3, --0,0,1,1,4, --
- R6) 0,0,1,1,2, -->0,0,1,1,2,2, --0,0,1,1,2, --0,0,1,1,3, --0,0,1,1,4, --
- R7) 0,0,1,1,3, -->0,0,1,1,2, --0,0,1,1, --0,0,1, --0,0,2, --
- R8) 0,0,1,1,4, -->0,0,1, --0,0,1, --0,0, --0, --
- R9) 0,0,1,1,2,2, -->0,0,1,1,2,2,3, --0,0,1,1,2,2,4, --0,0,1,1,2,2,5, --0,0,1,1,2,2,6, --
- R10) 0,0,1,1,2,2,3, -->0,0,1,1,2,2,3,3, --0,0,1,1,2,2,3, --0,0,1,1,2,2,4, --0,0,1,1,2,2,5, --0,0,1,1,2,2,6, --
- R11) 0,0,1,1,2,2,4, -->0,0,1,1,2,2,3, --0,0,1,1,2,2, --0,0,1,1,2, --0,0,1,1,3, --0,0,1,1,4, --
- R12) 0,0,1,1,2,2,5, -->0,0,1,1,2, --0,0,1,1,2, --0,0,1,1, --0,0,1, --0,0,2, --
- R13) 0,0,1,1,2,2,6, -->0,0,1, --0,0,1, --0,0,1, --0,0, --0, --
- R14) 0,0,1,1,2,2,3,3, -->0,0,1,1,2,2,3,3,4, --0,0,1,1,2,2,3,3,5, --0,0,1,1,2,2,3,3,6, --0,0,1,1,2,2,3,3,7, --0,0,1,1,2,2,3,3,8, --
- R15) 0,0,1,1,2,2,3,3,4, -->0,0,1,1,2,2,3,3,4,4, --0,0,1,1,2,2,3,3,4, --0,0,1,1,2,2,3,3,5, --0,0,1,1,2,2,3,3,6, --0,0,1,1,2,2,3,3,7, --0,0,1,1,2,2,3,3,8, --
- R16) 0,0,1,1,2,2,3,3,5, -->0,0,1,1,2,2,3,3,4, --0,0,1,1,2,2,3,3, --0,0,1,1,2,2,3, --0,0,1,1,2,2,4, --0,0,1,1,2,2,5, --0,0,1,1,2,2,6, --
- R17) 0,0,1,1,2,2,3,3,6, -->0,0,1,1,2,2,3, --0,0,1,1,2,2,3, --0,0,1,1,2,2, --0,0,1,1,2, --0,0,1,1,3, --0,0,1,1,4, --
- R18) 0,0,1,1,2,2,3,3,7, -->0,0,1,1,2, --0,0,1,1,2, --0,0,1,1,2, --0,0,1,1, --0,0,1, --0,0,2, --
- R19) 0,0,1,1,2,2,3,3,8, -->0,0,1, --0,0,1, --0,0,1, --0,0,1, --0,0, --0, --
- R20) 0,0,1,1,2,2,3,3,4,4, -->0,0,1,1,2,2,3,3,4,4,5, --0,0,1,1,2,2,3,3,4,4,6, --0,0,1,1,2,2,3,3,4,4,7, --0,0,1,1,2,2,3,3,4,4,8, --0,0,1,1,2,2,3,3,4,4,9, --0,0,1,1,2,2,3,3,4,4,10,

--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, :

LEN=3) 0,0,1, : 0,0,2, :

LEN=4) 0,0,1,1, :

LEN=5) 0,0,1,1,2, : 0,0,1,1,3, : 0,0,1,1,4, :

LEN=6) 0,0,1,1,2,2, :

LEN=7) 0,0,1,1,2,2,3, : 0,0,1,1,2,2,4, : 0,0,1,1,2,2,5, : 0,0,1,1,2,2,6, :

LEN=8) 0,0,1,1,2,2,3,3, :

LEN=9) 0,0,1,1,2,2,3,3,4, : 0,0,1,1,2,2,3,3,5, : 0,0,1,1,2,2,3,3,6, :

0,0,1,1,2,2,3,3,7, : 0,0,1,1,2,2,3,3,8, :

LEN=10) 0,0,1,1,2,2,3,3,4,4, :

LEN=11) 0,0,1,1,2,2,3,3,4,4,5, : 0,0,1,1,2,2,3,3,4,4,6, : 0,0,1,1,2,2,3,3,4,4,7, :

0,0,1,1,2,2,3,3,4,4,8, : 0,0,1,1,2,2,3,3,4,4,9, : 0,0,1,1,2,2,3,3,4,4,10, :

Number new nodes in level n is given by : 1,1,2,1,3,1,4,1,5,1,6,

-----Class

714-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][010][102][110][120][201][210]]$

--

Rules of T[L]:

R1) 0, -->0,0, --0, --

R2) 0,0, -->0,0,1, --0,0,2, --

R3) 0,0,1, -->0,0,1,1, --0,0,1, --0,0,2, --

R4) 0,0,2, -->0,0,2,1, --0,0, --0, --

R5) 0,0,1,1, -->0,0,1,1,2, --0,0,1,1,3, --0,0,1,1,4, --

R6) 0,0,2,1, -->0,0,2,1,1, --0,0,2,1,2, --

R7) 0,0,1,1,2, -->0,0,1,1,2,2, --0,0,1,1,2, --0,0,1,1,3, --0,0,1,1,4, --

R8) 0,0,1,1,3, -->0,0,2,1, --0,0,1,1, --0,0,1, --0,0,2, --

R9) 0,0,1,1,4, -->0,0,2,1, --0,0,2,1, --0,0, --0, --

R10) 0,0,2,1,1, -->0,0,2,1,2, --

R11) 0,0,2,1,2, -->

R12)

0,0,1,1,2,2, -->0,0,1,1,2,2,3, --0,0,1,1,2,2,4, --0,0,1,1,2,2,5, --0,0,1,1,2,2,6, --

R13)

0,0,1,1,2,2,3, -->0,0,1,1,2,2,3,3, --0,0,1,1,2,2,3, --0,0,1,1,2,2,4, --0,0,1,1,2,2,5, --

0,0,1,1,2,2,6, --

R14) 0,0,1,1,2,2,4, -->0,0,2,1, --0,0,1,1,2,2, --0,0,1,1,2, --0,0,1,1,3, --0,0,1,1,4, --

R15) 0,0,1,1,2,2,5, -->0,0,2,1, --0,0,2,1, --0,0,1,1, --0,0,1, --0,0,2, --

R16) 0,0,1,1,2,2,6, -->0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0, --0, --

R17)

0,0,1,1,2,2,3,3, -->0,0,1,1,2,2,3,3,4, --0,0,1,1,2,2,3,3,5, --0,0,1,1,2,2,3,3,6, --0,0,

1,1,2,2,3,3,7, --0,0,1,1,2,2,3,3,8, --

R18)

0,0,1,1,2,2,3,3,4, -->0,0,1,1,2,2,3,3,4,4, --0,0,1,1,2,2,3,3,4, --0,0,1,1,2,2,3,3,5, --

0,0,1,1,2,2,3,3,6, --0,0,1,1,2,2,3,3,7, --0,0,1,1,2,2,3,3,8, --

R19)

0,0,1,1,2,2,3,3,5, -->0,0,2,1, --0,0,1,1,2,2,3,3, --0,0,1,1,2,2,3, --0,0,1,1,2,2,4, --0,

0,1,1,2,2,5,--0,0,1,1,2,2,6,--
R20)
0,0,1,1,2,2,3,3,6,-->0,0,2,1,--0,0,2,1,--0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,1,3,--0,0,
1,1,4,--
R21) 0,0,1,1,2,2,3,3,7,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,1,1,--0,0,1,--0,0,2,--
R22) 0,0,1,1,2,2,3,3,8,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,--0,--
R23)
0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,4,6,--0,0,1,1,2,2,
3,3,4,4,7,--0,0,1,1,2,2,3,3,4,4,8,--0,0,1,1,2,2,3,3,4,4,9,--0,0,1,1,2,2,3,3,4,4,10,
--

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, :
LEN=3) 0,0,1, : 0,0,2, :
LEN=4) 0,0,1,1, : 0,0,2,1, :
LEN=5) 0,0,1,1,2, : 0,0,1,1,3, : 0,0,1,1,4, : 0,0,2,1,1, : 0,0,2,1,2, :
LEN=6) 0,0,1,1,2,2, :
LEN=7) 0,0,1,1,2,2,3, : 0,0,1,1,2,2,4, : 0,0,1,1,2,2,5, : 0,0,1,1,2,2,6, :
LEN=8) 0,0,1,1,2,2,3,3, :
LEN=9) 0,0,1,1,2,2,3,3,4, : 0,0,1,1,2,2,3,3,5, : 0,0,1,1,2,2,3,3,6, :
0,0,1,1,2,2,3,3,7, : 0,0,1,1,2,2,3,3,8, :
LEN=10) 0,0,1,1,2,2,3,3,4,4, :
LEN=11) 0,0,1,1,2,2,3,3,4,4,5, : 0,0,1,1,2,2,3,3,4,4,6, : 0,0,1,1,2,2,3,3,4,4,7, :
0,0,1,1,2,2,3,3,4,4,8, : 0,0,1,1,2,2,3,3,4,4,9, : 0,0,1,1,2,2,3,3,4,4,10, :
Number new nodes in level n is given by : 1,1,2,2,5,1,4,1,5,1,6,

-----Class

715-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][021][100][101][102]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,0,1,--
R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,1, :

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

716-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][021][100][101][110]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,0,1,--

R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,1, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

717-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][021][100][101][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,0,1,--
R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,1, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

718-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][021][100][101][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,0,1,--
R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,1, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

719-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][021][100][101][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,0,1,--
R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->

List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,1, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

720-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][021][100][102][110]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,0,1,--
R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,1, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

721-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][021][100][102][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,0,1,--
R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,1, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

722-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][021][100][102][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,0,1,--
R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->
List of different nodes in T[L]
LEN=1) 0, :

LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,1,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

723-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][021][100][102][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,0,1,--
R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,1,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

724-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][021][100][110][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,0,1,--
R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,1,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

725-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][021][100][110][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,0,1,--
R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,1,:
Number new nodes in level n is given by : 1,2,1, DONE

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

726-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][021][100][110][210]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0,0, \rightarrow 0,1, \rightarrow$

R2) $0,0, \rightarrow 0,0,1, \rightarrow 0,0,1, \rightarrow$

R3) $0,1, \rightarrow 0,0,1, \rightarrow$

R4) $0,0,1, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

LEN=3) $0,0,1, :$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

727-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][021][100][120][201]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0,0, \rightarrow 0,1, \rightarrow$

R2) $0,0, \rightarrow 0,0,1, \rightarrow 0,0,1, \rightarrow$

R3) $0,1, \rightarrow 0,0,1, \rightarrow$

R4) $0,0,1, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

LEN=3) $0,0,1, :$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

728-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][021][100][120][210]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0,0, \rightarrow 0,1, \rightarrow$

R2) $0,0, \rightarrow 0,0,1, \rightarrow 0,0,1, \rightarrow$

R3) $0,1, \rightarrow 0,0,1, \rightarrow$

R4) $0,0,1, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

LEN=3) $0,0,1, :$

Number new nodes in level n is given by : 1,2,1, DONE

```

-----Class
729-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][011][012][021][100][201][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,0,1,--
R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,1,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

```

-----Class
730-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][011][012][021][101][102][110]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,0,1,--
R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,1,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

```

-----Class
731-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][011][012][021][101][102][120]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,0,1,--
R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,1,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

```

-----Class
732-----

```

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][021][101][102][201]]$

--

Rules of $T[L]$:

R1) $0, -->0,0, --0,1, --$

R2) $0,0, -->0,0,1, --0,0,1, --$

R3) $0,1, -->0,0,1, --$

R4) $0,0,1, -->$

List of different nodes in $T[L]$

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

LEN=3) $0,0,1, :$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

733-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][021][101][102][210]]$

--

Rules of $T[L]$:

R1) $0, -->0,0, --0,1, --$

R2) $0,0, -->0,0,1, --0,0,1, --$

R3) $0,1, -->0,0,1, --$

R4) $0,0,1, -->$

List of different nodes in $T[L]$

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

LEN=3) $0,0,1, :$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

734-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][021][101][110][120]]$

--

Rules of $T[L]$:

R1) $0, -->0,0, --0,1, --$

R2) $0,0, -->0,0,1, --0,0,1, --$

R3) $0,1, -->0,0,1, --$

R4) $0,0,1, -->$

List of different nodes in $T[L]$

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

LEN=3) $0,0,1, :$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

735-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][021][101][110][201]]$


```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,0,1,--
R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,1,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

-----Class

736-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][021][101][110][210]]$

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,0,1,--
R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,1,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

-----Class

737-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][021][101][120][201]]$

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,0,1,--
R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,1,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

-----Class

738-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][021][101][120][210]]$

```

--
Rules of T[L]:

```

R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,0,1,--
R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,1,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

739-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][021][101][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,0,1,--
R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,1,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

740-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][021][102][110][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,0,1,--
R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,1,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

741-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][021][102][110][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,0,1,--

R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,1, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

742-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][021][102][110][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,0,1,--
R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,1, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

743-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][021][102][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,0,1,--
R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,1, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

744-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][021][102][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,0,1,--
R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->

List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,1, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

745-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][021][102][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,0,1,--
R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,1, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

746-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][021][110][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,0,1,--
R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,1, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

747-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][021][110][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,0,1,--
R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->
List of different nodes in T[L]
LEN=1) 0, :

LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,1,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

748-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][021][110][201][210]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,1,--0,0,1,--
- R3) 0,1,-->0,0,1,--
- R4) 0,0,1,-->

List of different nodes in T[L]

LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,1,:

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

749-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][021][120][201][210]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,1,--0,0,1,--
- R3) 0,1,-->0,0,1,--
- R4) 0,0,1,-->

List of different nodes in T[L]

LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,1,:

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

750-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][100][101][102][110]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,1,--0,1,--
- R3) 0,1,-->0,0,1,--
- R4) 0,0,1,-->

List of different nodes in T[L]

LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,1,:

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

751-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][100][101][102][120]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0,0, \rightarrow 0,1, \rightarrow$

R2) $0,0, \rightarrow 0,0,1, \rightarrow 0,1, \rightarrow$

R3) $0,1, \rightarrow 0,0,1, \rightarrow$

R4) $0,0,1, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

LEN=3) $0,0,1, :$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

752-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][100][101][102][201]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0,0, \rightarrow 0,1, \rightarrow$

R2) $0,0, \rightarrow 0,0,1, \rightarrow 0,1, \rightarrow$

R3) $0,1, \rightarrow 0,0,1, \rightarrow$

R4) $0,0,1, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

LEN=3) $0,0,1, :$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

753-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][100][101][102][210]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0,0, \rightarrow 0,1, \rightarrow$

R2) $0,0, \rightarrow 0,0,1, \rightarrow 0,1, \rightarrow$

R3) $0,1, \rightarrow 0,0,1, \rightarrow$

R4) $0,0,1, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

LEN=3) $0,0,1, :$

Number new nodes in level n is given by : 1,2,1, DONE

```

-----Class
754-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][011][012][100][101][110][120]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,1,--
R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,1,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

```

-----Class
755-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][011][012][100][101][110][201]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,1,--
R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,1,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

```

-----Class
756-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][011][012][100][101][110][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,1,--
R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,1,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

```

-----Class
757-----

```

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][100][101][120][201]]$

--

Rules of $T[L]$:

R1) $0,-->0,0,--0,1,--$

R2) $0,0,-->0,0,1,--0,1,--$

R3) $0,1,-->0,0,1,--$

R4) $0,0,1,-->$

List of different nodes in $T[L]$

LEN=1) $0,:$

LEN=2) $0,0,: 0,1,:$

LEN=3) $0,0,1,:$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

758-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][100][101][120][210]]$

--

Rules of $T[L]$:

R1) $0,-->0,0,--0,1,--$

R2) $0,0,-->0,0,1,--0,1,--$

R3) $0,1,-->0,0,1,--$

R4) $0,0,1,-->$

List of different nodes in $T[L]$

LEN=1) $0,:$

LEN=2) $0,0,: 0,1,:$

LEN=3) $0,0,1,:$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

759-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][100][101][201][210]]$

--

Rules of $T[L]$:

R1) $0,-->0,0,--0,1,--$

R2) $0,0,-->0,0,1,--0,1,--$

R3) $0,1,-->0,0,1,--$

R4) $0,0,1,-->$

List of different nodes in $T[L]$

LEN=1) $0,:$

LEN=2) $0,0,: 0,1,:$

LEN=3) $0,0,1,:$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

760-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][100][102][110][120]]$


```
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,1,--
R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,1,:
Number new nodes in level n is given by : 1,2,1,  DONE
```

-----Class

```
761-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][011][012][100][102][110][201]]
-----
```

```
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,1,--
R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,1,:
Number new nodes in level n is given by : 1,2,1,  DONE
```

-----Class

```
762-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][011][012][100][102][110][210]]
-----
```

```
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,1,--
R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,1,:
Number new nodes in level n is given by : 1,2,1,  DONE
```

-----Class

```
763-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][011][012][100][102][120][201]]
-----
```

```
--
Rules of T[L]:
```

R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,1,--
R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,1,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

764-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][100][102][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,1,--
R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,1,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

765-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][100][102][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,1,--
R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,1,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

766-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][100][110][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,1,--

R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,1,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

767-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][100][110][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,1,--
R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,1,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

768-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][100][110][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,1,--
R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,1,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

769-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][100][120][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,1,--
R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->

List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,1, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

770-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][101][102][110][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,1,--
R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,1, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

771-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][101][102][110][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,1,--
R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,1, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

772-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][101][102][110][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,1,--
R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->
List of different nodes in T[L]
LEN=1) 0, :

LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,1,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

773-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][101][102][120][201]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,1,--0,1,--
- R3) 0,1,-->0,0,1,--
- R4) 0,0,1,-->

List of different nodes in T[L]

- LEN=1) 0,:
- LEN=2) 0,0,: 0,1,:
- LEN=3) 0,0,1,:

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

774-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][101][102][120][210]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,1,--0,1,--
- R3) 0,1,-->0,0,1,--
- R4) 0,0,1,-->

List of different nodes in T[L]

- LEN=1) 0,:
- LEN=2) 0,0,: 0,1,:
- LEN=3) 0,0,1,:

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

775-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][101][102][201][210]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,1,--0,1,--
- R3) 0,1,-->0,0,1,--
- R4) 0,0,1,-->

List of different nodes in T[L]

- LEN=1) 0,:
- LEN=2) 0,0,: 0,1,:
- LEN=3) 0,0,1,:

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

776-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][101][110][120][201]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0,0, \rightarrow 0,1, \rightarrow$

R2) $0,0, \rightarrow 0,0,1, \rightarrow 0,1, \rightarrow$

R3) $0,1, \rightarrow 0,0,1, \rightarrow$

R4) $0,0,1, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

LEN=3) $0,0,1, :$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

777-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][101][110][120][210]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0,0, \rightarrow 0,1, \rightarrow$

R2) $0,0, \rightarrow 0,0,1, \rightarrow 0,1, \rightarrow$

R3) $0,1, \rightarrow 0,0,1, \rightarrow$

R4) $0,0,1, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

LEN=3) $0,0,1, :$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

778-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][101][110][201][210]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0,0, \rightarrow 0,1, \rightarrow$

R2) $0,0, \rightarrow 0,0,1, \rightarrow 0,1, \rightarrow$

R3) $0,1, \rightarrow 0,0,1, \rightarrow$

R4) $0,0,1, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

LEN=3) $0,0,1, :$

Number new nodes in level n is given by : 1,2,1, DONE

```

-----Class
779-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][011][012][101][120][201][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,1,--
R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,1,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

```

-----Class
780-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][011][012][102][110][120][201]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,1,--
R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,1,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

```

-----Class
781-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][011][012][102][110][120][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,1,--
R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,1,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

```

-----Class
782-----

```

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][102][110][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,1,--
R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,1,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class
783-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][102][120][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,1,--
R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,1,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class
784-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][012][110][120][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,1,--
R3) 0,1,-->0,0,1,--
R4) 0,0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,1,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class
785-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][021][100][101][102][110]]$


```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--0,0,2,--
R3) 0,1,-->0,1,0,--0,1,--
R4) 0,0,2,-->0,0,2,--
R5) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,2,: 0,1,0,:
Number new nodes in level n is given by : 1,2,2,   DONE

```

-----Class

```

786-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][011][021][100][101][102][120]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--0,0,2,--
R3) 0,1,-->0,1,0,--0,0,2,--
R4) 0,0,2,-->0,0,2,--
R5) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,2,: 0,1,0,:
Number new nodes in level n is given by : 1,2,2,   DONE

```

-----Class

```

787-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][011][021][100][101][102][201]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--0,0,2,--
R3) 0,1,-->0,1,0,--0,1,--
R4) 0,0,2,-->0,0,2,--
R5) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,2,: 0,1,0,:
Number new nodes in level n is given by : 1,2,2,   DONE

```

-----Class

```

788-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][011][021][100][101][102][210]]
-----

```

```

-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--0,0,2,--
R3) 0,1,-->0,1,0,--0,1,--
R4) 0,0,2,-->0,0,2,--
R5) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,2,: 0,1,0,:
Number new nodes in level n is given by : 1,2,2,   DONE

```

```

-----Class
789-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][011][021][100][101][110][120]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--0,0,2,--
R3) 0,0,2,-->0,0,2,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
LEN=3) 0,0,2,:
Number new nodes in level n is given by : 1,1,1,   DONE

```

```

-----Class
790-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][011][021][100][101][110][201]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,--0,0,2,--
R3) 0,0,2,-->0,0,2,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
LEN=3) 0,0,2,:
Number new nodes in level n is given by : 1,1,1,   DONE

```

```

-----Class
791-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][011][021][100][101][110][210]]
-----

```

```

--
Rules of T[L]:

```

```
R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,--0,0,2,--
R3) 0,0,2,-->0,0,2,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
LEN=3) 0,0,2,:
Number new nodes in level n is given by : 1,1,1,  DONE
```

-----Class

```
792-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][011][021][100][101][120][201]]
-----
```

```
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--0,0,2,--
R3) 0,0,2,-->0,0,2,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
LEN=3) 0,0,2,:
Number new nodes in level n is given by : 1,1,1,  DONE
```

-----Class

```
793-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][011][021][100][101][120][210]]
-----
```

```
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--0,0,2,--
R3) 0,0,2,-->0,0,2,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
LEN=3) 0,0,2,:
Number new nodes in level n is given by : 1,1,1,  DONE
```

-----Class

```
794-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][011][021][100][101][201][210]]
-----
```

```
--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,--0,0,2,--
R3) 0,0,2,-->0,0,2,--
List of different nodes in T[L]
LEN=1) 0,:
```

LEN=2) 0,0,:
LEN=3) 0,0,2,:
Number new nodes in level n is given by : 1,1,1, DONE

-----Class

795-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][021][100][102][110][120]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,--0,0,2,--
- R3) 0,1,-->0,1,0,--0,0,2,--
- R4) 0,0,2,-->0,0,2,--
- R5) 0,1,0,-->

List of different nodes in T[L]

- LEN=1) 0,:
- LEN=2) 0,0,: 0,1,:
- LEN=3) 0,0,2,: 0,1,0,:

Number new nodes in level n is given by : 1,2,2, DONE

-----Class

796-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][021][100][102][110][201]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,--0,0,2,--
- R3) 0,1,-->0,1,0,--0,1,--
- R4) 0,0,2,-->0,0,2,--
- R5) 0,1,0,-->

List of different nodes in T[L]

- LEN=1) 0,:
- LEN=2) 0,0,: 0,1,:
- LEN=3) 0,0,2,: 0,1,0,:

Number new nodes in level n is given by : 1,2,2, DONE

-----Class

797-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][021][100][102][110][210]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,--0,0,2,--
- R3) 0,1,-->0,1,0,--0,1,--
- R4) 0,0,2,-->0,0,2,--
- R5) 0,1,0,-->

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,2, : 0,1,0, :
Number new nodes in level n is given by : 1,2,2, DONE

-----Class

798-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][021][100][102][120][201]]$

--
Rules of T[L]:
R1) 0, -->0,0, --0,1, --
R2) 0,0, -->0,0, --0,0,2, --
R3) 0,1, -->0,1,0, --0,0,2, --
R4) 0,0,2, -->0,0,2, --
R5) 0,1,0, -->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,2, : 0,1,0, :
Number new nodes in level n is given by : 1,2,2, DONE

-----Class

799-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][021][100][102][120][210]]$

--
Rules of T[L]:
R1) 0, -->0,0, --0,1, --
R2) 0,0, -->0,0, --0,0,2, --
R3) 0,1, -->0,1,0, --0,0,2, --
R4) 0,0,2, -->0,0,2, --
R5) 0,1,0, -->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,2, : 0,1,0, :
Number new nodes in level n is given by : 1,2,2, DONE

-----Class

800-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][021][100][102][201][210]]$

--
Rules of T[L]:
R1) 0, -->0,0, --0,1, --
R2) 0,0, -->0,0, --0,0,2, --
R3) 0,1, -->0,1,0, --0,1, --
R4) 0,0,2, -->0,0,2, --
R5) 0,1,0, -->

List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,2, : 0,1,0, :
Number new nodes in level n is given by : 1,2,2, DONE

-----Class

801-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][021][100][110][120][201]]$

--
Rules of T[L]:
R1) 0, -->0,0, --0,0, --
R2) 0,0, -->0,0, --0,0,2, --
R3) 0,0,2, -->0,0,2, --
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
LEN=3) 0,0,2, :
Number new nodes in level n is given by : 1,1,1, DONE

-----Class

802-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][021][100][110][120][210]]$

--
Rules of T[L]:
R1) 0, -->0,0, --0,0, --
R2) 0,0, -->0,0, --0,0,2, --
R3) 0,0,2, -->0,0,2, --
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
LEN=3) 0,0,2, :
Number new nodes in level n is given by : 1,1,1, DONE

-----Class

803-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][021][100][110][201][210]]$

--
Rules of T[L]:
R1) 0, -->0,0, --0,0, --
R2) 0,0, -->0,0, --0,0,2, --
R3) 0,0,2, -->0,0,2, --
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
LEN=3) 0,0,2, :
Number new nodes in level n is given by : 1,1,1, DONE

```

-----Class
804-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][011][021][100][120][201][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--0,0,2,--
R3) 0,0,2,-->0,0,2,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
LEN=3) 0,0,2,:
Number new nodes in level n is given by : 1,1,1,  DONE

```

```

-----Class
805-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][011][021][101][102][110][120]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--0,0,2,--
R3) 0,1,-->0,1,0,--0,0,2,--
R4) 0,0,2,-->0,0,2,--
R5) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,2,: 0,1,0,:
Number new nodes in level n is given by : 1,2,2,  DONE

```

```

-----Class
806-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][011][021][101][102][110][201]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--0,0,2,--
R3) 0,1,-->0,1,0,--0,1,--
R4) 0,0,2,-->0,0,2,--
R5) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,2,: 0,1,0,:
Number new nodes in level n is given by : 1,2,2,  DONE

```

-----Class
807-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][021][101][102][110][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--0,0,2,--
R3) 0,1,-->0,1,0,--0,1,--
R4) 0,0,2,-->0,0,2,--
R5) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,2,: 0,1,0,:
Number new nodes in level n is given by : 1,2,2, DONE

-----Class
808-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][021][101][102][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--0,0,2,--
R3) 0,1,-->0,1,0,--0,0,2,--
R4) 0,0,2,-->0,0,2,--
R5) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,2,: 0,1,0,:
Number new nodes in level n is given by : 1,2,2, DONE

-----Class
809-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][021][101][102][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--0,0,2,--
R3) 0,1,-->0,1,0,--0,0,2,--
R4) 0,0,2,-->0,0,2,--
R5) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,2,: 0,1,0,:
Number new nodes in level n is given by : 1,2,2, DONE


```

-----Class
810-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][011][021][101][102][201][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--0,0,2,--
R3) 0,1,-->0,1,0,--0,1,--
R4) 0,0,2,-->0,0,2,--
R5) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,2,: 0,1,0,:
Number new nodes in level n is given by : 1,2,2,   DONE

```

```

-----Class
811-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][011][021][101][110][120][201]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--0,0,2,--
R3) 0,0,2,-->0,0,2,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
LEN=3) 0,0,2,:
Number new nodes in level n is given by : 1,1,1,   DONE

```

```

-----Class
812-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][011][021][101][110][120][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--0,0,2,--
R3) 0,0,2,-->0,0,2,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
LEN=3) 0,0,2,:
Number new nodes in level n is given by : 1,1,1,   DONE

```

```

-----Class
813-----

```

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][021][101][110][201][210]]$

--

Rules of T[L]:

R1) $0, -- \rightarrow 0, 0, -- 0, --$

R2) $0, 0, -- \rightarrow 0, 0, -- 0, 0, 2, --$

R3) $0, 0, 2, -- \rightarrow 0, 0, 2, --$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, :$

LEN=3) $0, 0, 2, :$

Number new nodes in level n is given by : 1,1,1, DONE

-----Class

814-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][021][101][120][201][210]]$

--

Rules of T[L]:

R1) $0, -- \rightarrow 0, 0, -- 0, 0, --$

R2) $0, 0, -- \rightarrow 0, 0, -- 0, 0, 2, --$

R3) $0, 0, 2, -- \rightarrow 0, 0, 2, --$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, :$

LEN=3) $0, 0, 2, :$

Number new nodes in level n is given by : 1,1,1, DONE

-----Class

815-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][021][102][110][120][201]]$

--

Rules of T[L]:

R1) $0, -- \rightarrow 0, 0, -- 0, 1, --$

R2) $0, 0, -- \rightarrow 0, 0, -- 0, 0, 2, --$

R3) $0, 1, -- \rightarrow 0, 1, 0, -- 0, 0, 2, --$

R4) $0, 0, 2, -- \rightarrow 0, 0, 2, --$

R5) $0, 1, 0, -- \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, : 0, 1, :$

LEN=3) $0, 0, 2, : 0, 1, 0, :$

Number new nodes in level n is given by : 1,2,2, DONE

-----Class

816-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][021][102][110][120][210]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,--0,0,2,--
- R3) 0,1,-->0,1,0,--0,0,2,--
- R4) 0,0,2,-->0,0,2,--
- R5) 0,1,0,-->

List of different nodes in T[L]

- LEN=1) 0,:
- LEN=2) 0,0,: 0,1,:
- LEN=3) 0,0,2,: 0,1,0,:

Number new nodes in level n is given by : 1,2,2, DONE

-----Class

817-----

Inversion Sequences ($I_n=(n+1)!$) avoiding L=[[000][011][021][102][110][201][210]]

--
Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,--0,0,2,--
- R3) 0,1,-->0,1,0,--0,1,--
- R4) 0,0,2,-->0,0,2,--
- R5) 0,1,0,-->

List of different nodes in T[L]

- LEN=1) 0,:
- LEN=2) 0,0,: 0,1,:
- LEN=3) 0,0,2,: 0,1,0,:

Number new nodes in level n is given by : 1,2,2, DONE

-----Class

818-----

Inversion Sequences ($I_n=(n+1)!$) avoiding L=[[000][011][021][102][120][201][210]]

--
Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,--0,0,2,--
- R3) 0,1,-->0,1,0,--0,0,2,--
- R4) 0,0,2,-->0,0,2,--
- R5) 0,1,0,-->

List of different nodes in T[L]

- LEN=1) 0,:
- LEN=2) 0,0,: 0,1,:
- LEN=3) 0,0,2,: 0,1,0,:

Number new nodes in level n is given by : 1,2,2, DONE

-----Class

819-----

Inversion Sequences ($I_n=(n+1)!$) avoiding L=[[000][011][021][110][120][201][210]]

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--0,0,2,--
R3) 0,0,2,-->0,0,2,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
LEN=3) 0,0,2,:
Number new nodes in level n is given by : 1,1,1,   DONE

```

```

-----Class
820-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][011][100][101][102][110][120]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,--0,1,--
R2) 0,1,-->0,1,0,--0,1,2,--
R3) 0,1,0,-->
R4) 0,1,2,-->0,1,2,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,1,:
LEN=3) 0,1,0,: 0,1,2,:
Number new nodes in level n is given by : 1,1,2,   DONE

```

```

-----Class
821-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][011][100][101][102][110][201]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,--0,1,--
R2) 0,1,-->0,1,0,--0,1,--
R3) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,1,:
LEN=3) 0,1,0,:
Number new nodes in level n is given by : 1,1,1,   DONE

```

```

-----Class
822-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][011][100][101][102][110][210]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,--0,1,--
R2) 0,1,-->0,1,0,--0,1,--

```

R3) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,1, :
LEN=3) 0,1,0, :
Number new nodes in level n is given by : 1,1,1, DONE

-----Class

823-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][100][101][102][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,--0,1,--
R2) 0,1,-->0,1,0,--0,1,2,--
R3) 0,1,0,-->
R4) 0,1,2,-->0,1,2,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,1, :
LEN=3) 0,1,0, : 0,1,2, :
Number new nodes in level n is given by : 1,1,2, DONE

-----Class

824-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][100][101][102][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,--0,1,--
R2) 0,1,-->0,1,0,--0,1,2,--
R3) 0,1,0,-->
R4) 0,1,2,-->0,1,2,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,1, :
LEN=3) 0,1,0, : 0,1,2, :
Number new nodes in level n is given by : 1,1,2, DONE

-----Class

825-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][100][101][102][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,--0,1,--
R2) 0,1,-->0,1,0,--0,1,--
R3) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0, :

LEN=2) 0,1,:
LEN=3) 0,1,0,:
Number new nodes in level n is given by : 1,1,1, DONE

-----Class

826-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][100][101][110][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,--0,1,--
R2) 0,1,-->0,--0,1,2,--
R3) 0,1,2,-->0,1,2,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,1,:
LEN=3) 0,1,2,:
Number new nodes in level n is given by : 1,1,1, DONE

-----Class

827-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][100][101][110][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,--0,1,--
R2) 0,1,-->0,--0,1,2,--
R3) 0,1,2,-->0,1,2,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,1,:
LEN=3) 0,1,2,:
Number new nodes in level n is given by : 1,1,1, DONE

-----Class

828-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][100][101][110][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,--0,--
List of different nodes in T[L]
LEN=1) 0,:
Number new nodes in level n is given by : 1, DONE

-----Class

829-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][100][101][120][201][210]]$

--

Rules of T[L]:
R1) $0, \rightarrow 0, \rightarrow 0, 1, \rightarrow$
R2) $0, 1, \rightarrow 0, \rightarrow 0, 1, 2, \rightarrow$
R3) $0, 1, 2, \rightarrow 0, 1, 2, \rightarrow$
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0, 1, :
LEN=3) 0, 1, 2, :
Number new nodes in level n is given by : 1, 1, 1, DONE

-----Class

830-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][100][102][110][120][201]]$

--
Rules of T[L]:
R1) $0, \rightarrow 0, \rightarrow 0, 1, \rightarrow$
R2) $0, 1, \rightarrow 0, 1, 0, \rightarrow 0, 1, 2, \rightarrow$
R3) $0, 1, 0, \rightarrow$
R4) $0, 1, 2, \rightarrow 0, 1, 2, \rightarrow$
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0, 1, :
LEN=3) 0, 1, 0, : 0, 1, 2, :
Number new nodes in level n is given by : 1, 1, 2, DONE

-----Class

831-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][100][102][110][120][210]]$

--
Rules of T[L]:
R1) $0, \rightarrow 0, \rightarrow 0, 1, \rightarrow$
R2) $0, 1, \rightarrow 0, 1, 0, \rightarrow 0, 1, 2, \rightarrow$
R3) $0, 1, 0, \rightarrow$
R4) $0, 1, 2, \rightarrow 0, 1, 2, \rightarrow$
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0, 1, :
LEN=3) 0, 1, 0, : 0, 1, 2, :
Number new nodes in level n is given by : 1, 1, 2, DONE

-----Class

832-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][100][102][110][201][210]]$

--
Rules of T[L]:
R1) $0, \rightarrow 0, \rightarrow 0, 1, \rightarrow$
R2) $0, 1, \rightarrow 0, 1, 0, \rightarrow 0, 1, \rightarrow$

R3) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,1, :
LEN=3) 0,1,0, :
Number new nodes in level n is given by : 1,1,1, DONE

-----Class

833-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][100][102][120][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,--0,1,--
R2) 0,1,-->0,1,0,--0,1,2,--
R3) 0,1,0,-->
R4) 0,1,2,-->0,1,2,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,1, :
LEN=3) 0,1,0, : 0,1,2, :
Number new nodes in level n is given by : 1,1,2, DONE

-----Class

834-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][100][110][120][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,--0,1,--
R2) 0,1,-->0,--0,1,2,--
R3) 0,1,2,-->0,1,2,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,1, :
LEN=3) 0,1,2, :
Number new nodes in level n is given by : 1,1,1, DONE

-----Class

835-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][101][102][110][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,--0,1,--
R2) 0,1,-->0,1,0,--0,1,2,--
R3) 0,1,0,-->
R4) 0,1,2,-->0,1,2,--
List of different nodes in T[L]
LEN=1) 0, :

LEN=2) 0,1,:
LEN=3) 0,1,0,: 0,1,2,:
Number new nodes in level n is given by : 1,1,2, DONE

-----Class

836-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][101][102][110][120][210]]$

--

Rules of T[L]:

R1) 0,-->0,--0,1,--

R2) 0,1,-->0,1,0,--0,1,2,--

R3) 0,1,0,-->

R4) 0,1,2,-->0,1,2,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,1,:

LEN=3) 0,1,0,: 0,1,2,:

Number new nodes in level n is given by : 1,1,2, DONE

-----Class

837-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][101][102][110][201][210]]$

--

Rules of T[L]:

R1) 0,-->0,--0,1,--

R2) 0,1,-->0,1,0,--0,1,--

R3) 0,1,0,-->

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,1,:

LEN=3) 0,1,0,:

Number new nodes in level n is given by : 1,1,1, DONE

-----Class

838-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][011][101][102][120][201][210]]$

--

Rules of T[L]:

R1) 0,-->0,--0,1,--

R2) 0,1,-->0,1,0,--0,1,2,--

R3) 0,1,0,-->

R4) 0,1,2,-->0,1,2,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,1,:

LEN=3) 0,1,0,: 0,1,2,:

Number new nodes in level n is given by : 1,1,2, DONE

```

-----Class
839-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][011][101][110][120][201][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,--0,1,--
R2) 0,1,-->0,--0,1,2,--
R3) 0,1,2,-->0,1,2,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,1,:
LEN=3) 0,1,2,:
Number new nodes in level n is given by : 1,1,1,   DONE

```

```

-----Class
840-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][011][102][110][120][201][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,--0,1,--
R2) 0,1,-->0,1,0,--0,1,2,--
R3) 0,1,0,-->
R4) 0,1,2,-->0,1,2,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,1,:
LEN=3) 0,1,0,: 0,1,2,:
Number new nodes in level n is given by : 1,1,2,   DONE

```

```

-----Class
841-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][012][021][100][101][102][110]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,0,1,--
R3) 0,1,-->0,1,0,--0,1,0,--
R4) 0,0,1,-->0,1,0,--
R5) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,1,: 0,1,0,:
Number new nodes in level n is given by : 1,2,2,   DONE

```

```

-----Class

```

842-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][012][021][100][101][102][120]]$

--
Rules of $T[L]$:
R1) $0,-->0,0,--0,1,--$
R2) $0,0,-->0,0,1,--0,0,1,--$
R3) $0,1,-->0,1,0,--0,0,1,--$
R4) $0,0,1,-->0,1,0,--$
R5) $0,1,0,-->$
List of different nodes in $T[L]$

LEN=1) $0,:$
LEN=2) $0,0,: 0,1,:$
LEN=3) $0,0,1,: 0,1,0,:$
Number new nodes in level n is given by : 1,2,2, DONE

-----Class

843-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][012][021][100][101][102][201]]$

--
Rules of $T[L]$:
R1) $0,-->0,0,--0,1,--$
R2) $0,0,-->0,0,1,--0,0,1,--$
R3) $0,1,-->0,1,0,--0,0,1,--$
R4) $0,0,1,-->0,1,0,--$
R5) $0,1,0,-->$
List of different nodes in $T[L]$

LEN=1) $0,:$
LEN=2) $0,0,: 0,1,:$
LEN=3) $0,0,1,: 0,1,0,:$
Number new nodes in level n is given by : 1,2,2, DONE

-----Class

844-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][012][021][100][101][102][210]]$

--
Rules of $T[L]$:
R1) $0,-->0,0,--0,1,--$
R2) $0,0,-->0,0,1,--0,0,1,--$
R3) $0,1,-->0,1,0,--0,0,1,--$
R4) $0,0,1,-->0,1,0,--$
R5) $0,1,0,-->$
List of different nodes in $T[L]$

LEN=1) $0,:$
LEN=2) $0,0,: 0,1,:$
LEN=3) $0,0,1,: 0,1,0,:$
Number new nodes in level n is given by : 1,2,2, DONE

```

-----Class
845-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][012][021][100][101][110][120]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,0,1,--
R3) 0,1,-->0,1,0,--0,1,0,--
R4) 0,0,1,-->0,1,0,--
R5) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,1,: 0,1,0,:
Number new nodes in level n is given by : 1,2,2,  DONE

```

```

-----Class
846-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][012][021][100][101][110][201]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,0,1,--
R3) 0,1,-->0,1,0,--0,1,0,--
R4) 0,0,1,-->0,1,0,--
R5) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,1,: 0,1,0,:
Number new nodes in level n is given by : 1,2,2,  DONE

```

```

-----Class
847-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][012][021][100][101][110][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,0,1,--
R3) 0,1,-->0,1,0,--0,1,0,--
R4) 0,0,1,-->0,1,0,--
R5) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,1,: 0,1,0,:
Number new nodes in level n is given by : 1,2,2,  DONE

```

-----Class

848-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][012][021][100][101][120][201]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$

R2) $0, 0, \rightarrow 0, 0, 1, \rightarrow 0, 0, 1, \rightarrow$

R3) $0, 1, \rightarrow 0, 1, 0, \rightarrow 0, 0, 1, \rightarrow$

R4) $0, 0, 1, \rightarrow 0, 1, 0, \rightarrow$

R5) $0, 1, 0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, : 0, 1, :$

LEN=3) $0, 0, 1, : 0, 1, 0, :$

Number new nodes in level n is given by : 1,2,2, DONE

-----Class

849-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][012][021][100][101][120][210]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$

R2) $0, 0, \rightarrow 0, 0, 1, \rightarrow 0, 0, 1, \rightarrow$

R3) $0, 1, \rightarrow 0, 1, 0, \rightarrow 0, 0, 1, \rightarrow$

R4) $0, 0, 1, \rightarrow 0, 1, 0, \rightarrow$

R5) $0, 1, 0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, : 0, 1, :$

LEN=3) $0, 0, 1, : 0, 1, 0, :$

Number new nodes in level n is given by : 1,2,2, DONE

-----Class

850-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][012][021][100][101][201][210]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$

R2) $0, 0, \rightarrow 0, 0, 1, \rightarrow 0, 0, 1, \rightarrow$

R3) $0, 1, \rightarrow 0, 1, 0, \rightarrow 0, 0, 1, \rightarrow$

R4) $0, 0, 1, \rightarrow 0, 1, 0, \rightarrow$

R5) $0, 1, 0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, : 0, 1, :$

LEN=3) $0, 0, 1, : 0, 1, 0, :$

Number new nodes in level n is given by : 1,2,2, DONE

-----Class

851-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][012][021][100][102][110][120]]$

Rules of $T[L]$:

R1) $0,-->0,0,--0,1,--$

R2) $0,0,-->0,0,1,--0,0,1,--$

R3) $0,1,-->0,0,1,--0,1,1,--$

R4) $0,0,1,-->0,1,1,--$

R5) $0,1,1,-->$

List of different nodes in $T[L]$

LEN=1) $0,:$

LEN=2) $0,0,: 0,1,:$

LEN=3) $0,0,1,: 0,1,1,:$

Number new nodes in level n is given by : 1,2,2, DONE

-----Class

852-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][012][021][100][102][110][201]]$

Rules of $T[L]$:

R1) $0,-->0,0,--0,1,--$

R2) $0,0,-->0,0,1,--0,0,1,--$

R3) $0,1,-->0,0,1,--0,1,1,--$

R4) $0,0,1,-->0,1,1,--$

R5) $0,1,1,-->$

List of different nodes in $T[L]$

LEN=1) $0,:$

LEN=2) $0,0,: 0,1,:$

LEN=3) $0,0,1,: 0,1,1,:$

Number new nodes in level n is given by : 1,2,2, DONE

-----Class

853-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][012][021][100][102][110][210]]$

Rules of $T[L]$:

R1) $0,-->0,0,--0,1,--$

R2) $0,0,-->0,0,1,--0,0,1,--$

R3) $0,1,-->0,0,1,--0,1,1,--$

R4) $0,0,1,-->0,1,1,--$

R5) $0,1,1,-->$

List of different nodes in $T[L]$

LEN=1) $0,:$

LEN=2) $0,0,: 0,1,:$

LEN=3) 0,0,1,: 0,1,1,:
Number new nodes in level n is given by : 1,2,2, DONE

-----Class

854-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][012][021][100][102][120][201]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,0,--

R2) 0,0,-->0,0,1,--0,0,1,--

R3) 0,0,1,-->0,0,1,1,--

R4) 0,0,1,1,-->

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,:

LEN=3) 0,0,1,:

LEN=4) 0,0,1,1,:

Number new nodes in level n is given by : 1,1,1,1, DONE

-----Class

855-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][012][021][100][102][120][210]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,0,--

R2) 0,0,-->0,0,1,--0,0,1,--

R3) 0,0,1,-->0,0,1,1,--

R4) 0,0,1,1,-->

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,:

LEN=3) 0,0,1,:

LEN=4) 0,0,1,1,:

Number new nodes in level n is given by : 1,1,1,1, DONE

-----Class

856-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][012][021][100][102][201][210]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,0,--

R2) 0,0,-->0,0,1,--0,0,1,--

R3) 0,0,1,-->0,0,1,1,--

R4) 0,0,1,1,-->

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,:

LEN=3) 0,0,1,:
LEN=4) 0,0,1,1,:
Number new nodes in level n is given by : 1,1,1,1, DONE

-----Class

857-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][012][021][100][110][120][201]]$

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,1,--0,0,1,--
- R3) 0,1,-->0,0,1,--0,1,1,--
- R4) 0,0,1,-->0,1,1,--
- R5) 0,1,1,-->

List of different nodes in T[L]

- LEN=1) 0,:
- LEN=2) 0,0,: 0,1,:
- LEN=3) 0,0,1,: 0,1,1,:

Number new nodes in level n is given by : 1,2,2, DONE

-----Class

858-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][012][021][100][110][120][210]]$

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,1,--0,0,1,--
- R3) 0,1,-->0,0,1,--0,1,1,--
- R4) 0,0,1,-->0,1,1,--
- R5) 0,1,1,-->

List of different nodes in T[L]

- LEN=1) 0,:
- LEN=2) 0,0,: 0,1,:
- LEN=3) 0,0,1,: 0,1,1,:

Number new nodes in level n is given by : 1,2,2, DONE

-----Class

859-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][012][021][100][110][201][210]]$

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,1,--0,0,1,--
- R3) 0,1,-->0,0,1,--0,1,1,--
- R4) 0,0,1,-->0,1,1,--
- R5) 0,1,1,-->

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,1, : 0,1,1, :
Number new nodes in level n is given by : 1,2,2, DONE

-----Class

860-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][012][021][100][120][201][210]]$

--

Rules of T[L]:

- R1) 0, -->0,0, --0,0, --
- R2) 0,0, -->0,0,1, --0,0,1, --
- R3) 0,0,1, -->0,0,1,1, --
- R4) 0,0,1,1, -->

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, :
- LEN=3) 0,0,1, :
- LEN=4) 0,0,1,1, :

Number new nodes in level n is given by : 1,1,1,1, DONE

-----Class

861-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][012][021][101][102][110][120]]$

--

Rules of T[L]:

- R1) 0, -->0,0, --0,1, --
- R2) 0,0, -->0,0,1, --0,0,1, --
- R3) 0,1, -->0,1,0, --0,1,0, --
- R4) 0,0,1, -->0,1,0, --
- R5) 0,1,0, -->

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, : 0,1, :
- LEN=3) 0,0,1, : 0,1,0, :

Number new nodes in level n is given by : 1,2,2, DONE

-----Class

862-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][012][021][101][102][110][201]]$

--

Rules of T[L]:

- R1) 0, -->0,0, --0,1, --
- R2) 0,0, -->0,0,1, --0,0,1, --
- R3) 0,1, -->0,1,0, --0,1,0, --
- R4) 0,0,1, -->0,1,0, --
- R5) 0,1,0, -->

List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,1, : 0,1,0, :
Number new nodes in level n is given by : 1,2,2, DONE

-----Class

863-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][012][021][101][102][110][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,0,1,--
R3) 0,1,-->0,1,0,--0,1,0,--
R4) 0,0,1,-->0,1,0,--
R5) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,1, : 0,1,0, :
Number new nodes in level n is given by : 1,2,2, DONE

-----Class

864-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][012][021][101][102][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,0,1,--
R3) 0,1,-->0,1,0,--0,0,1,--
R4) 0,0,1,-->0,1,0,--
R5) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,1, : 0,1,0, :
Number new nodes in level n is given by : 1,2,2, DONE

-----Class

865-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][012][021][101][102][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,0,1,--
R3) 0,1,-->0,1,0,--0,0,1,--
R4) 0,0,1,-->0,1,0,--

R5) 0,1,0,-->
 List of different nodes in T[L]
 LEN=1) 0, :
 LEN=2) 0,0, : 0,1, :
 LEN=3) 0,0,1, : 0,1,0, :
 Number new nodes in level n is given by : 1,2,2, DONE

-----Class

866-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][012][021][101][102][201][210]]$

--
 Rules of T[L]:
 R1) 0,-->0,0,--0,1,--
 R2) 0,0,-->0,0,1,--0,0,1,--
 R3) 0,1,-->0,1,0,--0,0,1,--
 R4) 0,0,1,-->0,1,0,--
 R5) 0,1,0,-->
 List of different nodes in T[L]
 LEN=1) 0, :
 LEN=2) 0,0, : 0,1, :
 LEN=3) 0,0,1, : 0,1,0, :
 Number new nodes in level n is given by : 1,2,2, DONE

-----Class

867-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][012][021][101][110][120][201]]$

--
 Rules of T[L]:
 R1) 0,-->0,0,--0,1,--
 R2) 0,0,-->0,0,1,--0,0,1,--
 R3) 0,1,-->0,1,0,--0,1,0,--
 R4) 0,0,1,-->0,1,0,--
 R5) 0,1,0,-->
 List of different nodes in T[L]
 LEN=1) 0, :
 LEN=2) 0,0, : 0,1, :
 LEN=3) 0,0,1, : 0,1,0, :
 Number new nodes in level n is given by : 1,2,2, DONE

-----Class

868-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][012][021][101][110][120][210]]$

--
 Rules of T[L]:
 R1) 0,-->0,0,--0,1,--
 R2) 0,0,-->0,0,1,--0,0,1,--
 R3) 0,1,-->0,1,0,--0,1,0,--

R4) 0,0,1,-->0,1,0,--
R5) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,1, : 0,1,0, :
Number new nodes in level n is given by : 1,2,2, DONE

-----Class

869-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][012][021][101][110][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,0,1,--
R3) 0,1,-->0,1,0,--0,1,0,--
R4) 0,0,1,-->0,1,0,--
R5) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,1, : 0,1,0, :
Number new nodes in level n is given by : 1,2,2, DONE

-----Class

870-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][012][021][101][120][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,0,1,--
R3) 0,1,-->0,1,0,--0,0,1,--
R4) 0,0,1,-->0,1,0,--
R5) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,1, : 0,1,0, :
Number new nodes in level n is given by : 1,2,2, DONE

-----Class

871-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][012][021][102][110][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,0,1,--

R3) 0,1,-->0,0,1,--0,1,1,--
R4) 0,0,1,-->0,1,1,--
R5) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,1, : 0,1,1, :
Number new nodes in level n is given by : 1,2,2, DONE

-----Class

872-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][012][021][102][110][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,0,1,--
R3) 0,1,-->0,0,1,--0,1,1,--
R4) 0,0,1,-->0,1,1,--
R5) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,1, : 0,1,1, :
Number new nodes in level n is given by : 1,2,2, DONE

-----Class

873-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][012][021][102][110][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,0,1,--
R3) 0,1,-->0,0,1,--0,1,1,--
R4) 0,0,1,-->0,1,1,--
R5) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,1, : 0,1,1, :
Number new nodes in level n is given by : 1,2,2, DONE

-----Class

874-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][012][021][102][120][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--

R2) 0,0,-->0,0,1,--0,0,1,--
R3) 0,0,1,-->0,0,1,1,--
R4) 0,0,1,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
LEN=3) 0,0,1, :
LEN=4) 0,0,1,1, :
Number new nodes in level n is given by : 1,1,1,1, DONE

-----Class

875-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][012][021][110][120][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,0,1,--
R3) 0,1,-->0,0,1,--0,1,1,--
R4) 0,0,1,-->0,1,1,--
R5) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,1, : 0,1,1, :
Number new nodes in level n is given by : 1,2,2, DONE

-----Class

876-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][012][100][101][102][110][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,1,--
R3) 0,1,-->0,1,0,--0,1,0,--
R4) 0,0,1,-->0,1,0,--
R5) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,1, : 0,1,0, :
Number new nodes in level n is given by : 1,2,2, DONE

-----Class

877-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][012][100][101][102][110][201]]$

--
Rules of T[L]:

R1) 0,-->0,0,--0,1,--
 R2) 0,0,-->0,0,1,--0,1,--
 R3) 0,1,-->0,1,0,--0,1,0,--
 R4) 0,0,1,-->0,1,0,--
 R5) 0,1,0,-->
 List of different nodes in T[L]
 LEN=1) 0,:
 LEN=2) 0,0,: 0,1,:
 LEN=3) 0,0,1,: 0,1,0,:
 Number new nodes in level n is given by : 1,2,2, DONE

-----Class

878-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][012][100][101][102][110][210]]$

--
 Rules of T[L]:
 R1) 0,-->0,0,--0,1,--
 R2) 0,0,-->0,0,1,--0,1,--
 R3) 0,1,-->0,1,0,--0,1,0,--
 R4) 0,0,1,-->0,1,0,--
 R5) 0,1,0,-->
 List of different nodes in T[L]
 LEN=1) 0,:
 LEN=2) 0,0,: 0,1,:
 LEN=3) 0,0,1,: 0,1,0,:
 Number new nodes in level n is given by : 1,2,2, DONE

-----Class

879-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][012][100][101][102][120][201]]$

--
 Rules of T[L]:
 R1) 0,-->0,0,--0,1,--
 R2) 0,0,-->0,0,1,--0,1,--
 R3) 0,1,-->0,1,0,--0,0,1,--
 R4) 0,0,1,-->0,1,0,--
 R5) 0,1,0,-->
 List of different nodes in T[L]
 LEN=1) 0,:
 LEN=2) 0,0,: 0,1,:
 LEN=3) 0,0,1,: 0,1,0,:
 Number new nodes in level n is given by : 1,2,2, DONE

-----Class

880-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][012][100][101][102][120][210]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,1,--0,1,--
- R3) 0,1,-->0,1,0,--0,0,1,--
- R4) 0,0,1,-->0,1,0,--
- R5) 0,1,0,-->

List of different nodes in T[L]

- LEN=1) 0,:
- LEN=2) 0,0,: 0,1,:
- LEN=3) 0,0,1,: 0,1,0,:

Number new nodes in level n is given by : 1,2,2, DONE

-----Class

881-----

Inversion Sequences ($I_n=(n+1)!$) avoiding L=[[000][012][100][101][102][201][210]]

--
Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,1,--0,1,--
- R3) 0,1,-->0,1,0,--0,0,1,--
- R4) 0,0,1,-->0,1,0,--
- R5) 0,1,0,-->

List of different nodes in T[L]

- LEN=1) 0,:
- LEN=2) 0,0,: 0,1,:
- LEN=3) 0,0,1,: 0,1,0,:

Number new nodes in level n is given by : 1,2,2, DONE

-----Class

882-----

Inversion Sequences ($I_n=(n+1)!$) avoiding L=[[000][012][100][101][110][120][201]]

--
Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,1,--0,1,--
- R3) 0,1,-->0,1,0,--0,1,0,--
- R4) 0,0,1,-->0,1,0,--
- R5) 0,1,0,-->

List of different nodes in T[L]

- LEN=1) 0,:
- LEN=2) 0,0,: 0,1,:
- LEN=3) 0,0,1,: 0,1,0,:

Number new nodes in level n is given by : 1,2,2, DONE

-----Class

883-----

Inversion Sequences ($I_n=(n+1)!$) avoiding L=[[000][012][100][101][110][120][210]]


```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,1,--
R3) 0,1,-->0,1,0,--0,1,0,--
R4) 0,0,1,-->0,1,0,--
R5) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,1,: 0,1,0,:
Number new nodes in level n is given by : 1,2,2,   DONE

```

-----Class

```

884-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][012][100][101][110][201][210]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,1,--
R3) 0,1,-->0,1,0,--0,1,0,--
R4) 0,0,1,-->0,1,0,--
R5) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,1,: 0,1,0,:
Number new nodes in level n is given by : 1,2,2,   DONE

```

-----Class

```

885-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][012][100][101][120][201][210]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,1,--
R3) 0,1,-->0,1,0,--0,0,1,--
R4) 0,0,1,-->0,1,0,--
R5) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,1,: 0,1,0,:
Number new nodes in level n is given by : 1,2,2,   DONE

```

-----Class

```

886-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][012][100][102][110][120][201]]
-----

```

```

-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,0,2,--
R3) 0,1,-->0,0,1,--0,1,1,--
R4) 0,0,1,-->0,1,1,--
R5) 0,0,2,-->0,1,1,--0,1,1,--
R6) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,1,: 0,0,2,: 0,1,1,:
Number new nodes in level n is given by : 1,2,3,  DONE

```

-----Class

887-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][012][100][102][110][120][210]]$

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,0,2,--
R3) 0,1,-->0,0,1,--0,1,1,--
R4) 0,0,1,-->0,1,1,--
R5) 0,0,2,-->0,1,1,--0,1,1,--
R6) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,1,: 0,0,2,: 0,1,1,:
Number new nodes in level n is given by : 1,2,3,  DONE

```

-----Class

888-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][012][100][102][110][201][210]]$

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,0,2,--
R3) 0,1,-->0,0,1,--0,1,1,--
R4) 0,0,1,-->0,1,1,--
R5) 0,0,2,-->0,1,1,--0,1,1,--
R6) 0,1,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,1,: 0,0,2,: 0,1,1,:
Number new nodes in level n is given by : 1,2,3,  DONE

```

-----Class

889-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][012][100][102][120][201][210]]$

--

Rules of $T[L]$:

- R1) $0, -->0,0, --0,1, --$
- R2) $0,0, -->0,0,1, --0,0,2, --$
- R3) $0,1, -->0,0,1, --0,0,1, --$
- R4) $0,0,1, -->0,0,1,1, --$
- R5) $0,0,2, -->0,0,1,1, --0,0,1, --$
- R6) $0,0,1,1, -->$

List of different nodes in $T[L]$

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

LEN=3) $0,0,1, : 0,0,2, :$

LEN=4) $0,0,1,1, :$

Number new nodes in level n is given by : 1,2,2,1, DONE

-----Class

890-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][012][100][110][120][201][210]]$

--

Rules of $T[L]$:

- R1) $0, -->0,0, --0,1, --$
- R2) $0,0, -->0,0,1, --0,0,2, --$
- R3) $0,1, -->0,0,1, --0,1,1, --$
- R4) $0,0,1, -->0,1,1, --$
- R5) $0,0,2, -->0,1,1, --0,1,1, --$
- R6) $0,1,1, -->$

List of different nodes in $T[L]$

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

LEN=3) $0,0,1, : 0,0,2, : 0,1,1, :$

Number new nodes in level n is given by : 1,2,3, DONE

-----Class

891-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][012][101][102][110][120][201]]$

--

Rules of $T[L]$:

- R1) $0, -->0,0, --0,1, --$
- R2) $0,0, -->0,0,1, --0,0,2, --$
- R3) $0,1, -->0,1,0, --0,1,0, --$
- R4) $0,0,1, -->0,1,0, --$
- R5) $0,0,2, -->0,0,1, --0,1,0, --$
- R6) $0,1,0, -->$

List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,1, : 0,0,2, : 0,1,0, :
Number new nodes in level n is given by : 1,2,3, DONE

-----Class

892-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][012][101][102][110][120][210]]$

--
Rules of T[L]:
R1) 0, -->0,0, --0,1, --
R2) 0,0, -->0,0,1, --0,0,2, --
R3) 0,1, -->0,1,0, --0,1,0, --
R4) 0,0,1, -->0,1,0, --
R5) 0,0,2, -->0,0,1, --0,1,0, --
R6) 0,1,0, -->

List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,1, : 0,0,2, : 0,1,0, :
Number new nodes in level n is given by : 1,2,3, DONE

-----Class

893-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][012][101][102][110][201][210]]$

--
Rules of T[L]:
R1) 0, -->0,0, --0,1, --
R2) 0,0, -->0,0,1, --0,0,2, --
R3) 0,1, -->0,1,0, --0,1,0, --
R4) 0,0,1, -->0,1,0, --
R5) 0,0,2, -->0,0,1, --0,1,0, --
R6) 0,1,0, -->

List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,1, : 0,0,2, : 0,1,0, :
Number new nodes in level n is given by : 1,2,3, DONE

-----Class

894-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][012][101][102][120][201][210]]$

--
Rules of T[L]:
R1) 0, -->0,0, --0,1, --
R2) 0,0, -->0,0,1, --0,0,2, --

R3) 0,1,-->0,1,0,--0,0,1,--
 R4) 0,0,1,-->0,1,0,--
 R5) 0,0,2,-->0,0,1,--0,0,2,2,--
 R6) 0,1,0,-->
 R7) 0,0,2,2,-->0,0,1,--
 List of different nodes in T[L]
 LEN=1) 0,:
 LEN=2) 0,0,: 0,1,:
 LEN=3) 0,0,1,: 0,0,2,: 0,1,0,:
 LEN=4) 0,0,2,2,:
 Number new nodes in level n is given by : 1,2,3,1, DONE

-----Class

895-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][012][101][110][120][201][210]]$

--
 Rules of T[L]:
 R1) 0,-->0,0,--0,1,--
 R2) 0,0,-->0,0,1,--0,0,2,--
 R3) 0,1,-->0,1,0,--0,1,0,--
 R4) 0,0,1,-->0,1,0,--
 R5) 0,0,2,-->0,0,1,--0,1,0,--
 R6) 0,1,0,-->
 List of different nodes in T[L]
 LEN=1) 0,:
 LEN=2) 0,0,: 0,1,:
 LEN=3) 0,0,1,: 0,0,2,: 0,1,0,:
 Number new nodes in level n is given by : 1,2,3, DONE

-----Class

896-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][012][102][110][120][201][210]]$

--
 Rules of T[L]:
 R1) 0,-->0,0,--0,1,--
 R2) 0,0,-->0,0,1,--0,1,--
 R3) 0,1,-->0,0,1,--0,1,1,--
 R4) 0,0,1,-->0,1,1,--
 R5) 0,1,1,-->
 List of different nodes in T[L]
 LEN=1) 0,:
 LEN=2) 0,0,: 0,1,:
 LEN=3) 0,0,1,: 0,1,1,:
 Number new nodes in level n is given by : 1,2,2, DONE

-----Class

897-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][021][100][101][102][110][120]]$

```

-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,0,2,--
R3) 0,1,-->0,1,0,--0,0,--0,0,2,--
R4) 0,0,1,-->0,0,1,1,--0,0,1,--0,0,2,--
R5) 0,0,2,-->0,0,--0,0,2,--
R6) 0,1,0,-->
R7) 0,0,1,1,-->0,0,1,1,2,--0,0,1,--0,0,2,--
R8) 0,0,1,1,2,-->0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,--0,0,2,--
R9) 0,0,1,1,2,2,-->0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,0,2,--
R10)
0,0,1,1,2,2,3,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,0,2,--
R11)
0,0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,0,2,--
R12)
0,0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,
1,1,2,--0,0,1,--0,0,2,--
R13)
0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--
0,0,1,1,2,--0,0,1,--0,0,2,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,1, : 0,0,2, : 0,1,0, :
LEN=4) 0,0,1,1, :
LEN=5) 0,0,1,1,2, :
LEN=6) 0,0,1,1,2,2, :
LEN=7) 0,0,1,1,2,2,3, :
LEN=8) 0,0,1,1,2,2,3,3, :
LEN=9) 0,0,1,1,2,2,3,3,4, :
LEN=10) 0,0,1,1,2,2,3,3,4,4, :
LEN=11) 0,0,1,1,2,2,3,3,4,4,5, :
Number new nodes in level n is given by : 1,2,3,1,1,1,1,1,1,1,1,

```

```

-----Class
898-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][021][100][101][102][110][201]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,0,2,--
R3) 0,1,-->0,1,0,--0,0,--0,1,--
R4) 0,0,1,-->0,0,1,1,--0,0,1,--0,0,2,--
R5) 0,0,2,-->0,0,--0,0,2,--
R6) 0,1,0,-->
R7) 0,0,1,1,-->0,0,1,1,2,--0,0,1,--0,0,2,--
R8) 0,0,1,1,2,-->0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,--0,0,2,--

```

R9) 0,0,1,1,2,2,-->0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,0,2,--
R10)
0,0,1,1,2,2,3,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,0,2,--
R11)
0,0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,0,2,--
R12)
0,0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,
1,1,2,--0,0,1,--0,0,2,--
R13)
0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--
0,0,1,1,2,--0,0,1,--0,0,2,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,1, : 0,0,2, : 0,1,0, :
LEN=4) 0,0,1,1, :
LEN=5) 0,0,1,1,2, :
LEN=6) 0,0,1,1,2,2, :
LEN=7) 0,0,1,1,2,2,3, :
LEN=8) 0,0,1,1,2,2,3,3, :
LEN=9) 0,0,1,1,2,2,3,3,4, :
LEN=10) 0,0,1,1,2,2,3,3,4,4, :
LEN=11) 0,0,1,1,2,2,3,3,4,4,5, :
Number new nodes in level n is given by : 1,2,3,1,1,1,1,1,1,1,1,

-----Class

899-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][021][100][101][102][110][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,0,2,--
R3) 0,1,-->0,1,0,--0,0,--0,1,--
R4) 0,0,1,-->0,0,1,1,--0,0,1,--0,0,2,--
R5) 0,0,2,-->0,0,--0,0,2,--
R6) 0,1,0,-->
R7) 0,0,1,1,-->0,0,1,1,2,--0,0,1,--0,0,2,--
R8) 0,0,1,1,2,-->0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,--0,0,2,--
R9) 0,0,1,1,2,2,-->0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,0,2,--
R10)
0,0,1,1,2,2,3,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,0,2,--
R11)
0,0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,0,2,--
R12)
0,0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,
1,1,2,--0,0,1,--0,0,2,--
R13)
0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--
0,0,1,1,2,--0,0,1,--0,0,2,--

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, : 0,1, :
- LEN=3) 0,0,1, : 0,0,2, : 0,1,0, :
- LEN=4) 0,0,1,1, :
- LEN=5) 0,0,1,1,2, :
- LEN=6) 0,0,1,1,2,2, :
- LEN=7) 0,0,1,1,2,2,3, :
- LEN=8) 0,0,1,1,2,2,3,3, :
- LEN=9) 0,0,1,1,2,2,3,3,4, :
- LEN=10) 0,0,1,1,2,2,3,3,4,4, :
- LEN=11) 0,0,1,1,2,2,3,3,4,4,5, :

Number new nodes in level n is given by : 1,2,3,1,1,1,1,1,1,1,1,

-----Class

900-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][021][100][101][102][120][201]]$

--

Rules of T[L]:

- R1) 0, -->0,0, --0,1, --
- R2) 0,0, -->0,0,1, --0,0,2, --
- R3) 0,1, -->0,1,0, --0,1,1, --0,0,2, --
- R4) 0,0,1, -->0,0,1,1, --0,0,1, --0,0,2, --
- R5) 0,0,2, -->0,0, --0,0,2, --
- R6) 0,1,0, -->
- R7) 0,1,1, -->0,1,0, --0,0,1, --0,0,2, --
- R8) 0,0,1,1, -->0,0,1,1,2, --0,0,1, --0,0,2, --
- R9) 0,0,1,1,2, -->0,0,1,1,2,2, --0,0,1,1,2, --0,0,1, --0,0,2, --
- R10) 0,0,1,1,2,2, -->0,0,1,1,2,2,3, --0,0,1,1,2, --0,0,1, --0,0,2, --
- R11)
- 0,0,1,1,2,2,3, -->0,0,1,1,2,2,3,3, --0,0,1,1,2,2,3, --0,0,1,1,2, --0,0,1, --0,0,2, --
- R12)
- 0,0,1,1,2,2,3,3, -->0,0,1,1,2,2,3,3,4, --0,0,1,1,2,2,3, --0,0,1,1,2, --0,0,1, --0,0,2, --
- R13)
- 0,0,1,1,2,2,3,3,4, -->0,0,1,1,2,2,3,3,4,4, --0,0,1,1,2,2,3,3,4, --0,0,1,1,2,2,3, --0,0,1,1,2, --0,0,1, --0,0,2, --
- R14)
- 0,0,1,1,2,2,3,3,4,4, -->0,0,1,1,2,2,3,3,4,4,5, --0,0,1,1,2,2,3,3,4, --0,0,1,1,2,2,3, --0,0,1,1,2, --0,0,1, --0,0,2, --

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, : 0,1, :
- LEN=3) 0,0,1, : 0,0,2, : 0,1,0, : 0,1,1, :
- LEN=4) 0,0,1,1, :
- LEN=5) 0,0,1,1,2, :
- LEN=6) 0,0,1,1,2,2, :
- LEN=7) 0,0,1,1,2,2,3, :
- LEN=8) 0,0,1,1,2,2,3,3, :
- LEN=9) 0,0,1,1,2,2,3,3,4, :

LEN=10) 0,0,1,1,2,2,3,3,4,4, :
 LEN=11) 0,0,1,1,2,2,3,3,4,4,5, :
 Number new nodes in level n is given by : 1,2,4,1,1,1,1,1,1,1,1,

-----Class

901-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][021][100][101][102][120][210]]

--

Rules of T[L]:

- R1) 0, -->0,0,--0,1,--
- R2) 0,0, -->0,0,1,--0,0,2,--
- R3) 0,1, -->0,1,0,--0,1,1,--0,0,2,--
- R4) 0,0,1, -->0,0,1,1,--0,0,1,--0,0,2,--
- R5) 0,0,2, -->0,0,--0,0,2,--
- R6) 0,1,0, -->
- R7) 0,1,1, -->0,1,0,--0,0,1,--0,0,2,--
- R8) 0,0,1,1, -->0,0,1,1,2,--0,0,1,--0,0,2,--
- R9) 0,0,1,1,2, -->0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,--0,0,2,--
- R10) 0,0,1,1,2,2, -->0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,0,2,--
- R11) 0,0,1,1,2,2,3, -->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,0,2,--
- R12) 0,0,1,1,2,2,3,3, -->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,0,2,--
- R13) 0,0,1,1,2,2,3,3,4, -->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,0,2,--
- R14) 0,0,1,1,2,2,3,3,4,4, -->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,0,2,--

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, : 0,1, :
- LEN=3) 0,0,1, : 0,0,2, : 0,1,0, : 0,1,1, :
- LEN=4) 0,0,1,1, :
- LEN=5) 0,0,1,1,2, :
- LEN=6) 0,0,1,1,2,2, :
- LEN=7) 0,0,1,1,2,2,3, :
- LEN=8) 0,0,1,1,2,2,3,3, :
- LEN=9) 0,0,1,1,2,2,3,3,4, :
- LEN=10) 0,0,1,1,2,2,3,3,4,4, :
- LEN=11) 0,0,1,1,2,2,3,3,4,4,5, :
 Number new nodes in level n is given by : 1,2,4,1,1,1,1,1,1,1,1,

-----Class

902-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[000][021][100][101][102][201][210]]

--

Rules of T[L]:

- R1) 0, -->0,0, --0,1, --
- R2) 0,0, -->0,0,1, --0,0,2, --
- R3) 0,1, -->0,1,0, --0,1,1, --0,1, --
- R4) 0,0,1, -->0,0,1,1, --0,0,1, --0,0,2, --
- R5) 0,0,2, -->0,0, --0,0,2, --
- R6) 0,1,0, -->
- R7) 0,1,1, -->0,1,0, --0,1,1,2, --0,1, --
- R8) 0,0,1,1, -->0,0,1,1,2, --0,0,1, --0,0,2, --
- R9) 0,1,1,2, -->0,1,0, --0,1,1,2,2, --0,1,1,2, --0,1, --
- R10) 0,0,1,1,2, -->0,0,1,1,2,2, --0,0,1,1,2, --0,0,1, --0,0,2, --
- R11) 0,1,1,2,2, -->0,1,0, --0,1,1,2,2,3, --0,1,1,2, --0,1, --
- R12) 0,0,1,1,2,2, -->0,0,1,1,2,2,3, --0,0,1,1,2, --0,0,1, --0,0,2, --
- R13) 0,1,1,2,2,3, -->0,1,0, --0,1,1,2,2,3,3, --0,1,1,2,2,3, --0,1,1,2, --0,1, --
- R14) 0,0,1,1,2,2,3, -->0,0,1,1,2,2,3,3, --0,0,1,1,2,2,3, --0,0,1,1,2, --0,0,1, --0,0,2, --
- R15) 0,1,1,2,2,3,3, -->0,1,0, --0,1,1,2,2,3,3,4, --0,1,1,2,2,3, --0,1,1,2, --0,1, --
- R16) 0,0,1,1,2,2,3,3, -->0,0,1,1,2,2,3,3,4, --0,0,1,1,2,2,3, --0,0,1,1,2, --0,0,1, --0,0,2, --
- R17) 0,1,1,2,2,3,3,4, -->0,1,0, --0,1,1,2,2,3,3,4,4, --0,1,1,2,2,3,3,4, --0,1,1,2,2,3, --0,1,1,2, --0,1, --
- R18) 0,0,1,1,2,2,3,3,4, -->0,0,1,1,2,2,3,3,4,4, --0,0,1,1,2,2,3,3,4, --0,0,1,1,2,2,3, --0,0,1,1,2, --0,0,1, --0,0,2, --
- R19) 0,1,1,2,2,3,3,4,4, -->0,1,0, --0,1,1,2,2,3,3,4,4,5, --0,1,1,2,2,3,3,4, --0,1,1,2,2,3, --0,1,1,2, --0,1, --
- R20) 0,0,1,1,2,2,3,3,4,4, -->0,0,1,1,2,2,3,3,4,4,5, --0,0,1,1,2,2,3,3,4, --0,0,1,1,2,2,3, --0,0,1,1,2, --0,0,1, --0,0,2, --
- R21) 0,1,1,2,2,3,3,4,4,5, -->0,1,0, --0,1,1,2,2,3,3,4,4,5,5, --0,1,1,2,2,3,3,4,4,5, --0,1,1,2,2,3,3,4, --0,1,1,2,2,3, --0,1,1,2, --0,1, --

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, : 0,1, :
- LEN=3) 0,0,1, : 0,0,2, : 0,1,0, : 0,1,1, :
- LEN=4) 0,0,1,1, : 0,1,1,2, :
- LEN=5) 0,0,1,1,2, : 0,1,1,2,2, :
- LEN=6) 0,0,1,1,2,2, : 0,1,1,2,2,3, :
- LEN=7) 0,0,1,1,2,2,3, : 0,1,1,2,2,3,3, :
- LEN=8) 0,0,1,1,2,2,3,3, : 0,1,1,2,2,3,3,4, :
- LEN=9) 0,0,1,1,2,2,3,3,4, : 0,1,1,2,2,3,3,4,4, :
- LEN=10) 0,0,1,1,2,2,3,3,4,4, : 0,1,1,2,2,3,3,4,4,5, :
- LEN=11) 0,0,1,1,2,2,3,3,4,4,5, : 0,1,1,2,2,3,3,4,4,5,5, :

Number new nodes in level n is given by : 1,2,4,2,2,2,2,2,2,2,2,

-----Class

903-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][021][100][101][110][120][201]]$

--
Rules of T[L]:

- R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$
- R2) $0, 0, \rightarrow 0, 0, 1, \rightarrow 0, 0, 2, \rightarrow$
- R3) $0, 1, \rightarrow 0, 0, \rightarrow 0, 0, \rightarrow 0, 0, 2, \rightarrow$
- R4) $0, 0, 1, \rightarrow 0, 0, 1, 1, \rightarrow 0, 0, 1, \rightarrow 0, 0, 2, \rightarrow$
- R5) $0, 0, 2, \rightarrow 0, 0, \rightarrow 0, 0, 2, \rightarrow$
- R6) $0, 0, 1, 1, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, 0, 2, \rightarrow$
- R7) $0, 0, 1, 1, 2, \rightarrow 0, 0, 1, 1, 2, 2, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, 0, 2, \rightarrow$
- R8) $0, 0, 1, 1, 2, 2, \rightarrow 0, 0, 1, 1, 2, 2, 3, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, 0, 2, \rightarrow$
- R9) $0, 0, 1, 1, 2, 2, 3, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, \rightarrow 0, 0, 1, 1, 2, 2, 3, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, 0, 2, \rightarrow$
- R10) $0, 0, 1, 1, 2, 2, 3, 3, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, \rightarrow 0, 0, 1, 1, 2, 2, 3, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, 0, 2, \rightarrow$
- R11) $0, 0, 1, 1, 2, 2, 3, 3, 4, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, 4, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, \rightarrow 0, 0, 1, 1, 2, 2, 3, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, 0, 2, \rightarrow$
- R12) $0, 0, 1, 1, 2, 2, 3, 3, 4, 4, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, 4, 5, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, \rightarrow 0, 0, 1, 1, 2, 2, 3, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, 0, 2, \rightarrow$

List of different nodes in T[L]

- LEN=1) $0, :$
- LEN=2) $0, 0, : 0, 1, :$
- LEN=3) $0, 0, 1, : 0, 0, 2, :$
- LEN=4) $0, 0, 1, 1, :$
- LEN=5) $0, 0, 1, 1, 2, :$
- LEN=6) $0, 0, 1, 1, 2, 2, :$
- LEN=7) $0, 0, 1, 1, 2, 2, 3, :$
- LEN=8) $0, 0, 1, 1, 2, 2, 3, 3, :$
- LEN=9) $0, 0, 1, 1, 2, 2, 3, 3, 4, :$
- LEN=10) $0, 0, 1, 1, 2, 2, 3, 3, 4, 4, :$
- LEN=11) $0, 0, 1, 1, 2, 2, 3, 3, 4, 4, 5, :$

Number new nodes in level n is given by : 1,2,2,1,1,1,1,1,1,1,1,

-----Class

904-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][021][100][101][110][120][210]]$

--
Rules of T[L]:

- R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$
- R2) $0, 0, \rightarrow 0, 0, 1, \rightarrow 0, 0, 2, \rightarrow$
- R3) $0, 1, \rightarrow 0, 0, \rightarrow 0, 0, \rightarrow 0, 0, 2, \rightarrow$
- R4) $0, 0, 1, \rightarrow 0, 0, 1, 1, \rightarrow 0, 0, 1, \rightarrow 0, 0, 2, \rightarrow$
- R5) $0, 0, 2, \rightarrow 0, 0, \rightarrow 0, 0, 2, \rightarrow$
- R6) $0, 0, 1, 1, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, 0, 2, \rightarrow$
- R7) $0, 0, 1, 1, 2, \rightarrow 0, 0, 1, 1, 2, 2, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, 0, 2, \rightarrow$
- R8) $0, 0, 1, 1, 2, 2, \rightarrow 0, 0, 1, 1, 2, 2, 3, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, 0, 2, \rightarrow$
- R9) $0, 0, 1, 1, 2, 2, 3, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, \rightarrow 0, 0, 1, 1, 2, 2, 3, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, 0, 2, \rightarrow$
- R10) $0, 0, 1, 1, 2, 2, 3, 3, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, \rightarrow 0, 0, 1, 1, 2, 2, 3, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, 0, 2, \rightarrow$

$0,0,1,1,2,2,3,3, \rightarrow 0,0,1,1,2,2,3,3,4, \rightarrow 0,0,1,1,2,2,3, \rightarrow 0,0,1,1,2, \rightarrow 0,0,1, \rightarrow 0,0,2, \rightarrow$
 R11)
 $0,0,1,1,2,2,3,3,4, \rightarrow 0,0,1,1,2,2,3,3,4,4, \rightarrow 0,0,1,1,2,2,3,3,4, \rightarrow 0,0,1,1,2,2,3, \rightarrow 0,0,1,1,2, \rightarrow 0,0,1, \rightarrow 0,0,2, \rightarrow$
 R12)
 $0,0,1,1,2,2,3,3,4,4, \rightarrow 0,0,1,1,2,2,3,3,4,4,5, \rightarrow 0,0,1,1,2,2,3,3,4, \rightarrow 0,0,1,1,2,2,3, \rightarrow 0,0,1,1,2, \rightarrow 0,0,1, \rightarrow 0,0,2, \rightarrow$
 List of different nodes in T[L]
 LEN=1) 0, :
 LEN=2) 0,0, : 0,1, :
 LEN=3) 0,0,1, : 0,0,2, :
 LEN=4) 0,0,1,1, :
 LEN=5) 0,0,1,1,2, :
 LEN=6) 0,0,1,1,2,2, :
 LEN=7) 0,0,1,1,2,2,3, :
 LEN=8) 0,0,1,1,2,2,3,3, :
 LEN=9) 0,0,1,1,2,2,3,3,4, :
 LEN=10) 0,0,1,1,2,2,3,3,4,4, :
 LEN=11) 0,0,1,1,2,2,3,3,4,4,5, :
 Number new nodes in level n is given by : 1,2,2,1,1,1,1,1,1,1,1,

-----Class
 905-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][021][100][101][110][201][210]]$

 --
 Rules of T[L]:
 R1) $0, \rightarrow 0,0, \rightarrow 0,1, \rightarrow$
 R2) $0,0, \rightarrow 0,0,1, \rightarrow 0,0,2, \rightarrow$
 R3) $0,1, \rightarrow 0,0, \rightarrow 0,0, \rightarrow 0,1, \rightarrow$
 R4) $0,0,1, \rightarrow 0,0,1,1, \rightarrow 0,0,1, \rightarrow 0,0,2, \rightarrow$
 R5) $0,0,2, \rightarrow 0,0, \rightarrow 0,0,2, \rightarrow$
 R6) $0,0,1,1, \rightarrow 0,0,1,1,2, \rightarrow 0,0,1, \rightarrow 0,0,2, \rightarrow$
 R7) $0,0,1,1,2, \rightarrow 0,0,1,1,2,2, \rightarrow 0,0,1,1,2, \rightarrow 0,0,1, \rightarrow 0,0,2, \rightarrow$
 R8) $0,0,1,1,2,2, \rightarrow 0,0,1,1,2,2,3, \rightarrow 0,0,1,1,2, \rightarrow 0,0,1, \rightarrow 0,0,2, \rightarrow$
 R9) $0,0,1,1,2,2,3, \rightarrow 0,0,1,1,2,2,3,3, \rightarrow 0,0,1,1,2,2,3, \rightarrow 0,0,1,1,2, \rightarrow 0,0,1, \rightarrow 0,0,2, \rightarrow$
 R10)
 $0,0,1,1,2,2,3,3, \rightarrow 0,0,1,1,2,2,3,3,4, \rightarrow 0,0,1,1,2,2,3, \rightarrow 0,0,1,1,2, \rightarrow 0,0,1, \rightarrow 0,0,2, \rightarrow$
 R11)
 $0,0,1,1,2,2,3,3,4, \rightarrow 0,0,1,1,2,2,3,3,4,4, \rightarrow 0,0,1,1,2,2,3,3,4, \rightarrow 0,0,1,1,2,2,3, \rightarrow 0,0,1,1,2, \rightarrow 0,0,1, \rightarrow 0,0,2, \rightarrow$
 R12)
 $0,0,1,1,2,2,3,3,4,4, \rightarrow 0,0,1,1,2,2,3,3,4,4,5, \rightarrow 0,0,1,1,2,2,3,3,4, \rightarrow 0,0,1,1,2,2,3, \rightarrow 0,0,1,1,2, \rightarrow 0,0,1, \rightarrow 0,0,2, \rightarrow$
 List of different nodes in T[L]
 LEN=1) 0, :
 LEN=2) 0,0, : 0,1, :
 LEN=3) 0,0,1, : 0,0,2, :
 LEN=4) 0,0,1,1, :
 LEN=5) 0,0,1,1,2, :

LEN=6) 0,0,1,1,2,2, :
 LEN=7) 0,0,1,1,2,2,3, :
 LEN=8) 0,0,1,1,2,2,3,3, :
 LEN=9) 0,0,1,1,2,2,3,3,4, :
 LEN=10) 0,0,1,1,2,2,3,3,4,4, :
 LEN=11) 0,0,1,1,2,2,3,3,4,4,5, :
 Number new nodes in level n is given by : 1,2,2,1,1,1,1,1,1,1,1,

-----Class

906-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][021][100][101][120][201][210]]$

--
 Rules of $T[L]$:

- R1) 0, -->0,0,--0,1,--
- R2) 0,0, -->0,0,1,--0,0,2,--
- R3) 0,1, -->0,0,--0,0,1,--0,0,2,--
- R4) 0,0,1, -->0,0,1,1,--0,0,1,--0,0,2,--
- R5) 0,0,2, -->0,0,--0,0,2,--
- R6) 0,0,1,1, -->0,0,1,1,2,--0,0,1,--0,0,2,--
- R7) 0,0,1,1,2, -->0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,--0,0,2,--
- R8) 0,0,1,1,2,2, -->0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,0,2,--
- R9) 0,0,1,1,2,2,3, -->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,0,2,--
- R10) 0,0,1,1,2,2,3,3, -->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,0,2,--
- R11) 0,0,1,1,2,2,3,3,4, -->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,0,2,--
- R12) 0,0,1,1,2,2,3,3,4,4, -->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,0,2,--

List of different nodes in $T[L]$

LEN=1) 0, :
 LEN=2) 0,0, : 0,1, :
 LEN=3) 0,0,1, : 0,0,2, :
 LEN=4) 0,0,1,1, :
 LEN=5) 0,0,1,1,2, :
 LEN=6) 0,0,1,1,2,2, :
 LEN=7) 0,0,1,1,2,2,3, :
 LEN=8) 0,0,1,1,2,2,3,3, :
 LEN=9) 0,0,1,1,2,2,3,3,4, :
 LEN=10) 0,0,1,1,2,2,3,3,4,4, :
 LEN=11) 0,0,1,1,2,2,3,3,4,4,5, :
 Number new nodes in level n is given by : 1,2,2,1,1,1,1,1,1,1,1,

-----Class

907-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][021][100][102][110][120][201]]$

--

Rules of T[L]:

- R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$
- R2) $0, 0, \rightarrow 0, 0, 1, \rightarrow 0, 0, 2, \rightarrow$
- R3) $0, 1, \rightarrow 0, 1, 0, \rightarrow 0, 0, \rightarrow 0, 0, 2, \rightarrow$
- R4) $0, 0, 1, \rightarrow 0, 0, 1, 1, \rightarrow 0, 0, 1, \rightarrow 0, 0, 2, \rightarrow$
- R5) $0, 0, 2, \rightarrow 0, 0, \rightarrow 0, 0, 2, \rightarrow$
- R6) $0, 1, 0, \rightarrow 0, 1, 0, 1, \rightarrow$
- R7) $0, 0, 1, 1, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, 0, 2, \rightarrow$
- R8) $0, 1, 0, 1, \rightarrow$
- R9) $0, 0, 1, 1, 2, \rightarrow 0, 0, 1, 1, 2, 2, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, 0, 2, \rightarrow$
- R10) $0, 0, 1, 1, 2, 2, \rightarrow 0, 0, 1, 1, 2, 2, 3, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, 0, 2, \rightarrow$
- R11) $0, 0, 1, 1, 2, 2, 3, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, \rightarrow 0, 0, 1, 1, 2, 2, 3, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, 0, 2, \rightarrow$
- R12) $0, 0, 1, 1, 2, 2, 3, 3, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, \rightarrow 0, 0, 1, 1, 2, 2, 3, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, 0, 2, \rightarrow$
- R13) $0, 0, 1, 1, 2, 2, 3, 3, 4, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, 4, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, \rightarrow 0, 0, 1, 1, 2, 2, 3, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, 0, 2, \rightarrow$
- R14) $0, 0, 1, 1, 2, 2, 3, 3, 4, 4, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, 4, 5, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, \rightarrow 0, 0, 1, 1, 2, 2, 3, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, 0, 2, \rightarrow$

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0, 0, : 0, 1, :
- LEN=3) 0, 0, 1, : 0, 0, 2, : 0, 1, 0, :
- LEN=4) 0, 0, 1, 1, : 0, 1, 0, 1, :
- LEN=5) 0, 0, 1, 1, 2, :
- LEN=6) 0, 0, 1, 1, 2, 2, :
- LEN=7) 0, 0, 1, 1, 2, 2, 3, :
- LEN=8) 0, 0, 1, 1, 2, 2, 3, 3, :
- LEN=9) 0, 0, 1, 1, 2, 2, 3, 3, 4, :
- LEN=10) 0, 0, 1, 1, 2, 2, 3, 3, 4, 4, :
- LEN=11) 0, 0, 1, 1, 2, 2, 3, 3, 4, 4, 5, :

Number new nodes in level n is given by : 1,2,3,2,1,1,1,1,1,1,1,

-----Class

908-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][021][100][102][110][120][210]]$

--

Rules of T[L]:

- R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$
- R2) $0, 0, \rightarrow 0, 0, 1, \rightarrow 0, 0, 2, \rightarrow$
- R3) $0, 1, \rightarrow 0, 1, 0, \rightarrow 0, 0, \rightarrow 0, 0, 2, \rightarrow$
- R4) $0, 0, 1, \rightarrow 0, 0, 1, 1, \rightarrow 0, 0, 1, \rightarrow 0, 0, 2, \rightarrow$
- R5) $0, 0, 2, \rightarrow 0, 0, \rightarrow 0, 0, 2, \rightarrow$
- R6) $0, 1, 0, \rightarrow 0, 1, 0, 1, \rightarrow$
- R7) $0, 0, 1, 1, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, 0, 2, \rightarrow$
- R8) $0, 1, 0, 1, \rightarrow$
- R9) $0, 0, 1, 1, 2, \rightarrow 0, 0, 1, 1, 2, 2, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, 0, 2, \rightarrow$

R10) 0,0,1,1,2,2,-->0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,0,2,--
R11)
0,0,1,1,2,2,3,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,0,2,--
R12)
0,0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,0,2,--
R13)
0,0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,
1,1,2,--0,0,1,--0,0,2,--
R14)
0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--
0,0,1,1,2,--0,0,1,--0,0,2,--

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,1, : 0,0,2, : 0,1,0, :
LEN=4) 0,0,1,1, : 0,1,0,1, :
LEN=5) 0,0,1,1,2, :
LEN=6) 0,0,1,1,2,2, :
LEN=7) 0,0,1,1,2,2,3, :
LEN=8) 0,0,1,1,2,2,3,3, :
LEN=9) 0,0,1,1,2,2,3,3,4, :
LEN=10) 0,0,1,1,2,2,3,3,4,4, :
LEN=11) 0,0,1,1,2,2,3,3,4,4,5, :

Number new nodes in level n is given by : 1,2,3,2,1,1,1,1,1,1,1,

-----Class

909-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][021][100][102][110][201][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,0,2,--
R3) 0,1,-->0,1,0,--0,0,--0,1,2,--
R4) 0,0,1,-->0,0,1,1,--0,0,1,--0,0,2,--
R5) 0,0,2,-->0,0,--0,0,2,--
R6) 0,1,0,-->0,1,0,1,--
R7) 0,1,2,-->0,1,0,1,--0,0,--0,1,2,--
R8) 0,0,1,1,-->0,0,1,1,2,--0,0,1,--0,0,2,--
R9) 0,1,0,1,-->
R10) 0,0,1,1,2,-->0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,--0,0,2,--
R11) 0,0,1,1,2,2,-->0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,0,2,--
R12)
0,0,1,1,2,2,3,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,0,2,--
R13)
0,0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,0,2,--
R14)
0,0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,
1,1,2,--0,0,1,--0,0,2,--
R15)

0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--
0,0,1,1,2,--0,0,1,--0,0,2,--

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, : 0,1, :
- LEN=3) 0,0,1, : 0,0,2, : 0,1,0, : 0,1,2, :
- LEN=4) 0,0,1,1, : 0,1,0,1, :
- LEN=5) 0,0,1,1,2, :
- LEN=6) 0,0,1,1,2,2, :
- LEN=7) 0,0,1,1,2,2,3, :
- LEN=8) 0,0,1,1,2,2,3,3, :
- LEN=9) 0,0,1,1,2,2,3,3,4, :
- LEN=10) 0,0,1,1,2,2,3,3,4,4, :
- LEN=11) 0,0,1,1,2,2,3,3,4,4,5, :

Number new nodes in level n is given by : 1,2,4,2,1,1,1,1,1,1,1,

-----Class

910-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][021][100][102][120][201][210]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,1,--0,0,2,--
- R3) 0,1,-->0,1,0,--0,1,1,--0,0,2,--
- R4) 0,0,1,-->0,0,1,1,--0,0,1,--0,0,2,--
- R5) 0,0,2,-->0,0,--0,0,2,--
- R6) 0,1,0,-->0,1,0,1,--
- R7) 0,1,1,-->0,1,0,1,--0,0,1,--0,0,2,--
- R8) 0,0,1,1,-->0,0,1,1,2,--0,0,1,--0,0,2,--
- R9) 0,1,0,1,-->
- R10) 0,0,1,1,2,-->0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,--0,0,2,--
- R11) 0,0,1,1,2,2,-->0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,0,2,--
- R12)
- 0,0,1,1,2,2,3,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,0,2,--
- R13)
- 0,0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,0,2,--
- R14)
- 0,0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,0,2,--
- R15)
- 0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,0,2,--

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, : 0,1, :
- LEN=3) 0,0,1, : 0,0,2, : 0,1,0, : 0,1,1, :
- LEN=4) 0,0,1,1, : 0,1,0,1, :
- LEN=5) 0,0,1,1,2, :
- LEN=6) 0,0,1,1,2,2, :

LEN=7) 0,0,1,1,2,2,3, :
 LEN=8) 0,0,1,1,2,2,3,3, :
 LEN=9) 0,0,1,1,2,2,3,3,4, :
 LEN=10) 0,0,1,1,2,2,3,3,4,4, :
 LEN=11) 0,0,1,1,2,2,3,3,4,4,5, :
 Number new nodes in level n is given by : 1,2,4,2,1,1,1,1,1,1,1,

-----Class

911-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][021][100][110][120][201][210]]$

--

Rules of T[L]:

- R1) 0, -->0,0,--0,1,--
- R2) 0,0, -->0,0,1,--0,0,2,--
- R3) 0,1, -->0,0,1,--0,0,--0,0,2,--
- R4) 0,0,1, -->0,0,1,1,--0,0,1,--0,0,2,--
- R5) 0,0,2, -->0,0,--0,0,2,--
- R6) 0,0,1,1, -->0,0,1,1,2,--0,0,1,--0,0,2,--
- R7) 0,0,1,1,2, -->0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,--0,0,2,--
- R8) 0,0,1,1,2,2, -->0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,0,2,--
- R9) 0,0,1,1,2,2,3, -->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,0,2,--
- R10) 0,0,1,1,2,2,3,3, -->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,0,2,--
- R11) 0,0,1,1,2,2,3,3,4, -->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,0,2,--
- R12) 0,0,1,1,2,2,3,3,4,4, -->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,0,2,--

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, : 0,1, :
- LEN=3) 0,0,1, : 0,0,2, :
- LEN=4) 0,0,1,1, :
- LEN=5) 0,0,1,1,2, :
- LEN=6) 0,0,1,1,2,2, :
- LEN=7) 0,0,1,1,2,2,3, :
- LEN=8) 0,0,1,1,2,2,3,3, :
- LEN=9) 0,0,1,1,2,2,3,3,4, :
- LEN=10) 0,0,1,1,2,2,3,3,4,4, :
- LEN=11) 0,0,1,1,2,2,3,3,4,4,5, :
 Number new nodes in level n is given by : 1,2,2,1,1,1,1,1,1,1,1,

-----Class

912-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][021][101][102][110][120][201]]$

--

Rules of T[L]:

- R1) 0, -->0,0, --0,1, --
- R2) 0,0, -->0,0,1, --0,0,2, --
- R3) 0,1, -->0,1,0, --0,0, --0,0,2, --
- R4) 0,0,1, -->0,0,1,1, --0,0,1, --0,0,2, --
- R5) 0,0,2, -->0,0, --0,0,2, --
- R6) 0,1,0, -->
- R7) 0,0,1,1, -->0,0,1,1,2, --0,0,1, --0,0,2, --
- R8) 0,0,1,1,2, -->0,0,1,1,2,2, --0,0,1,1,2, --0,0,1, --0,0,2, --
- R9) 0,0,1,1,2,2, -->0,0,1,1,2,2,3, --0,0,1,1,2, --0,0,1, --0,0,2, --
- R10) 0,0,1,1,2,2,3, -->0,0,1,1,2,2,3,3, --0,0,1,1,2,2,3, --0,0,1,1,2, --0,0,1, --0,0,2, --
- R11) 0,0,1,1,2,2,3,3, -->0,0,1,1,2,2,3,3,4, --0,0,1,1,2,2,3, --0,0,1,1,2, --0,0,1, --0,0,2, --
- R12) 0,0,1,1,2,2,3,3,4, -->0,0,1,1,2,2,3,3,4,4, --0,0,1,1,2,2,3,3,4, --0,0,1,1,2,2,3, --0,0,1,1,2, --0,0,1, --0,0,2, --
- R13) 0,0,1,1,2,2,3,3,4,4, -->0,0,1,1,2,2,3,3,4,4,5, --0,0,1,1,2,2,3,3,4, --0,0,1,1,2,2,3, --0,0,1,1,2, --0,0,1, --0,0,2, --

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, : 0,1, :
- LEN=3) 0,0,1, : 0,0,2, : 0,1,0, :
- LEN=4) 0,0,1,1, :
- LEN=5) 0,0,1,1,2, :
- LEN=6) 0,0,1,1,2,2, :
- LEN=7) 0,0,1,1,2,2,3, :
- LEN=8) 0,0,1,1,2,2,3,3, :
- LEN=9) 0,0,1,1,2,2,3,3,4, :
- LEN=10) 0,0,1,1,2,2,3,3,4,4, :
- LEN=11) 0,0,1,1,2,2,3,3,4,4,5, :

Number new nodes in level n is given by : 1,2,3,1,1,1,1,1,1,1,1,

-----Class

913-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][021][101][102][110][120][210]]$

--
Rules of T[L]:

- R1) 0, -->0,0, --0,1, --
- R2) 0,0, -->0,0,1, --0,0,2, --
- R3) 0,1, -->0,1,0, --0,0, --0,0,2, --
- R4) 0,0,1, -->0,0,1,1, --0,0,1, --0,0,2, --
- R5) 0,0,2, -->0,0, --0,0,2, --
- R6) 0,1,0, -->
- R7) 0,0,1,1, -->0,0,1,1,2, --0,0,1, --0,0,2, --
- R8) 0,0,1,1,2, -->0,0,1,1,2,2, --0,0,1,1,2, --0,0,1, --0,0,2, --
- R9) 0,0,1,1,2,2, -->0,0,1,1,2,2,3, --0,0,1,1,2, --0,0,1, --0,0,2, --
- R10) 0,0,1,1,2,2,3, -->0,0,1,1,2,2,3,3, --0,0,1,1,2,2,3, --0,0,1,1,2, --0,0,1, --0,0,2, --

R11)
 $0,0,1,1,2,2,3,3, \rightarrow 0,0,1,1,2,2,3,3,4, \rightarrow 0,0,1,1,2,2,3, \rightarrow 0,0,1,1,2, \rightarrow 0,0,1, \rightarrow 0,0,2, \rightarrow$
R12)
 $0,0,1,1,2,2,3,3,4, \rightarrow 0,0,1,1,2,2,3,3,4,4, \rightarrow 0,0,1,1,2,2,3,3,4, \rightarrow 0,0,1,1,2,2,3, \rightarrow 0,0,1,1,2, \rightarrow 0,0,1, \rightarrow 0,0,2, \rightarrow$
R13)
 $0,0,1,1,2,2,3,3,4,4, \rightarrow 0,0,1,1,2,2,3,3,4,4,5, \rightarrow 0,0,1,1,2,2,3,3,4, \rightarrow 0,0,1,1,2,2,3, \rightarrow 0,0,1,1,2, \rightarrow 0,0,1, \rightarrow 0,0,2, \rightarrow$
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,1, : 0,0,2, : 0,1,0, :
LEN=4) 0,0,1,1, :
LEN=5) 0,0,1,1,2, :
LEN=6) 0,0,1,1,2,2, :
LEN=7) 0,0,1,1,2,2,3, :
LEN=8) 0,0,1,1,2,2,3,3, :
LEN=9) 0,0,1,1,2,2,3,3,4, :
LEN=10) 0,0,1,1,2,2,3,3,4,4, :
LEN=11) 0,0,1,1,2,2,3,3,4,4,5, :
Number new nodes in level n is given by : 1,2,3,1,1,1,1,1,1,1,1,

-----Class
914-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][021][101][102][110][201][210]]$

--
Rules of T[L]:
R1) $0, \rightarrow 0,0, \rightarrow 0,1, \rightarrow$
R2) $0,0, \rightarrow 0,0,1, \rightarrow 0,0,2, \rightarrow$
R3) $0,1, \rightarrow 0,1,0, \rightarrow 0,0, \rightarrow 0,1, \rightarrow$
R4) $0,0,1, \rightarrow 0,0,1,1, \rightarrow 0,0,1, \rightarrow 0,0,2, \rightarrow$
R5) $0,0,2, \rightarrow 0,0, \rightarrow 0,0,2, \rightarrow$
R6) $0,1,0, \rightarrow$
R7) $0,0,1,1, \rightarrow 0,0,1,1,2, \rightarrow 0,0,1, \rightarrow 0,0,2, \rightarrow$
R8) $0,0,1,1,2, \rightarrow 0,0,1,1,2,2, \rightarrow 0,0,1,1,2, \rightarrow 0,0,1, \rightarrow 0,0,2, \rightarrow$
R9) $0,0,1,1,2,2, \rightarrow 0,0,1,1,2,2,3, \rightarrow 0,0,1,1,2, \rightarrow 0,0,1, \rightarrow 0,0,2, \rightarrow$
R10)
 $0,0,1,1,2,2,3, \rightarrow 0,0,1,1,2,2,3,3, \rightarrow 0,0,1,1,2,2,3, \rightarrow 0,0,1,1,2, \rightarrow 0,0,1, \rightarrow 0,0,2, \rightarrow$
R11)
 $0,0,1,1,2,2,3,3, \rightarrow 0,0,1,1,2,2,3,3,4, \rightarrow 0,0,1,1,2,2,3, \rightarrow 0,0,1,1,2, \rightarrow 0,0,1, \rightarrow 0,0,2, \rightarrow$
R12)
 $0,0,1,1,2,2,3,3,4, \rightarrow 0,0,1,1,2,2,3,3,4,4, \rightarrow 0,0,1,1,2,2,3,3,4, \rightarrow 0,0,1,1,2,2,3, \rightarrow 0,0,1,1,2, \rightarrow 0,0,1, \rightarrow 0,0,2, \rightarrow$
R13)
 $0,0,1,1,2,2,3,3,4,4, \rightarrow 0,0,1,1,2,2,3,3,4,4,5, \rightarrow 0,0,1,1,2,2,3,3,4, \rightarrow 0,0,1,1,2,2,3, \rightarrow 0,0,1,1,2, \rightarrow 0,0,1, \rightarrow 0,0,2, \rightarrow$
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :

LEN=3) 0,0,1,: 0,0,2,: 0,1,0,:
 LEN=4) 0,0,1,1,:
 LEN=5) 0,0,1,1,2,:
 LEN=6) 0,0,1,1,2,2,:
 LEN=7) 0,0,1,1,2,2,3,:
 LEN=8) 0,0,1,1,2,2,3,3,:
 LEN=9) 0,0,1,1,2,2,3,3,4,:
 LEN=10) 0,0,1,1,2,2,3,3,4,4,:
 LEN=11) 0,0,1,1,2,2,3,3,4,4,5,:
 Number new nodes in level n is given by : 1,2,3,1,1,1,1,1,1,1,1,

-----Class

915-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][021][101][102][120][201][210]]$

--

Rules of $T[L]$:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,1,--0,0,2,--
- R3) 0,1,-->0,1,0,--0,1,1,--0,0,2,--
- R4) 0,0,1,-->0,0,1,1,--0,0,1,--0,0,2,--
- R5) 0,0,2,-->0,0,--0,0,2,--
- R6) 0,1,0,-->
- R7) 0,1,1,-->0,1,0,--0,0,1,--0,0,2,--
- R8) 0,0,1,1,-->0,0,1,1,2,--0,0,1,--0,0,2,--
- R9) 0,0,1,1,2,-->0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,--0,0,2,--
- R10) 0,0,1,1,2,2,-->0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,0,2,--
- R11) 0,0,1,1,2,2,3,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,0,2,--
- R12) 0,0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,0,2,--
- R13) 0,0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,0,2,--
- R14) 0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,0,2,--

List of different nodes in $T[L]$

LEN=1) 0,:
 LEN=2) 0,0,: 0,1,:
 LEN=3) 0,0,1,: 0,0,2,: 0,1,0,: 0,1,1,:
 LEN=4) 0,0,1,1,:
 LEN=5) 0,0,1,1,2,:
 LEN=6) 0,0,1,1,2,2,:
 LEN=7) 0,0,1,1,2,2,3,:
 LEN=8) 0,0,1,1,2,2,3,3,:
 LEN=9) 0,0,1,1,2,2,3,3,4,:
 LEN=10) 0,0,1,1,2,2,3,3,4,4,:
 LEN=11) 0,0,1,1,2,2,3,3,4,4,5,:
 Number new nodes in level n is given by : 1,2,4,1,1,1,1,1,1,1,1,

-----Class

916-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][021][101][110][120][201][210]]$

--

Rules of $T[L]$:

- R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$
- R2) $0, 0, \rightarrow 0, 0, 1, \rightarrow 0, 0, 2, \rightarrow$
- R3) $0, 1, \rightarrow 0, 0, \rightarrow 0, 0, \rightarrow 0, 0, 2, \rightarrow$
- R4) $0, 0, 1, \rightarrow 0, 0, 1, 1, \rightarrow 0, 0, 1, \rightarrow 0, 0, 2, \rightarrow$
- R5) $0, 0, 2, \rightarrow 0, 0, \rightarrow 0, 0, 2, \rightarrow$
- R6) $0, 0, 1, 1, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, 0, 2, \rightarrow$
- R7) $0, 0, 1, 1, 2, \rightarrow 0, 0, 1, 1, 2, 2, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, 0, 2, \rightarrow$
- R8) $0, 0, 1, 1, 2, 2, \rightarrow 0, 0, 1, 1, 2, 2, 3, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, 0, 2, \rightarrow$
- R9) $0, 0, 1, 1, 2, 2, 3, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, \rightarrow 0, 0, 1, 1, 2, 2, 3, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, 0, 2, \rightarrow$
- R10) $0, 0, 1, 1, 2, 2, 3, 3, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, \rightarrow 0, 0, 1, 1, 2, 2, 3, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, 0, 2, \rightarrow$
- R11) $0, 0, 1, 1, 2, 2, 3, 3, 4, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, 4, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, \rightarrow 0, 0, 1, 1, 2, 2, 3, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, 0, 2, \rightarrow$
- R12) $0, 0, 1, 1, 2, 2, 3, 3, 4, 4, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, 4, 5, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, \rightarrow 0, 0, 1, 1, 2, 2, 3, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, 0, 2, \rightarrow$

List of different nodes in $T[L]$

- LEN=1) $0, :$
 - LEN=2) $0, 0, : 0, 1, :$
 - LEN=3) $0, 0, 1, : 0, 0, 2, :$
 - LEN=4) $0, 0, 1, 1, :$
 - LEN=5) $0, 0, 1, 1, 2, :$
 - LEN=6) $0, 0, 1, 1, 2, 2, :$
 - LEN=7) $0, 0, 1, 1, 2, 2, 3, :$
 - LEN=8) $0, 0, 1, 1, 2, 2, 3, 3, :$
 - LEN=9) $0, 0, 1, 1, 2, 2, 3, 3, 4, :$
 - LEN=10) $0, 0, 1, 1, 2, 2, 3, 3, 4, 4, :$
 - LEN=11) $0, 0, 1, 1, 2, 2, 3, 3, 4, 4, 5, :$
- Number new nodes in level n is given by : 1,2,2,1,1,1,1,1,1,1,1,

-----Class

917-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][021][102][110][120][201][210]]$

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Rules of $T[L]$:

- R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$
- R2) $0, 0, \rightarrow 0, 0, 1, \rightarrow 0, 0, 2, \rightarrow$
- R3) $0, 1, \rightarrow 0, 1, 0, \rightarrow 0, 0, \rightarrow 0, 0, 2, \rightarrow$
- R4) $0, 0, 1, \rightarrow 0, 0, 1, 1, \rightarrow 0, 0, 1, \rightarrow 0, 0, 2, \rightarrow$
- R5) $0, 0, 2, \rightarrow 0, 0, \rightarrow 0, 0, 2, \rightarrow$
- R6) $0, 1, 0, \rightarrow 0, 1, 0, 1, \rightarrow$

R7) 0,0,1,1,-->0,0,1,1,2,--0,0,1,--0,0,2,--
R8) 0,1,0,1,-->
R9) 0,0,1,1,2,-->0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,--0,0,2,--
R10) 0,0,1,1,2,2,-->0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,0,2,--
R11)
0,0,1,1,2,2,3,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,0,2,--
R12)
0,0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,0,2,--
R13)
0,0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--0,0,
1,1,2,--0,0,1,--0,0,2,--
R14)
0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,--
0,0,1,1,2,--0,0,1,--0,0,2,--

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,1, : 0,0,2, : 0,1,0, :
LEN=4) 0,0,1,1, : 0,1,0,1, :
LEN=5) 0,0,1,1,2, :
LEN=6) 0,0,1,1,2,2, :
LEN=7) 0,0,1,1,2,2,3, :
LEN=8) 0,0,1,1,2,2,3,3, :
LEN=9) 0,0,1,1,2,2,3,3,4, :
LEN=10) 0,0,1,1,2,2,3,3,4,4, :
LEN=11) 0,0,1,1,2,2,3,3,4,4,5, :

Number new nodes in level n is given by : 1,2,3,2,1,1,1,1,1,1,1,

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918-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][100][101][102][110][120][201]]$

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Rules of T[L]:

R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,1,--
R3) 0,1,-->0,1,0,--0,0,--0,1,--
R4) 0,0,1,-->0,0,1,1,--0,0,1,2,--0,0,1,3,--
R5) 0,1,0,-->
R6) 0,0,1,1,-->0,0,1,1,2,--0,0,1,2,--0,0,1,3,--
R7) 0,0,1,2,-->0,1,0,--0,0,1,1,--0,0,1,2,--0,0,1,3,--
R8) 0,0,1,3,-->0,1,0,--0,0,1,3,2,--0,0,--0,1,--
R9) 0,0,1,1,2,-->0,0,1,1,2,2,--0,0,1,1,2,3,--0,0,1,1,2,4,--0,0,1,1,2,5,--
R10) 0,0,1,3,2,-->0,1,0,--
R11) 0,0,1,1,2,2,-->0,0,1,1,2,2,3,--0,0,1,1,2,3,--0,0,1,1,2,4,--0,0,1,1,2,5,--
R12)
0,0,1,1,2,3,-->0,1,0,--0,0,1,1,2,2,--0,0,1,1,2,3,--0,0,1,1,2,4,--0,0,1,1,2,5,--
R13) 0,0,1,1,2,4,-->0,1,0,--0,0,1,3,2,--0,0,1,1,--0,0,1,2,--0,0,1,3,--
R14) 0,0,1,1,2,5,-->0,1,0,--0,0,1,3,2,--0,0,1,1,2,5,4,--0,0,--0,1,--
R15)

0,0,1,1,2,2,3,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,4,--0,0,1,1,2,2,3,5,--0,0,1,1,2,2,3,6,--0,0,1,1,2,2,3,7,--

R16) 0,0,1,1,2,5,4,-->0,1,0,--0,0,1,3,2,--

R17)

0,0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,4,--0,0,1,1,2,2,3,5,--0,0,1,1,2,2,3,6,--0,0,1,1,2,2,3,7,--

R18)

0,0,1,1,2,2,3,4,-->0,1,0,--0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,4,--0,0,1,1,2,2,3,5,--0,0,1,1,2,2,3,6,--0,0,1,1,2,2,3,7,--

R19)

0,0,1,1,2,2,3,5,-->0,1,0,--0,0,1,3,2,--0,0,1,1,2,2,--0,0,1,1,2,3,--0,0,1,1,2,4,--0,0,1,1,2,5,--

R20)

0,0,1,1,2,2,3,6,-->0,1,0,--0,0,1,3,2,--0,0,1,1,2,5,4,--0,0,1,1,--0,0,1,2,--0,0,1,3,--

R21)

0,0,1,1,2,2,3,7,-->0,1,0,--0,0,1,3,2,--0,0,1,1,2,5,4,--0,0,1,1,2,2,3,7,6,--0,0,--0,1,--

R22)

0,0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,5,--0,0,1,1,2,2,3,3,4,6,--0,0,1,1,2,2,3,3,4,7,--0,0,1,1,2,2,3,3,4,8,--0,0,1,1,2,2,3,3,4,9,--

R23) 0,0,1,1,2,2,3,7,6,-->0,1,0,--0,0,1,3,2,--0,0,1,1,2,5,4,--

R24)

0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,5,--0,0,1,1,2,2,3,3,4,6,--0,0,1,1,2,2,3,3,4,7,--0,0,1,1,2,2,3,3,4,8,--0,0,1,1,2,2,3,3,4,9,--

R25)

0,0,1,1,2,2,3,3,4,5,-->0,1,0,--0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,5,--0,0,1,1,2,2,3,3,4,6,--0,0,1,1,2,2,3,3,4,7,--0,0,1,1,2,2,3,3,4,8,--0,0,1,1,2,2,3,3,4,9,--

R26)

0,0,1,1,2,2,3,3,4,6,-->0,1,0,--0,0,1,3,2,--0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,4,--0,0,1,1,2,2,3,5,--0,0,1,1,2,2,3,6,--0,0,1,1,2,2,3,7,--

R27)

0,0,1,1,2,2,3,3,4,7,-->0,1,0,--0,0,1,3,2,--0,0,1,1,2,5,4,--0,0,1,1,2,2,--0,0,1,1,2,3,--0,0,1,1,2,4,--0,0,1,1,2,5,--

R28)

0,0,1,1,2,2,3,3,4,8,-->0,1,0,--0,0,1,3,2,--0,0,1,1,2,5,4,--0,0,1,1,2,2,3,7,6,--0,0,1,1,--0,0,1,2,--0,0,1,3,--

R29)

0,0,1,1,2,2,3,3,4,9,-->0,1,0,--0,0,1,3,2,--0,0,1,1,2,5,4,--0,0,1,1,2,2,3,7,6,--0,0,1,1,2,2,3,3,4,9,8,--0,0,--0,1,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,0,1,: 0,1,0,:

LEN=4) 0,0,1,1,: 0,0,1,2,: 0,0,1,3,:

LEN=5) 0,0,1,1,2,: 0,0,1,3,2,:

LEN=6) 0,0,1,1,2,2,: 0,0,1,1,2,3,: 0,0,1,1,2,4,: 0,0,1,1,2,5,:

LEN=7) 0,0,1,1,2,2,3,: 0,0,1,1,2,5,4,:

LEN=8) 0,0,1,1,2,2,3,3,: 0,0,1,1,2,2,3,4,: 0,0,1,1,2,2,3,5,: 0,0,1,1,2,2,3,6,:

0,0,1,1,2,2,3,7,:

LEN=9) 0,0,1,1,2,2,3,3,4,: 0,0,1,1,2,2,3,7,6,:
 LEN=10) 0,0,1,1,2,2,3,3,4,4,: 0,0,1,1,2,2,3,3,4,5,: 0,0,1,1,2,2,3,3,4,6,:
 0,0,1,1,2,2,3,3,4,7,: 0,0,1,1,2,2,3,3,4,8,: 0,0,1,1,2,2,3,3,4,9,:
 LEN=11) 0,0,1,1,2,2,3,3,4,4,5,: 0,0,1,1,2,2,3,3,4,9,8,:
 Number new nodes in level n is given by : 1,2,2,3,2,4,2,5,2,6,2,

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919-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][100][101][102][110][120][210]]$

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Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,1,--0,1,--
- R3) 0,1,-->0,1,0,--0,0,--0,1,--
- R4) 0,0,1,-->0,0,1,1,--0,0,1,2,--0,0,1,3,--
- R5) 0,1,0,-->
- R6) 0,0,1,1,-->0,0,1,1,2,--0,0,1,2,--0,0,1,3,--
- R7) 0,0,1,2,-->0,1,0,--0,0,1,1,--0,0,1,2,--0,0,1,3,--
- R8) 0,0,1,3,-->0,0,1,3,1,--0,1,0,--0,0,--0,1,--
- R9) 0,0,1,1,2,-->0,0,1,1,2,2,--0,0,1,1,2,3,--0,0,1,1,2,4,--0,0,1,1,2,5,--
- R10) 0,0,1,3,1,-->0,1,0,--
- R11) 0,0,1,1,2,2,-->0,0,1,1,2,2,3,--0,0,1,1,2,3,--0,0,1,1,2,4,--0,0,1,1,2,5,--
- R12) 0,0,1,1,2,3,-->0,1,0,--0,0,1,1,2,2,--0,0,1,1,2,3,--0,0,1,1,2,4,--0,0,1,1,2,5,--
- R13) 0,0,1,1,2,4,-->0,0,1,3,1,--0,1,0,--0,0,1,1,--0,0,1,2,--0,0,1,3,--
- R14) 0,0,1,1,2,5,-->0,0,1,1,2,5,2,--0,0,1,3,1,--0,1,0,--0,0,--0,1,--
- R15) 0,0,1,1,2,2,3,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,4,--0,0,1,1,2,2,3,5,--0,0,1,1,2,2,3,6,--0,0,1,1,2,2,3,7,--
- R16) 0,0,1,1,2,5,2,-->0,0,1,3,1,--0,1,0,--
- R17) 0,0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,4,--0,0,1,1,2,2,3,5,--0,0,1,1,2,2,3,6,--0,0,1,1,2,2,3,7,--
- R18) 0,0,1,1,2,2,3,4,-->0,1,0,--0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,4,--0,0,1,1,2,2,3,5,--0,0,1,1,2,2,3,6,--0,0,1,1,2,2,3,7,--
- R19) 0,0,1,1,2,2,3,5,-->0,0,1,3,1,--0,1,0,--0,0,1,1,2,2,--0,0,1,1,2,3,--0,0,1,1,2,4,--0,0,1,1,2,5,--
- R20) 0,0,1,1,2,2,3,6,-->0,0,1,1,2,5,2,--0,0,1,3,1,--0,1,0,--0,0,1,1,--0,0,1,2,--0,0,1,3,--
- R21) 0,0,1,1,2,2,3,7,-->0,0,1,1,2,2,3,7,3,--0,0,1,1,2,5,2,--0,0,1,3,1,--0,1,0,--0,0,--0,1,--
- R22) 0,0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,5,--0,0,1,1,2,2,3,3,4,6,--0,0,1,1,2,2,3,3,4,7,--0,0,1,1,2,2,3,3,4,8,--0,0,1,1,2,2,3,3,4,9,--
- R23) 0,0,1,1,2,2,3,7,3,-->0,0,1,1,2,5,2,--0,0,1,3,1,--0,1,0,--

R24)

0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,5,--0,0,1,1,2,2,3,3,4,6,--0,0,1,1,2,2,3,3,4,7,--0,0,1,1,2,2,3,3,4,8,--0,0,1,1,2,2,3,3,4,9,--

R25)

0,0,1,1,2,2,3,3,4,5,-->0,1,0,--0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,5,--0,0,1,1,2,2,3,3,4,6,--0,0,1,1,2,2,3,3,4,7,--0,0,1,1,2,2,3,3,4,8,--0,0,1,1,2,2,3,3,4,9,--

R26)

0,0,1,1,2,2,3,3,4,6,-->0,0,1,3,1,--0,1,0,--0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,4,--0,0,1,1,2,2,3,5,--0,0,1,1,2,2,3,6,--0,0,1,1,2,2,3,7,--

R27)

0,0,1,1,2,2,3,3,4,7,-->0,0,1,1,2,5,2,--0,0,1,3,1,--0,1,0,--0,0,1,1,2,2,--0,0,1,1,2,3,--0,0,1,1,2,4,--0,0,1,1,2,5,--

R28)

0,0,1,1,2,2,3,3,4,8,-->0,0,1,1,2,2,3,7,3,--0,0,1,1,2,5,2,--0,0,1,3,1,--0,1,0,--0,0,1,1,--0,0,1,2,--0,0,1,3,--

R29)

0,0,1,1,2,2,3,3,4,9,-->0,0,1,1,2,2,3,3,4,9,4,--0,0,1,1,2,2,3,7,3,--0,0,1,1,2,5,2,--0,0,1,3,1,--0,1,0,--0,0,--0,1,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,0,1,: 0,1,0,:

LEN=4) 0,0,1,1,: 0,0,1,2,: 0,0,1,3,:

LEN=5) 0,0,1,1,2,: 0,0,1,3,1,:

LEN=6) 0,0,1,1,2,2,: 0,0,1,1,2,3,: 0,0,1,1,2,4,: 0,0,1,1,2,5,:

LEN=7) 0,0,1,1,2,2,3,: 0,0,1,1,2,5,2,:

LEN=8) 0,0,1,1,2,2,3,3,: 0,0,1,1,2,2,3,4,: 0,0,1,1,2,2,3,5,: 0,0,1,1,2,2,3,6,:

0,0,1,1,2,2,3,7,:

LEN=9) 0,0,1,1,2,2,3,3,4,: 0,0,1,1,2,2,3,7,3,:

LEN=10) 0,0,1,1,2,2,3,3,4,4,: 0,0,1,1,2,2,3,3,4,5,: 0,0,1,1,2,2,3,3,4,6,:

0,0,1,1,2,2,3,3,4,7,: 0,0,1,1,2,2,3,3,4,8,: 0,0,1,1,2,2,3,3,4,9,:

LEN=11) 0,0,1,1,2,2,3,3,4,4,5,: 0,0,1,1,2,2,3,3,4,9,4,:

Number new nodes in level n is given by : 1,2,2,3,2,4,2,5,2,6,2,

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920-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][100][101][102][110][201][210]]$

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Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,1,--0,1,--

R3) 0,1,-->0,1,0,--0,0,--0,1,2,--

R4) 0,0,1,-->0,0,1,1,--0,0,1,2,--0,1,2,--

R5) 0,1,0,-->

R6) 0,1,2,-->0,1,0,--0,1,0,--0,0,--0,1,2,3,--

R7) 0,0,1,1,-->0,0,1,1,2,--0,0,1,2,--0,1,2,--

R8) 0,0,1,2,-->0,1,0,--0,0,1,1,--0,0,1,2,3,--0,1,2,3,--

R9) 0,1,2,3,-->0,1,0,--0,1,0,--0,1,0,--0,0,--0,1,2,3,4,--

R10) 0,0,1,1,2,-->0,0,1,1,2,2,--0,0,1,1,2,3,--0,0,1,2,3,--0,1,2,3,--

R9) 0,0,1,3,-->0,1,0,--0,1,0,--0,0,1,3,3,--0,1,--
R10) 0,0,1,1,2,-->0,0,1,1,2,2,--0,0,1,1,2,3,--0,0,1,1,2,4,--0,0,1,1,2,5,--
R11) 0,0,1,2,2,-->0,1,0,--0,0,1,1,2,--0,0,1,2,--0,0,1,3,--
R12) 0,0,1,3,3,-->0,1,0,--0,1,0,--0,0,1,--0,1,--
R13) 0,0,1,1,2,2,-->0,0,1,1,2,2,3,--0,0,1,1,2,3,--0,0,1,1,2,4,--0,0,1,1,2,5,--
R14)
0,0,1,1,2,3,-->0,1,0,--0,0,1,1,2,3,3,--0,0,1,1,2,3,--0,0,1,1,2,4,--0,0,1,1,2,5,--
R15) 0,0,1,1,2,4,-->0,1,0,--0,1,0,--0,0,1,1,2,4,4,--0,0,1,2,--0,0,1,3,--
R16) 0,0,1,1,2,5,-->0,1,0,--0,1,0,--0,1,0,--0,0,1,1,2,5,5,--0,1,--
R17)
0,0,1,1,2,2,3,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,4,--0,0,1,1,2,2,3,5,--0,0,1,1,2,2,
3,6,--0,0,1,1,2,2,3,7,--
R18)
0,0,1,1,2,3,3,-->0,1,0,--0,0,1,1,2,2,3,--0,0,1,1,2,3,--0,0,1,1,2,4,--0,0,1,1,2,5,--
R19) 0,0,1,1,2,4,4,-->0,1,0,--0,1,0,--0,0,1,1,2,--0,0,1,2,--0,0,1,3,--
R20) 0,0,1,1,2,5,5,-->0,1,0,--0,1,0,--0,1,0,--0,0,1,--0,1,--
R21)
0,0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,4,--0,0,1,1,2,2,3,5,--0,0,1,1,
2,2,3,6,--0,0,1,1,2,2,3,7,--
R22)
0,0,1,1,2,2,3,4,-->0,1,0,--0,0,1,1,2,2,3,4,4,--0,0,1,1,2,2,3,4,--0,0,1,1,2,2,3,5,--
0,0,1,1,2,2,3,6,--0,0,1,1,2,2,3,7,--
R23)
0,0,1,1,2,2,3,5,-->0,1,0,--0,1,0,--0,0,1,1,2,2,3,5,5,--0,0,1,1,2,3,--0,0,1,1,2,4,--
0,0,1,1,2,5,--
R24)
0,0,1,1,2,2,3,6,-->0,1,0,--0,1,0,--0,1,0,--0,0,1,1,2,2,3,6,6,--0,0,1,2,--0,0,1,3,--
R25) 0,0,1,1,2,2,3,7,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,1,1,2,2,3,7,7,--0,1,--
R26)
0,0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,5,--0,0,1,1,2,2,3,3,4,
6,--0,0,1,1,2,2,3,3,4,7,--0,0,1,1,2,2,3,3,4,8,--0,0,1,1,2,2,3,3,4,9,--
R27)
0,0,1,1,2,2,3,4,4,-->0,1,0,--0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,4,--0,0,1,1,2,2,3,5,
--0,0,1,1,2,2,3,6,--0,0,1,1,2,2,3,7,--
R28)
0,0,1,1,2,2,3,5,5,-->0,1,0,--0,1,0,--0,0,1,1,2,2,3,--0,0,1,1,2,3,--0,0,1,1,2,4,--0,
0,1,1,2,5,--
R29) 0,0,1,1,2,2,3,6,6,-->0,1,0,--0,1,0,--0,1,0,--0,0,1,1,2,--0,0,1,2,--0,0,1,3,--
R30) 0,0,1,1,2,2,3,7,7,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,1,--0,1,--
R31)
0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,5,--0,0,1,1,2,2,3,
3,4,6,--0,0,1,1,2,2,3,3,4,7,--0,0,1,1,2,2,3,3,4,8,--0,0,1,1,2,2,3,3,4,9,--
R32)
0,0,1,1,2,2,3,3,4,5,-->0,1,0,--0,0,1,1,2,2,3,3,4,5,5,--0,0,1,1,2,2,3,3,4,5,--0,0,1,
1,2,2,3,3,4,6,--0,0,1,1,2,2,3,3,4,7,--0,0,1,1,2,2,3,3,4,8,--0,0,1,1,2,2,3,3,4,9,--
R33)
0,0,1,1,2,2,3,3,4,6,-->0,1,0,--0,1,0,--0,0,1,1,2,2,3,3,4,6,6,--0,0,1,1,2,2,3,4,--0,
0,1,1,2,2,3,5,--0,0,1,1,2,2,3,6,--0,0,1,1,2,2,3,7,--
R34)
0,0,1,1,2,2,3,3,4,7,-->0,1,0,--0,1,0,--0,1,0,--0,0,1,1,2,2,3,3,4,7,7,--0,0,1,1,2,3,

```

--0,0,1,1,2,4,--0,0,1,1,2,5,--
R35)
0,0,1,1,2,2,3,3,4,8,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,1,1,2,2,3,3,4,8,8,--0,0,
1,2,--0,0,1,3,--
R36)
0,0,1,1,2,2,3,3,4,9,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,1,1,2,2,3,3,4,9,
9,--0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,1,: 0,1,0,: 0,1,1,:
LEN=4) 0,0,1,1,: 0,0,1,2,: 0,0,1,3,:
LEN=5) 0,0,1,1,2,: 0,0,1,2,2,: 0,0,1,3,3,:
LEN=6) 0,0,1,1,2,2,: 0,0,1,1,2,3,: 0,0,1,1,2,4,: 0,0,1,1,2,5,:
LEN=7) 0,0,1,1,2,2,3,: 0,0,1,1,2,3,3,: 0,0,1,1,2,4,4,: 0,0,1,1,2,5,5,:
LEN=8) 0,0,1,1,2,2,3,3,: 0,0,1,1,2,2,3,4,: 0,0,1,1,2,2,3,5,: 0,0,1,1,2,2,3,6,:
0,0,1,1,2,2,3,7,:
LEN=9) 0,0,1,1,2,2,3,3,4,: 0,0,1,1,2,2,3,4,4,: 0,0,1,1,2,2,3,5,5,:
0,0,1,1,2,2,3,6,6,: 0,0,1,1,2,2,3,7,7,:
LEN=10) 0,0,1,1,2,2,3,3,4,4,: 0,0,1,1,2,2,3,3,4,5,: 0,0,1,1,2,2,3,3,4,6,:
0,0,1,1,2,2,3,3,4,7,: 0,0,1,1,2,2,3,3,4,8,: 0,0,1,1,2,2,3,3,4,9,:
LEN=11) 0,0,1,1,2,2,3,3,4,4,5,: 0,0,1,1,2,2,3,3,4,5,5,: 0,0,1,1,2,2,3,3,4,6,6,:
0,0,1,1,2,2,3,3,4,7,7,: 0,0,1,1,2,2,3,3,4,8,8,: 0,0,1,1,2,2,3,3,4,9,9,:
Number new nodes in level n is given by : 1,2,3,3,3,4,4,5,5,6,6,

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-----Class

922-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][100][101][110][120][201][210]]$

Rules of T[L]:

```

R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,1,--
R3) 0,1,-->0,0,--0,0,--0,1,--
R4) 0,0,1,-->0,0,1,1,--0,0,1,2,--0,0,1,3,--
R5) 0,0,1,1,-->0,0,1,1,2,--0,0,1,2,--0,0,1,3,--
R6) 0,0,1,2,-->0,0,1,1,--0,0,1,1,--0,0,1,2,--0,0,1,3,--
R7) 0,0,1,3,-->0,0,--0,0,--0,0,--0,1,--
R8) 0,0,1,1,2,-->0,0,1,1,2,2,--0,0,1,1,2,3,--0,0,1,1,2,4,--0,0,1,1,2,5,--
R9) 0,0,1,1,2,2,-->0,0,1,1,2,2,3,--0,0,1,1,2,3,--0,0,1,1,2,4,--0,0,1,1,2,5,--
R10)
0,0,1,1,2,3,-->0,0,1,1,2,2,--0,0,1,1,2,2,--0,0,1,1,2,3,--0,0,1,1,2,4,--0,0,1,1,2,5,
--
R11) 0,0,1,1,2,4,-->0,0,1,1,--0,0,1,1,--0,0,1,1,--0,0,1,2,--0,0,1,3,--
R12) 0,0,1,1,2,5,-->0,0,--0,0,--0,0,--0,0,--0,1,--
R13)
0,0,1,1,2,2,3,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,4,--0,0,1,1,2,2,3,5,--0,0,1,1,2,2,
3,6,--0,0,1,1,2,2,3,7,--
R14)
0,0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,4,--0,0,1,1,2,2,3,5,--0,0,1,1,

```

2,2,3,6,--0,0,1,1,2,2,3,7,--
R15) 0,0,1,1,2,2,3,4,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,4,--0,0,1,1,2,2,3,5,--0,0,1,1,2,2,3,6,--0,0,1,1,2,2,3,7,--
R16) 0,0,1,1,2,2,3,5,-->0,0,1,1,2,2,--0,0,1,1,2,2,--0,0,1,1,2,2,--0,0,1,1,2,3,--0,0,1,1,2,4,--0,0,1,1,2,5,--
R17) 0,0,1,1,2,2,3,6,-->0,0,1,1,--0,0,1,1,--0,0,1,1,--0,0,1,1,--0,0,1,2,--0,0,1,3,--
R18) 0,0,1,1,2,2,3,7,-->0,0,--0,0,--0,0,--0,0,--0,0,--0,1,--
R19) 0,0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,5,--0,0,1,1,2,2,3,3,4,6,--0,0,1,1,2,2,3,3,4,7,--0,0,1,1,2,2,3,3,4,8,--0,0,1,1,2,2,3,3,4,9,--
R20) 0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,5,--0,0,1,1,2,2,3,3,4,6,--0,0,1,1,2,2,3,3,4,7,--0,0,1,1,2,2,3,3,4,8,--0,0,1,1,2,2,3,3,4,9,--
R21) 0,0,1,1,2,2,3,3,4,5,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,5,--0,0,1,1,2,2,3,3,4,6,--0,0,1,1,2,2,3,3,4,7,--0,0,1,1,2,2,3,3,4,8,--0,0,1,1,2,2,3,3,4,9,--
R22) 0,0,1,1,2,2,3,3,4,6,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,4,--0,0,1,1,2,2,3,5,--0,0,1,1,2,2,3,6,--0,0,1,1,2,2,3,7,--
R23) 0,0,1,1,2,2,3,3,4,7,-->0,0,1,1,2,2,--0,0,1,1,2,2,--0,0,1,1,2,2,--0,0,1,1,2,2,--0,0,1,1,2,3,--0,0,1,1,2,4,--0,0,1,1,2,5,--
R24) 0,0,1,1,2,2,3,3,4,8,-->0,0,1,1,--0,0,1,1,--0,0,1,1,--0,0,1,1,--0,0,1,1,--0,0,1,1,--0,0,1,2,--0,0,1,3,--
R25) 0,0,1,1,2,2,3,3,4,9,-->0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,1, :
LEN=4) 0,0,1,1, : 0,0,1,2, : 0,0,1,3, :
LEN=5) 0,0,1,1,2, :
LEN=6) 0,0,1,1,2,2, : 0,0,1,1,2,3, : 0,0,1,1,2,4, : 0,0,1,1,2,5, :
LEN=7) 0,0,1,1,2,2,3, :
LEN=8) 0,0,1,1,2,2,3,3, : 0,0,1,1,2,2,3,4, : 0,0,1,1,2,2,3,5, : 0,0,1,1,2,2,3,6, :
0,0,1,1,2,2,3,7, :
LEN=9) 0,0,1,1,2,2,3,3,4, :
LEN=10) 0,0,1,1,2,2,3,3,4,4, : 0,0,1,1,2,2,3,3,4,5, : 0,0,1,1,2,2,3,3,4,6, :
0,0,1,1,2,2,3,3,4,7, : 0,0,1,1,2,2,3,3,4,8, : 0,0,1,1,2,2,3,3,4,9, :
LEN=11) 0,0,1,1,2,2,3,3,4,4,5, :
Number new nodes in level n is given by : 1,2,1,3,1,4,1,5,1,6,1,

-----Class

923-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][100][102][110][120][201][210]]$

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Rules of $T[L]$:

R1) $0, -- \rightarrow 0, 0, -- 0, 1, --$

R2) $0, 0, -- \rightarrow 0, 0, 1, -- 0, 1, --$

R3) $0, 1, -- \rightarrow 0, 1, 0, -- 0, 0, -- 0, 1, --$

R4) $0, 0, 1, -- \rightarrow 0, 0, 1, 1, -- 0, 0, 1, 2, -- 0, 0, 1, 3, --$

R5) $0, 1, 0, -- \rightarrow 0, 1, 0, 1, --$

R6) $0, 0, 1, 1, -- \rightarrow 0, 0, 1, 1, 2, -- 0, 0, 1, 2, -- 0, 0, 1, 3, --$

R7) $0, 0, 1, 2, -- \rightarrow 0, 1, 0, -- 0, 0, 1, 1, -- 0, 0, 1, 2, -- 0, 0, 1, 3, --$

R8) $0, 0, 1, 3, -- \rightarrow 0, 1, 0, -- 0, 1, 0, -- 0, 0, -- 0, 1, --$

R9) $0, 1, 0, 1, -- \rightarrow$

R10) $0, 0, 1, 1, 2, -- \rightarrow 0, 0, 1, 1, 2, 2, -- 0, 0, 1, 1, 2, 3, -- 0, 0, 1, 1, 2, 4, -- 0, 0, 1, 1, 2, 5, --$

R11) $0, 0, 1, 1, 2, 2, -- \rightarrow 0, 0, 1, 1, 2, 2, 3, -- 0, 0, 1, 1, 2, 3, -- 0, 0, 1, 1, 2, 4, -- 0, 0, 1, 1, 2, 5, --$

R12)

$0, 0, 1, 1, 2, 3, -- \rightarrow 0, 1, 0, -- 0, 0, 1, 1, 2, 2, -- 0, 0, 1, 1, 2, 3, -- 0, 0, 1, 1, 2, 4, -- 0, 0, 1, 1, 2, 5, --$

R13) $0, 0, 1, 1, 2, 4, -- \rightarrow 0, 1, 0, -- 0, 1, 0, -- 0, 0, 1, 1, -- 0, 0, 1, 2, -- 0, 0, 1, 3, --$

R14) $0, 0, 1, 1, 2, 5, -- \rightarrow 0, 1, 0, -- 0, 1, 0, -- 0, 1, 0, -- 0, 0, -- 0, 1, --$

R15)

$0, 0, 1, 1, 2, 2, 3, -- \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, -- 0, 0, 1, 1, 2, 2, 3, 4, -- 0, 0, 1, 1, 2, 2, 3, 5, -- 0, 0, 1, 1, 2, 2, 3, 6, -- 0, 0, 1, 1, 2, 2, 3, 7, --$

R16)

$0, 0, 1, 1, 2, 2, 3, 3, -- \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, -- 0, 0, 1, 1, 2, 2, 3, 4, -- 0, 0, 1, 1, 2, 2, 3, 5, -- 0, 0, 1, 1, 2, 2, 3, 6, -- 0, 0, 1, 1, 2, 2, 3, 7, --$

R17)

$0, 0, 1, 1, 2, 2, 3, 4, -- \rightarrow 0, 1, 0, -- 0, 0, 1, 1, 2, 2, 3, 3, -- 0, 0, 1, 1, 2, 2, 3, 4, -- 0, 0, 1, 1, 2, 2, 3, 5, -- 0, 0, 1, 1, 2, 2, 3, 6, -- 0, 0, 1, 1, 2, 2, 3, 7, --$

R18)

$0, 0, 1, 1, 2, 2, 3, 5, -- \rightarrow 0, 1, 0, -- 0, 1, 0, -- 0, 0, 1, 1, 2, 2, -- 0, 0, 1, 1, 2, 3, -- 0, 0, 1, 1, 2, 4, -- 0, 0, 1, 1, 2, 5, --$

R19) $0, 0, 1, 1, 2, 2, 3, 6, -- \rightarrow 0, 1, 0, -- 0, 1, 0, -- 0, 1, 0, -- 0, 0, 1, 1, -- 0, 0, 1, 2, -- 0, 0, 1, 3, --$

R20) $0, 0, 1, 1, 2, 2, 3, 7, -- \rightarrow 0, 1, 0, -- 0, 1, 0, -- 0, 1, 0, -- 0, 1, 0, -- 0, 0, -- 0, 1, --$

R21)

$0, 0, 1, 1, 2, 2, 3, 3, 4, -- \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, 4, -- 0, 0, 1, 1, 2, 2, 3, 3, 4, 5, -- 0, 0, 1, 1, 2, 2, 3, 3, 4, 6, -- 0, 0, 1, 1, 2, 2, 3, 3, 4, 7, -- 0, 0, 1, 1, 2, 2, 3, 3, 4, 8, -- 0, 0, 1, 1, 2, 2, 3, 3, 4, 9, --$

R22)

$0, 0, 1, 1, 2, 2, 3, 3, 4, 4, -- \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, 4, 5, -- 0, 0, 1, 1, 2, 2, 3, 3, 4, 5, -- 0, 0, 1, 1, 2, 2, 3, 3, 4, 6, -- 0, 0, 1, 1, 2, 2, 3, 3, 4, 7, -- 0, 0, 1, 1, 2, 2, 3, 3, 4, 8, -- 0, 0, 1, 1, 2, 2, 3, 3, 4, 9, --$

R23)

$0, 0, 1, 1, 2, 2, 3, 3, 4, 5, -- \rightarrow 0, 1, 0, -- 0, 0, 1, 1, 2, 2, 3, 3, 4, 4, -- 0, 0, 1, 1, 2, 2, 3, 3, 4, 5, -- 0, 0, 1, 1, 2, 2, 3, 3, 4, 6, -- 0, 0, 1, 1, 2, 2, 3, 3, 4, 7, -- 0, 0, 1, 1, 2, 2, 3, 3, 4, 8, -- 0, 0, 1, 1, 2, 2, 3, 3, 4, 9, --$

R24)

$0, 0, 1, 1, 2, 2, 3, 3, 4, 6, -- \rightarrow 0, 1, 0, -- 0, 1, 0, -- 0, 0, 1, 1, 2, 2, 3, 3, -- 0, 0, 1, 1, 2, 2, 3, 4, -- 0, 0, 1, 1, 2, 2, 3, 5, -- 0, 0, 1, 1, 2, 2, 3, 6, -- 0, 0, 1, 1, 2, 2, 3, 7, --$

R25)

$0, 0, 1, 1, 2, 2, 3, 3, 4, 7, -- \rightarrow 0, 1, 0, -- 0, 1, 0, -- 0, 1, 0, -- 0, 0, 1, 1, 2, 2, -- 0, 0, 1, 1, 2, 3, -- 0, 0, 1, 1, 2, 4, -- 0, 0, 1, 1, 2, 5, --$

R26)

$0, 0, 1, 1, 2, 2, 3, 3, 4, 8, -- \rightarrow 0, 1, 0, -- 0, 1, 0, -- 0, 1, 0, -- 0, 1, 0, -- 0, 0, 1, 1, -- 0, 0, 1, 2, -- 0, 0, 1, 3, --$

--

R27) $0, 0, 1, 1, 2, 2, 3, 3, 4, 9, -- \rightarrow 0, 1, 0, -- 0, 1, 0, -- 0, 1, 0, -- 0, 1, 0, -- 0, 1, 0, -- 0, 0, -- 0, 1, --$

List of different nodes in T[L]

- LEN=1) 0,:
 - LEN=2) 0,0,: 0,1,:
 - LEN=3) 0,0,1,: 0,1,0,:
 - LEN=4) 0,0,1,1,: 0,0,1,2,: 0,0,1,3,: 0,1,0,1,:
 - LEN=5) 0,0,1,1,2,:
 - LEN=6) 0,0,1,1,2,2,: 0,0,1,1,2,3,: 0,0,1,1,2,4,: 0,0,1,1,2,5,:
 - LEN=7) 0,0,1,1,2,2,3,:
 - LEN=8) 0,0,1,1,2,2,3,3,: 0,0,1,1,2,2,3,4,: 0,0,1,1,2,2,3,5,: 0,0,1,1,2,2,3,6,:
 - 0,0,1,1,2,2,3,7,:
 - LEN=9) 0,0,1,1,2,2,3,3,4,:
 - LEN=10) 0,0,1,1,2,2,3,3,4,4,: 0,0,1,1,2,2,3,3,4,5,: 0,0,1,1,2,2,3,3,4,6,:
 - 0,0,1,1,2,2,3,3,4,7,: 0,0,1,1,2,2,3,3,4,8,: 0,0,1,1,2,2,3,3,4,9,:
 - LEN=11) 0,0,1,1,2,2,3,3,4,4,5,:
- Number new nodes in level n is given by : 1,2,2,4,1,4,1,5,1,6,1,

-----Class

924-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[000][101][102][110][120][201][210]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,1,--0,0,2,--
- R3) 0,1,-->0,1,0,--0,0,--0,1,--
- R4) 0,0,1,-->0,0,1,1,--0,0,1,2,--0,0,1,3,--
- R5) 0,0,2,-->0,0,2,1,--0,0,--0,1,--
- R6) 0,1,0,-->
- R7) 0,0,1,1,-->0,0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--
- R8) 0,0,1,2,-->0,1,0,--0,0,1,1,--0,0,1,2,--0,0,1,3,--
- R9) 0,0,1,3,-->0,1,0,--0,0,2,1,--0,0,--0,1,--
- R10) 0,0,2,1,-->0,1,0,--
- R11) 0,0,1,1,2,-->0,0,1,1,2,2,--0,0,1,1,2,3,--0,0,1,1,2,4,--0,0,1,1,2,5,--
- R12) 0,0,1,1,3,-->0,0,2,1,--0,0,1,1,--0,0,1,2,--0,0,1,3,--
- R13) 0,0,1,1,4,-->0,0,2,1,--0,0,2,1,--0,0,--0,1,--
- R14)
- 0,0,1,1,2,2,-->0,0,1,1,2,2,3,--0,0,1,1,2,2,4,--0,0,1,1,2,2,5,--0,0,1,1,2,2,6,--
- R15)
- 0,0,1,1,2,3,-->0,1,0,--0,0,1,1,2,2,--0,0,1,1,2,3,--0,0,1,1,2,4,--0,0,1,1,2,5,--
- R16) 0,0,1,1,2,4,-->0,1,0,--0,0,2,1,--0,0,1,1,--0,0,1,2,--0,0,1,3,--
- R17) 0,0,1,1,2,5,-->0,1,0,--0,0,2,1,--0,0,2,1,--0,0,--0,1,--
- R18)
- 0,0,1,1,2,2,3,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,4,--0,0,1,1,2,2,3,5,--0,0,1,1,2,2,3,6,--0,0,1,1,2,2,3,7,--
- R19)
- 0,0,1,1,2,2,4,-->0,0,2,1,--0,0,1,1,2,2,--0,0,1,1,2,3,--0,0,1,1,2,4,--0,0,1,1,2,5,--
- R20) 0,0,1,1,2,2,5,-->0,0,2,1,--0,0,2,1,--0,0,1,1,--0,0,1,2,--0,0,1,3,--
- R21) 0,0,1,1,2,2,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,--0,1,--
- R22)
- 0,0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,4,--0,0,1,1,2,2,3,3,5,--0,0,1,1,2,2,3,3,6,--0,0,

1,1,2,2,3,3,7,--0,0,1,1,2,2,3,3,8,--
 R23) 0,0,1,1,2,2,3,4,-->0,1,0,--0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,4,--0,0,1,1,2,2,3,5,--0,
 0,1,1,2,2,3,6,--0,0,1,1,2,2,3,7,--
 R24) 0,0,1,1,2,2,3,5,-->0,1,0,--0,0,2,1,--0,0,1,1,2,2,--0,0,1,1,2,3,--0,0,1,1,2,4,--0,0,
 1,1,2,5,--
 R25) 0,0,1,1,2,2,3,6,-->0,1,0,--0,0,2,1,--0,0,2,1,--0,0,1,1,--0,0,1,2,--0,0,1,3,--
 R26) 0,0,1,1,2,2,3,7,-->0,1,0,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,--0,1,--
 R27) 0,0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,5,--0,0,1,1,2,2,3,3,4,
 6,--0,0,1,1,2,2,3,3,4,7,--0,0,1,1,2,2,3,3,4,8,--0,0,1,1,2,2,3,3,4,9,--
 R28) 0,0,1,1,2,2,3,3,5,-->0,0,2,1,--0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,4,--0,0,1,1,2,2,3,5,
 --0,0,1,1,2,2,3,6,--0,0,1,1,2,2,3,7,--
 R29) 0,0,1,1,2,2,3,3,6,-->0,0,2,1,--0,0,2,1,--0,0,1,1,2,2,--0,0,1,1,2,3,--0,0,1,1,2,4,--
 0,0,1,1,2,5,--
 R30) 0,0,1,1,2,2,3,3,7,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,1,1,--0,0,1,2,--0,0,1,3,--
 R31) 0,0,1,1,2,2,3,3,8,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,--0,1,--
 R32) 0,0,1,1,2,2,3,3,4,4,-->0,0,1,1,2,2,3,3,4,4,5,--0,0,1,1,2,2,3,3,4,4,6,--0,0,1,1,2,2,
 3,3,4,4,7,--0,0,1,1,2,2,3,3,4,4,8,--0,0,1,1,2,2,3,3,4,4,9,--0,0,1,1,2,2,3,3,4,4,10,
 --
 R33) 0,0,1,1,2,2,3,3,4,5,-->0,1,0,--0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,5,--0,0,1,1,
 2,2,3,3,4,6,--0,0,1,1,2,2,3,3,4,7,--0,0,1,1,2,2,3,3,4,8,--0,0,1,1,2,2,3,3,4,9,--
 R34) 0,0,1,1,2,2,3,3,4,6,-->0,1,0,--0,0,2,1,--0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,4,--0,0,1,
 1,2,2,3,5,--0,0,1,1,2,2,3,6,--0,0,1,1,2,2,3,7,--
 R35) 0,0,1,1,2,2,3,3,4,7,-->0,1,0,--0,0,2,1,--0,0,2,1,--0,0,1,1,2,2,--0,0,1,1,2,3,--0,0,
 1,1,2,4,--0,0,1,1,2,5,--
 R36) 0,0,1,1,2,2,3,3,4,8,-->0,1,0,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,1,1,--0,0,1,2,--0,
 0,1,3,--
 R37) 0,0,1,1,2,2,3,3,4,9,-->0,1,0,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,--0,1,--
 List of different nodes in T[L]
 LEN=1) 0, :
 LEN=2) 0,0, : 0,1, :
 LEN=3) 0,0,1, : 0,0,2, : 0,1,0, :
 LEN=4) 0,0,1,1, : 0,0,1,2, : 0,0,1,3, : 0,0,2,1, :
 LEN=5) 0,0,1,1,2, : 0,0,1,1,3, : 0,0,1,1,4, :
 LEN=6) 0,0,1,1,2,2, : 0,0,1,1,2,3, : 0,0,1,1,2,4, : 0,0,1,1,2,5, :
 LEN=7) 0,0,1,1,2,2,3, : 0,0,1,1,2,2,4, : 0,0,1,1,2,2,5, : 0,0,1,1,2,2,6, :
 LEN=8) 0,0,1,1,2,2,3,3, : 0,0,1,1,2,2,3,4, : 0,0,1,1,2,2,3,5, : 0,0,1,1,2,2,3,6, :
 0,0,1,1,2,2,3,7, :
 LEN=9) 0,0,1,1,2,2,3,3,4, : 0,0,1,1,2,2,3,3,5, : 0,0,1,1,2,2,3,3,6, :

0,0,1,1,2,2,3,3,7,: 0,0,1,1,2,2,3,3,8,:
LEN=10) 0,0,1,1,2,2,3,3,4,4,: 0,0,1,1,2,2,3,3,4,5,: 0,0,1,1,2,2,3,3,4,6,:
0,0,1,1,2,2,3,3,4,7,: 0,0,1,1,2,2,3,3,4,8,: 0,0,1,1,2,2,3,3,4,9,:
LEN=11) 0,0,1,1,2,2,3,3,4,4,5,: 0,0,1,1,2,2,3,3,4,4,6,: 0,0,1,1,2,2,3,3,4,4,7,:
0,0,1,1,2,2,3,3,4,4,8,: 0,0,1,1,2,2,3,3,4,4,9,: 0,0,1,1,2,2,3,3,4,4,10,:
Number new nodes in level n is given by : 1,2,3,4,3,4,4,5,5,6,6,

-----Class

925-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][012][021][100][101]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,--

R3) 0,1,-->

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

Number new nodes in level n is given by : 1,2, DONE

-----Class

926-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][012][021][100][102]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,--

R3) 0,1,-->

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

Number new nodes in level n is given by : 1,2, DONE

-----Class

927-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][012][021][100][110]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,--

R3) 0,1,-->

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

Number new nodes in level n is given by : 1,2, DONE

-----Class

928-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][012][021][100][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class
929-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][012][021][100][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class
930-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][012][021][100][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class
931-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][012][021][101][102]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->

List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

932-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][012][021][101][110]]$

--
Rules of T[L]:
R1) 0, -->0,0, --0,1, --
R2) 0,0, -->0,0, --
R3) 0,1, -->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

933-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][012][021][101][120]]$

--
Rules of T[L]:
R1) 0, -->0,0, --0,1, --
R2) 0,0, -->0,0, --
R3) 0,1, -->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

934-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][012][021][101][201]]$

--
Rules of T[L]:
R1) 0, -->0,0, --0,1, --
R2) 0,0, -->0,0, --
R3) 0,1, -->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

935-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][012][021][101][210]]$

--
Rules of T[L]:
R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$
R2) $0, 0, \rightarrow 0, 0, \rightarrow$
R3) $0, 1, \rightarrow$
List of different nodes in T[L]
LEN=1) $0, :$
LEN=2) $0, 0, : 0, 1, :$
Number new nodes in level n is given by : 1,2, DONE

-----Class
936-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][012][021][102][110]]$

--
Rules of T[L]:
R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$
R2) $0, 0, \rightarrow 0, 0, \rightarrow$
R3) $0, 1, \rightarrow$
List of different nodes in T[L]
LEN=1) $0, :$
LEN=2) $0, 0, : 0, 1, :$
Number new nodes in level n is given by : 1,2, DONE

-----Class
937-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][012][021][102][120]]$

--
Rules of T[L]:
R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$
R2) $0, 0, \rightarrow 0, 0, \rightarrow$
R3) $0, 1, \rightarrow$
List of different nodes in T[L]
LEN=1) $0, :$
LEN=2) $0, 0, : 0, 1, :$
Number new nodes in level n is given by : 1,2, DONE

-----Class
938-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][012][021][102][201]]$

--
Rules of T[L]:
R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$
R2) $0, 0, \rightarrow 0, 0, \rightarrow$
R3) $0, 1, \rightarrow$
List of different nodes in T[L]
LEN=1) $0, :$

LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

939-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][011][012][021][102][210]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,--

R3) 0,1,-->

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

Number new nodes in level n is given by : 1,2, DONE

-----Class

940-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][011][012][021][110][120]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,--

R3) 0,1,-->

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

Number new nodes in level n is given by : 1,2, DONE

-----Class

941-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][011][012][021][110][201]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,--

R3) 0,1,-->

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

Number new nodes in level n is given by : 1,2, DONE

-----Class

942-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][011][012][021][110][210]]

Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

943-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][012][021][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

944-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][012][021][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

945-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][012][021][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

```

-----Class
946-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][011][012][100][101][102]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

```

-----Class
947-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][011][012][100][101][110]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

```

-----Class
948-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][011][012][100][101][120]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

```

-----Class
949-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][011][012][100][101][201]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--

```


R2) 0,0,-->0,0,--
R3) 0,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

950-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][012][100][101][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

951-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][012][100][102][110]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

952-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][012][100][102][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

953-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][012][100][102][201]]$

--
Rules of $T[L]$:

R1) $0,-->0,0,--0,1,--$

R2) $0,0,-->0,0,--$

R3) $0,1,-->$

List of different nodes in $T[L]$

LEN=1) $0,:$

LEN=2) $0,0,: 0,1,:$

Number new nodes in level n is given by : 1,2, DONE

-----Class

954-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][012][100][102][210]]$

--
Rules of $T[L]$:

R1) $0,-->0,0,--0,1,--$

R2) $0,0,-->0,0,--$

R3) $0,1,-->$

List of different nodes in $T[L]$

LEN=1) $0,:$

LEN=2) $0,0,: 0,1,:$

Number new nodes in level n is given by : 1,2, DONE

-----Class

955-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][012][100][110][120]]$

--
Rules of $T[L]$:

R1) $0,-->0,0,--0,1,--$

R2) $0,0,-->0,0,--$

R3) $0,1,-->$

List of different nodes in $T[L]$

LEN=1) $0,:$

LEN=2) $0,0,: 0,1,:$

Number new nodes in level n is given by : 1,2, DONE

-----Class

956-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][012][100][110][201]]$

--
Rules of $T[L]$:

R1) $0,-->0,0,--0,1,--$

R2) $0,0,-->0,0,--$

R3) $0,1,-->$

List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

957-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][012][100][110][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

958-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][012][100][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

959-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][012][100][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

960-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][012][100][201][210]]$

--
Rules of T[L]:
R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$
R2) $0, 0, \rightarrow 0, 0, \rightarrow$
R3) $0, 1, \rightarrow$
List of different nodes in T[L]
LEN=1) $0, :$
LEN=2) $0, 0, : 0, 1, :$
Number new nodes in level n is given by : 1,2, DONE

-----Class
961-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][012][101][102][110]]$

--
Rules of T[L]:
R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$
R2) $0, 0, \rightarrow 0, 0, \rightarrow$
R3) $0, 1, \rightarrow$
List of different nodes in T[L]
LEN=1) $0, :$
LEN=2) $0, 0, : 0, 1, :$
Number new nodes in level n is given by : 1,2, DONE

-----Class
962-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][012][101][102][120]]$

--
Rules of T[L]:
R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$
R2) $0, 0, \rightarrow 0, 0, \rightarrow$
R3) $0, 1, \rightarrow$
List of different nodes in T[L]
LEN=1) $0, :$
LEN=2) $0, 0, : 0, 1, :$
Number new nodes in level n is given by : 1,2, DONE

-----Class
963-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][012][101][102][201]]$

--
Rules of T[L]:
R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$
R2) $0, 0, \rightarrow 0, 0, \rightarrow$
R3) $0, 1, \rightarrow$
List of different nodes in T[L]
LEN=1) $0, :$

LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

964-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][011][012][101][102][210]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,--

R3) 0,1,-->

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

Number new nodes in level n is given by : 1,2, DONE

-----Class

965-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][011][012][101][110][120]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,--

R3) 0,1,-->

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

Number new nodes in level n is given by : 1,2, DONE

-----Class

966-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][011][012][101][110][201]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,--

R3) 0,1,-->

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

Number new nodes in level n is given by : 1,2, DONE

-----Class

967-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][011][012][101][110][210]]

Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class
968-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][012][101][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class
969-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][012][101][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class
970-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][012][101][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

```

-----Class
971-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][011][012][102][110][120]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

```

-----Class
972-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][011][012][102][110][201]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

```

-----Class
973-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][011][012][102][110][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

```

-----Class
974-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][011][012][102][120][201]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--

```

R2) 0,0,-->0,0,--
R3) 0,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

975-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][012][102][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

976-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][012][102][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

977-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][012][110][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

978-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][012][110][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class
979-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][012][110][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class
980-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][012][120][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class
981-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][021][100][101][102]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

982-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][011][021][100][101][110]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,0,--

R2) 0,0,-->0,0,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, :

Number new nodes in level n is given by : 1,1, DONE

-----Class

983-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][011][021][100][101][120]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,0,--

R2) 0,0,-->0,0,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, :

Number new nodes in level n is given by : 1,1, DONE

-----Class

984-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][011][021][100][101][201]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,0,--

R2) 0,0,-->0,0,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, :

Number new nodes in level n is given by : 1,1, DONE

-----Class

985-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][011][021][100][101][210]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,0,--

R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

986-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][021][100][102][110]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

987-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][021][100][102][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

988-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][021][100][102][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

989-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][021][100][102][210]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 0, \rightarrow$

R2) $0, 0, \rightarrow 0, 0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, :$

Number new nodes in level n is given by : 1,1, DONE

-----Class

990-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][021][100][110][120]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 0, \rightarrow$

R2) $0, 0, \rightarrow 0, 0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, :$

Number new nodes in level n is given by : 1,1, DONE

-----Class

991-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][021][100][110][201]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 0, \rightarrow$

R2) $0, 0, \rightarrow 0, 0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, :$

Number new nodes in level n is given by : 1,1, DONE

-----Class

992-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][021][100][110][210]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 0, \rightarrow$

R2) $0, 0, \rightarrow 0, 0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, :$

Number new nodes in level n is given by : 1,1, DONE

-----Class

993-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][021][100][120][201]]$

```

-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
    Number new nodes in level n is given by : 1,1,    DONE

-----Class
994-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][011][021][100][120][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
    Number new nodes in level n is given by : 1,1,    DONE

-----Class
995-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][011][021][100][201][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
    Number new nodes in level n is given by : 1,1,    DONE

-----Class
996-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][011][021][101][102][110]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
    Number new nodes in level n is given by : 1,1,    DONE

-----Class

```

997-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][021][101][102][120]]$

--
Rules of T[L]:
R1) $0,-->0,0,--0,0,--$
R2) $0,0,-->0,0,--$
List of different nodes in T[L]
LEN=1) $0,:$
LEN=2) $0,0,:$
Number new nodes in level n is given by : 1,1, DONE

-----Class
998-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][021][101][102][201]]$

--
Rules of T[L]:
R1) $0,-->0,0,--0,0,--$
R2) $0,0,-->0,0,--$
List of different nodes in T[L]
LEN=1) $0,:$
LEN=2) $0,0,:$
Number new nodes in level n is given by : 1,1, DONE

-----Class
999-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][021][101][102][210]]$

--
Rules of T[L]:
R1) $0,-->0,0,--0,0,--$
R2) $0,0,-->0,0,--$
List of different nodes in T[L]
LEN=1) $0,:$
LEN=2) $0,0,:$
Number new nodes in level n is given by : 1,1, DONE

-----Class
1000-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][021][101][110][120]]$

--
Rules of T[L]:
R1) $0,-->0,0,--0,0,--$
R2) $0,0,-->0,0,--$
List of different nodes in T[L]
LEN=1) $0,:$
LEN=2) $0,0,:$
Number new nodes in level n is given by : 1,1, DONE

```

-----Class
1001-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][011][021][101][110][201]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1,  DONE

```

```

-----Class
1002-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][011][021][101][110][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1,  DONE

```

```

-----Class
1003-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][011][021][101][120][201]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1,  DONE

```

```

-----Class
1004-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][011][021][101][120][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:

```

LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1, DONE

-----Class

1005-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][011][021][101][201][210]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,0,--

R2) 0,0,-->0,0,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,:

Number new nodes in level n is given by : 1,1, DONE

-----Class

1006-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][011][021][102][110][120]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,0,--

R2) 0,0,-->0,0,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,:

Number new nodes in level n is given by : 1,1, DONE

-----Class

1007-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][011][021][102][110][201]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,0,--

R2) 0,0,-->0,0,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,:

Number new nodes in level n is given by : 1,1, DONE

-----Class

1008-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][011][021][102][110][210]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,0,--

R2) 0,0,-->0,0,--

List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

1009-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][011][021][102][120][201]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

1010-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][011][021][102][120][210]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

1011-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][011][021][102][201][210]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

1012-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][011][021][110][120][201]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

1013-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][021][110][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

1014-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][021][110][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

1015-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][021][120][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

1016-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][100][101][102][110]]$

```
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
  Number new nodes in level n is given by : 1,1,  DONE
```

```
-----Class
1017-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][011][100][101][102][120]]
-----
```

```
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
  Number new nodes in level n is given by : 1,1,  DONE
```

```
-----Class
1018-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][011][100][101][102][201]]
-----
```

```
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
  Number new nodes in level n is given by : 1,1,  DONE
```

```
-----Class
1019-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][011][100][101][102][210]]
-----
```

```
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
  Number new nodes in level n is given by : 1,1,  DONE
```

```
-----Class
1020-----
```

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][100][101][110][120]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 0, \rightarrow$

R2) $0, 0, \rightarrow 0, 0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, :$

Number new nodes in level n is given by : 1,1, DONE

-----Class

1021-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][100][101][110][201]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 0, \rightarrow$

R2) $0, 0, \rightarrow 0, 0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, :$

Number new nodes in level n is given by : 1,1, DONE

-----Class

1022-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][100][101][110][210]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 0, \rightarrow$

R2) $0, 0, \rightarrow 0, 0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, :$

Number new nodes in level n is given by : 1,1, DONE

-----Class

1023-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][100][101][120][201]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 0, \rightarrow$

R2) $0, 0, \rightarrow 0, 0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, :$

Number new nodes in level n is given by : 1,1, DONE

```

-----Class
1024-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][011][100][101][120][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1,  DONE

```

```

-----Class
1025-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][011][100][101][201][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1,  DONE

```

```

-----Class
1026-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][011][100][102][110][120]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1,  DONE

```

```

-----Class
1027-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][011][100][102][110][201]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:

```

Number new nodes in level n is given by : 1,1, DONE

-----Class

1028-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][100][102][110][210]]$

--

Rules of T[L]:

R1) $0,-->0,0,--0,0,--$

R2) $0,0,-->0,0,--$

List of different nodes in T[L]

LEN=1) $0,:$

LEN=2) $0,0,:$

Number new nodes in level n is given by : 1,1, DONE

-----Class

1029-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][100][102][120][201]]$

--

Rules of T[L]:

R1) $0,-->0,0,--0,0,--$

R2) $0,0,-->0,0,--$

List of different nodes in T[L]

LEN=1) $0,:$

LEN=2) $0,0,:$

Number new nodes in level n is given by : 1,1, DONE

-----Class

1030-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][100][102][120][210]]$

--

Rules of T[L]:

R1) $0,-->0,0,--0,0,--$

R2) $0,0,-->0,0,--$

List of different nodes in T[L]

LEN=1) $0,:$

LEN=2) $0,0,:$

Number new nodes in level n is given by : 1,1, DONE

-----Class

1031-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][100][102][201][210]]$

--

Rules of T[L]:

R1) $0,-->0,0,--0,0,--$

R2) $0,0,-->0,0,--$

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

1032-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][100][110][120][201]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,0,--

R2) 0,0,-->0,0,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, :

Number new nodes in level n is given by : 1,1, DONE

-----Class

1033-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][100][110][120][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,0,--

R2) 0,0,-->0,0,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, :

Number new nodes in level n is given by : 1,1, DONE

-----Class

1034-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][100][110][201][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,0,--

R2) 0,0,-->0,0,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, :

Number new nodes in level n is given by : 1,1, DONE

-----Class

1035-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][100][120][201][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,0,--

R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1, DONE

-----Class

1036-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][101][102][110][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1, DONE

-----Class

1037-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][101][102][110][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1, DONE

-----Class

1038-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][101][102][110][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1, DONE

-----Class

1039-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][101][102][120][201]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 0, \rightarrow$

R2) $0, 0, \rightarrow 0, 0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, :$

Number new nodes in level n is given by : 1,1, DONE

-----Class

1040-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][101][102][120][210]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 0, \rightarrow$

R2) $0, 0, \rightarrow 0, 0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, :$

Number new nodes in level n is given by : 1,1, DONE

-----Class

1041-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][101][102][201][210]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 0, \rightarrow$

R2) $0, 0, \rightarrow 0, 0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, :$

Number new nodes in level n is given by : 1,1, DONE

-----Class

1042-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][101][110][120][201]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 0, \rightarrow$

R2) $0, 0, \rightarrow 0, 0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, :$

Number new nodes in level n is given by : 1,1, DONE

-----Class

1043-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][101][110][120][210]]$

```

-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
    Number new nodes in level n is given by : 1,1,    DONE

-----Class
1044-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][011][101][110][201][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
    Number new nodes in level n is given by : 1,1,    DONE

-----Class
1045-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][011][101][120][201][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
    Number new nodes in level n is given by : 1,1,    DONE

-----Class
1046-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][011][102][110][120][201]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
    Number new nodes in level n is given by : 1,1,    DONE

-----Class

```

1047-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][102][110][120][210]]$

--
Rules of T[L]:
R1) $0,-->0,0,--0,0,--$
R2) $0,0,-->0,0,--$
List of different nodes in T[L]
LEN=1) $0,:$
LEN=2) $0,0,:$
Number new nodes in level n is given by : 1,1, DONE

-----Class
1048-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][102][110][201][210]]$

--
Rules of T[L]:
R1) $0,-->0,0,--0,0,--$
R2) $0,0,-->0,0,--$
List of different nodes in T[L]
LEN=1) $0,:$
LEN=2) $0,0,:$
Number new nodes in level n is given by : 1,1, DONE

-----Class
1049-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][102][120][201][210]]$

--
Rules of T[L]:
R1) $0,-->0,0,--0,0,--$
R2) $0,0,-->0,0,--$
List of different nodes in T[L]
LEN=1) $0,:$
LEN=2) $0,0,:$
Number new nodes in level n is given by : 1,1, DONE

-----Class
1050-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][011][110][120][201][210]]$

--
Rules of T[L]:
R1) $0,-->0,0,--0,0,--$
R2) $0,0,-->0,0,--$
List of different nodes in T[L]
LEN=1) $0,:$
LEN=2) $0,0,:$
Number new nodes in level n is given by : 1,1, DONE

-----Class
1051-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][012][021][100][101][102]]$

--
Rules of $T[L]$:
R1) $0,-->0,0,--0,0,--$
R2) $0,0,-->0,0,--$
List of different nodes in $T[L]$
LEN=1) $0,:$
LEN=2) $0,0,:$
Number new nodes in level n is given by : 1,1, DONE

-----Class
1052-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][012][021][100][101][110]]$

--
Rules of $T[L]$:
R1) $0,-->0,0,--0,0,--$
R2) $0,0,-->0,0,--$
List of different nodes in $T[L]$
LEN=1) $0,:$
LEN=2) $0,0,:$
Number new nodes in level n is given by : 1,1, DONE

-----Class
1053-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][012][021][100][101][120]]$

--
Rules of $T[L]$:
R1) $0,-->0,0,--0,0,--$
R2) $0,0,-->0,0,--$
List of different nodes in $T[L]$
LEN=1) $0,:$
LEN=2) $0,0,:$
Number new nodes in level n is given by : 1,1, DONE

-----Class
1054-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][012][021][100][101][201]]$

--
Rules of $T[L]$:
R1) $0,-->0,0,--0,0,--$
R2) $0,0,-->0,0,--$
List of different nodes in $T[L]$
LEN=1) $0,:$

LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1, DONE

-----Class

1055-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][012][021][100][101][210]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,0,--

R2) 0,0,-->0,0,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,:

Number new nodes in level n is given by : 1,1, DONE

-----Class

1056-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][012][021][100][102][110]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,0,--

R2) 0,0,-->0,0,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,:

Number new nodes in level n is given by : 1,1, DONE

-----Class

1057-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][012][021][100][102][120]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,0,--

R2) 0,0,-->0,0,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,:

Number new nodes in level n is given by : 1,1, DONE

-----Class

1058-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][012][021][100][102][201]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,0,--

R2) 0,0,-->0,0,--

List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

1059-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][012][021][100][102][210]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

1060-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][012][021][100][110][120]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

1061-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][012][021][100][110][201]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

1062-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][012][021][100][110][210]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1, DONE

-----Class

1063-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][012][021][100][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1, DONE

-----Class

1064-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][012][021][100][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1, DONE

-----Class

1065-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][012][021][100][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1, DONE

-----Class

1066-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][012][021][101][102][110]]$

```
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1,  DONE
```

```
-----Class
1067-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][012][021][101][102][120]]
-----
```

```
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1,  DONE
```

```
-----Class
1068-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][012][021][101][102][201]]
-----
```

```
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1,  DONE
```

```
-----Class
1069-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][012][021][101][102][210]]
-----
```

```
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1,  DONE
```

```
-----Class
1070-----
```


Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][012][021][101][110][120]]$

--

Rules of $T[L]$:

R1) $0, -- \rightarrow 0, 0, -- 0, 0, --$

R2) $0, 0, -- \rightarrow 0, 0, --$

List of different nodes in $T[L]$

LEN=1) $0, :$

LEN=2) $0, 0, :$

Number new nodes in level n is given by : 1,1, DONE

-----Class

1071-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][012][021][101][110][201]]$

--

Rules of $T[L]$:

R1) $0, -- \rightarrow 0, 0, -- 0, 0, --$

R2) $0, 0, -- \rightarrow 0, 0, --$

List of different nodes in $T[L]$

LEN=1) $0, :$

LEN=2) $0, 0, :$

Number new nodes in level n is given by : 1,1, DONE

-----Class

1072-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][012][021][101][110][210]]$

--

Rules of $T[L]$:

R1) $0, -- \rightarrow 0, 0, -- 0, 0, --$

R2) $0, 0, -- \rightarrow 0, 0, --$

List of different nodes in $T[L]$

LEN=1) $0, :$

LEN=2) $0, 0, :$

Number new nodes in level n is given by : 1,1, DONE

-----Class

1073-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][012][021][101][120][201]]$

--

Rules of $T[L]$:

R1) $0, -- \rightarrow 0, 0, -- 0, 0, --$

R2) $0, 0, -- \rightarrow 0, 0, --$

List of different nodes in $T[L]$

LEN=1) $0, :$

LEN=2) $0, 0, :$

Number new nodes in level n is given by : 1,1, DONE

```

-----Class
1074-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][012][021][101][120][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1,  DONE

```

```

-----Class
1075-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][012][021][101][201][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1,  DONE

```

```

-----Class
1076-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][012][021][102][110][120]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1,  DONE

```

```

-----Class
1077-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][012][021][102][110][201]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:

```

Number new nodes in level n is given by : 1,1, DONE

-----Class

1078-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][012][021][102][110][210]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,0,--

R2) 0,0,-->0,0,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,:

Number new nodes in level n is given by : 1,1, DONE

-----Class

1079-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][012][021][102][120][201]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,0,--

R2) 0,0,-->0,0,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,:

Number new nodes in level n is given by : 1,1, DONE

-----Class

1080-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][012][021][102][120][210]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,0,--

R2) 0,0,-->0,0,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,:

Number new nodes in level n is given by : 1,1, DONE

-----Class

1081-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][012][021][102][201][210]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,0,--

R2) 0,0,-->0,0,--

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

1082-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][012][021][110][120][201]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,0,--

R2) 0,0,-->0,0,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, :

Number new nodes in level n is given by : 1,1, DONE

-----Class

1083-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][012][021][110][120][210]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,0,--

R2) 0,0,-->0,0,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, :

Number new nodes in level n is given by : 1,1, DONE

-----Class

1084-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][012][021][110][201][210]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,0,--

R2) 0,0,-->0,0,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, :

Number new nodes in level n is given by : 1,1, DONE

-----Class

1085-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][012][021][120][201][210]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,0,--

R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

1086-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][012][100][101][102][110]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

1087-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][012][100][101][102][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

1088-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][012][100][101][102][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

1089-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][012][100][101][102][210]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 0, \rightarrow$

R2) $0, 0, \rightarrow 0, 0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, :$

Number new nodes in level n is given by : 1,1, DONE

-----Class

1090-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][012][100][101][110][120]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 0, \rightarrow$

R2) $0, 0, \rightarrow 0, 0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, :$

Number new nodes in level n is given by : 1,1, DONE

-----Class

1091-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][012][100][101][110][201]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 0, \rightarrow$

R2) $0, 0, \rightarrow 0, 0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, :$

Number new nodes in level n is given by : 1,1, DONE

-----Class

1092-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][012][100][101][110][210]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 0, \rightarrow$

R2) $0, 0, \rightarrow 0, 0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, :$

Number new nodes in level n is given by : 1,1, DONE

-----Class

1093-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][012][100][101][120][201]]$

```

-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
  Number new nodes in level n is given by : 1,1,  DONE

-----Class
1094-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][012][100][101][120][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
  Number new nodes in level n is given by : 1,1,  DONE

-----Class
1095-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][012][100][101][201][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
  Number new nodes in level n is given by : 1,1,  DONE

-----Class
1096-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][012][100][102][110][120]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
  Number new nodes in level n is given by : 1,1,  DONE

-----Class

```

1097-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][012][100][102][110][201]]$

--
Rules of T[L]:
R1) $0,-->0,0,--0,0,--$
R2) $0,0,-->0,0,--$
List of different nodes in T[L]
LEN=1) $0,:$
LEN=2) $0,0,:$
Number new nodes in level n is given by : 1,1, DONE

-----Class
1098-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][012][100][102][110][210]]$

--
Rules of T[L]:
R1) $0,-->0,0,--0,0,--$
R2) $0,0,-->0,0,--$
List of different nodes in T[L]
LEN=1) $0,:$
LEN=2) $0,0,:$
Number new nodes in level n is given by : 1,1, DONE

-----Class
1099-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][012][100][102][120][201]]$

--
Rules of T[L]:
R1) $0,-->0,0,--0,0,--$
R2) $0,0,-->0,0,--$
List of different nodes in T[L]
LEN=1) $0,:$
LEN=2) $0,0,:$
Number new nodes in level n is given by : 1,1, DONE

-----Class
1100-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][012][100][102][120][210]]$

--
Rules of T[L]:
R1) $0,-->0,0,--0,0,--$
R2) $0,0,-->0,0,--$
List of different nodes in T[L]
LEN=1) $0,:$
LEN=2) $0,0,:$
Number new nodes in level n is given by : 1,1, DONE

-----Class
1101-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][012][100][102][201][210]]$

--
Rules of $T[L]$:
R1) $0,-->0,0,--0,0,--$
R2) $0,0,-->0,0,--$
List of different nodes in $T[L]$
LEN=1) $0,:$
LEN=2) $0,0,:$
Number new nodes in level n is given by : 1,1, DONE

-----Class
1102-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][012][100][110][120][201]]$

--
Rules of $T[L]$:
R1) $0,-->0,0,--0,0,--$
R2) $0,0,-->0,0,--$
List of different nodes in $T[L]$
LEN=1) $0,:$
LEN=2) $0,0,:$
Number new nodes in level n is given by : 1,1, DONE

-----Class
1103-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][012][100][110][120][210]]$

--
Rules of $T[L]$:
R1) $0,-->0,0,--0,0,--$
R2) $0,0,-->0,0,--$
List of different nodes in $T[L]$
LEN=1) $0,:$
LEN=2) $0,0,:$
Number new nodes in level n is given by : 1,1, DONE

-----Class
1104-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][012][100][110][201][210]]$

--
Rules of $T[L]$:
R1) $0,-->0,0,--0,0,--$
R2) $0,0,-->0,0,--$
List of different nodes in $T[L]$
LEN=1) $0,:$

LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1, DONE

-----Class

1105-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][012][100][120][201][210]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,0,--

R2) 0,0,-->0,0,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,:

Number new nodes in level n is given by : 1,1, DONE

-----Class

1106-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][012][101][102][110][120]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,0,--

R2) 0,0,-->0,0,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,:

Number new nodes in level n is given by : 1,1, DONE

-----Class

1107-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][012][101][102][110][201]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,0,--

R2) 0,0,-->0,0,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,:

Number new nodes in level n is given by : 1,1, DONE

-----Class

1108-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][012][101][102][110][210]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,0,--

R2) 0,0,-->0,0,--

List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

1109-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][012][101][102][120][201]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

1110-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][012][101][102][120][210]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

1111-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][012][101][102][201][210]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

1112-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][012][101][110][120][201]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1, DONE

-----Class

1113-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][012][101][110][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1, DONE

-----Class

1114-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][012][101][110][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1, DONE

-----Class

1115-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][012][101][120][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1, DONE

-----Class

1116-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][012][102][110][120][201]]$

```
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
    Number new nodes in level n is given by : 1,1,    DONE
```

```
-----Class
1117-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][012][102][110][120][210]]
-----
```

```
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
    Number new nodes in level n is given by : 1,1,    DONE
```

```
-----Class
1118-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][012][102][110][201][210]]
-----
```

```
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
    Number new nodes in level n is given by : 1,1,    DONE
```

```
-----Class
1119-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][012][102][120][201][210]]
-----
```

```
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
    Number new nodes in level n is given by : 1,1,    DONE
```

```
-----Class
1120-----
```

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][012][110][120][201][210]]$

--

Rules of $T[L]$:

R1) $0,-->0,0,--0,0,--$

R2) $0,0,-->0,0,--$

List of different nodes in $T[L]$

LEN=1) $0,:$

LEN=2) $0,0,:$

Number new nodes in level n is given by : 1,1, DONE

-----Class

1121-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][021][100][101][102][110]]$

--

Rules of $T[L]$:

R1) $0,-->0,0,--0,0,--$

R2) $0,0,-->0,0,--$

List of different nodes in $T[L]$

LEN=1) $0,:$

LEN=2) $0,0,:$

Number new nodes in level n is given by : 1,1, DONE

-----Class

1122-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][021][100][101][102][120]]$

--

Rules of $T[L]$:

R1) $0,-->0,0,--0,0,--$

R2) $0,0,-->0,0,--$

List of different nodes in $T[L]$

LEN=1) $0,:$

LEN=2) $0,0,:$

Number new nodes in level n is given by : 1,1, DONE

-----Class

1123-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][021][100][101][102][201]]$

--

Rules of $T[L]$:

R1) $0,-->0,0,--0,0,--$

R2) $0,0,-->0,0,--$

List of different nodes in $T[L]$

LEN=1) $0,:$

LEN=2) $0,0,:$

Number new nodes in level n is given by : 1,1, DONE

-----Class
1124-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][021][100][101][102][210]]$

--
Rules of $T[L]$:
R1) $0,-->0,0,--0,--$
R2) $0,0,-->0,0,--$
List of different nodes in $T[L]$
LEN=1) $0,:$
LEN=2) $0,0,:$
Number new nodes in level n is given by : 1,1, DONE

-----Class
1125-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][021][100][101][110][120]]$

--
Rules of $T[L]$:
R1) $0,-->0,0,--0,--$
R2) $0,0,-->0,0,--$
List of different nodes in $T[L]$
LEN=1) $0,:$
LEN=2) $0,0,:$
Number new nodes in level n is given by : 1,1, DONE

-----Class
1126-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][021][100][101][110][201]]$

--
Rules of $T[L]$:
R1) $0,-->0,0,--0,--$
R2) $0,0,-->0,0,--$
List of different nodes in $T[L]$
LEN=1) $0,:$
LEN=2) $0,0,:$
Number new nodes in level n is given by : 1,1, DONE

-----Class
1127-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][021][100][101][110][210]]$

--
Rules of $T[L]$:
R1) $0,-->0,0,--0,--$
R2) $0,0,-->0,0,--$
List of different nodes in $T[L]$
LEN=1) $0,:$
LEN=2) $0,0,:$

Number new nodes in level n is given by : 1,1, DONE

-----Class

1128-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][021][100][101][120][201]]$

--

Rules of $T[L]$:

R1) $0,-->0,0,--0,--$

R2) $0,0,-->0,0,--$

List of different nodes in $T[L]$

LEN=1) $0,:$

LEN=2) $0,0,:$

Number new nodes in level n is given by : 1,1, DONE

-----Class

1129-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][021][100][101][120][210]]$

--

Rules of $T[L]$:

R1) $0,-->0,0,--0,--$

R2) $0,0,-->0,0,--$

List of different nodes in $T[L]$

LEN=1) $0,:$

LEN=2) $0,0,:$

Number new nodes in level n is given by : 1,1, DONE

-----Class

1130-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][021][100][101][201][210]]$

--

Rules of $T[L]$:

R1) $0,-->0,0,--0,--$

R2) $0,0,-->0,0,--$

List of different nodes in $T[L]$

LEN=1) $0,:$

LEN=2) $0,0,:$

Number new nodes in level n is given by : 1,1, DONE

-----Class

1131-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][021][100][102][110][120]]$

--

Rules of $T[L]$:

R1) $0,-->0,0,--0,--$

R2) $0,0,-->0,0,--$

List of different nodes in $T[L]$

LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

1132-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][021][100][102][110][201]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,--

R2) 0,0,-->0,0,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, :

Number new nodes in level n is given by : 1,1, DONE

-----Class

1133-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][021][100][102][110][210]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,--

R2) 0,0,-->0,0,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, :

Number new nodes in level n is given by : 1,1, DONE

-----Class

1134-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][021][100][102][120][201]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,--

R2) 0,0,-->0,0,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, :

Number new nodes in level n is given by : 1,1, DONE

-----Class

1135-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][021][100][102][120][210]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,--

R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

1136-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][021][100][102][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

1137-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][021][100][110][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

1138-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][021][100][110][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

1139-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][021][100][110][201][210]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, \rightarrow$

R2) $0, 0, \rightarrow 0, 0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, :$

Number new nodes in level n is given by : 1,1, DONE

-----Class

1140-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][021][100][120][201][210]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, \rightarrow$

R2) $0, 0, \rightarrow 0, 0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, :$

Number new nodes in level n is given by : 1,1, DONE

-----Class

1141-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][021][101][102][110][120]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, \rightarrow$

R2) $0, 0, \rightarrow 0, 0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, :$

Number new nodes in level n is given by : 1,1, DONE

-----Class

1142-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][021][101][102][110][201]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, \rightarrow$

R2) $0, 0, \rightarrow 0, 0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, :$

Number new nodes in level n is given by : 1,1, DONE

-----Class

1143-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][021][101][102][110][210]]$

```

-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
  Number new nodes in level n is given by : 1,1,  DONE

-----Class
1144-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][021][101][102][120][201]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
  Number new nodes in level n is given by : 1,1,  DONE

-----Class
1145-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][021][101][102][120][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
  Number new nodes in level n is given by : 1,1,  DONE

-----Class
1146-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][021][101][102][201][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
  Number new nodes in level n is given by : 1,1,  DONE

-----Class

```

1147-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][021][101][110][120][201]]$

--
Rules of T[L]:
R1) $0,-->0,0,--0,--$
R2) $0,0,-->0,0,--$
List of different nodes in T[L]
LEN=1) $0,:$
LEN=2) $0,0,:$
Number new nodes in level n is given by : 1,1, DONE

-----Class
1148-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][021][101][110][120][210]]$

--
Rules of T[L]:
R1) $0,-->0,0,--0,--$
R2) $0,0,-->0,0,--$
List of different nodes in T[L]
LEN=1) $0,:$
LEN=2) $0,0,:$
Number new nodes in level n is given by : 1,1, DONE

-----Class
1149-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][021][101][110][201][210]]$

--
Rules of T[L]:
R1) $0,-->0,0,--0,--$
R2) $0,0,-->0,0,--$
List of different nodes in T[L]
LEN=1) $0,:$
LEN=2) $0,0,:$
Number new nodes in level n is given by : 1,1, DONE

-----Class
1150-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][021][101][120][201][210]]$

--
Rules of T[L]:
R1) $0,-->0,0,--0,--$
R2) $0,0,-->0,0,--$
List of different nodes in T[L]
LEN=1) $0,:$
LEN=2) $0,0,:$
Number new nodes in level n is given by : 1,1, DONE

-----Class
1151-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][021][102][110][120][201]]$

--
Rules of $T[L]$:
R1) $0,-->0,0,--0,--$
R2) $0,0,-->0,0,--$
List of different nodes in $T[L]$
LEN=1) $0,:$
LEN=2) $0,0,:$
Number new nodes in level n is given by : 1,1, DONE

-----Class
1152-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][021][102][110][120][210]]$

--
Rules of $T[L]$:
R1) $0,-->0,0,--0,--$
R2) $0,0,-->0,0,--$
List of different nodes in $T[L]$
LEN=1) $0,:$
LEN=2) $0,0,:$
Number new nodes in level n is given by : 1,1, DONE

-----Class
1153-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][021][102][110][201][210]]$

--
Rules of $T[L]$:
R1) $0,-->0,0,--0,--$
R2) $0,0,-->0,0,--$
List of different nodes in $T[L]$
LEN=1) $0,:$
LEN=2) $0,0,:$
Number new nodes in level n is given by : 1,1, DONE

-----Class
1154-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][021][102][120][201][210]]$

--
Rules of $T[L]$:
R1) $0,-->0,0,--0,--$
R2) $0,0,-->0,0,--$
List of different nodes in $T[L]$
LEN=1) $0,:$

LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1, DONE

-----Class

1155-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][021][110][120][201][210]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,--

R2) 0,0,-->0,0,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,:

Number new nodes in level n is given by : 1,1, DONE

-----Class

1156-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][100][101][102][110][120]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,--

R2) 0,0,-->0,0,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,:

Number new nodes in level n is given by : 1,1, DONE

-----Class

1157-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][100][101][102][110][201]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,--

R2) 0,0,-->0,0,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,:

Number new nodes in level n is given by : 1,1, DONE

-----Class

1158-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][100][101][102][110][210]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,--

R2) 0,0,-->0,0,--

List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

1159-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][100][101][102][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

1160-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][100][101][102][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

1161-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][100][101][102][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

1162-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][100][101][110][120][201]]$

--
Rules of T[L]:

R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

1163-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][100][101][110][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

1164-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][100][101][110][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

1165-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][100][101][120][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

1166-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][100][102][110][120][201]]$

```
--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
  Number new nodes in level n is given by : 1,1,  DONE
```

```
-----Class
1167-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][100][102][110][120][210]]
-----
```

```
--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
  Number new nodes in level n is given by : 1,1,  DONE
```

```
-----Class
1168-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][100][102][110][201][210]]
-----
```

```
--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
  Number new nodes in level n is given by : 1,1,  DONE
```

```
-----Class
1169-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][100][102][120][201][210]]
-----
```

```
--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
  Number new nodes in level n is given by : 1,1,  DONE
```

```
-----Class
1170-----
```

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][100][110][120][201][210]]$

--

Rules of T[L]:

R1) $0,-->0,0,--0,--$

R2) $0,0,-->0,0,--$

List of different nodes in T[L]

LEN=1) $0,:$

LEN=2) $0,0,:$

Number new nodes in level n is given by : 1,1, DONE

-----Class

1171-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][101][102][110][120][201]]$

--

Rules of T[L]:

R1) $0,-->0,0,--0,--$

R2) $0,0,-->0,0,--$

List of different nodes in T[L]

LEN=1) $0,:$

LEN=2) $0,0,:$

Number new nodes in level n is given by : 1,1, DONE

-----Class

1172-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][101][102][110][120][210]]$

--

Rules of T[L]:

R1) $0,-->0,0,--0,--$

R2) $0,0,-->0,0,--$

List of different nodes in T[L]

LEN=1) $0,:$

LEN=2) $0,0,:$

Number new nodes in level n is given by : 1,1, DONE

-----Class

1173-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][010][101][102][110][201][210]]$

--

Rules of T[L]:

R1) $0,-->0,0,--0,--$

R2) $0,0,-->0,0,--$

List of different nodes in T[L]

LEN=1) $0,:$

LEN=2) $0,0,:$

Number new nodes in level n is given by : 1,1, DONE

```

-----Class
1174-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][101][102][120][201][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1,  DONE

```

```

-----Class
1175-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][101][110][120][201][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1,  DONE

```

```

-----Class
1176-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][010][102][110][120][201][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1,  DONE

```

```

-----Class
1177-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][012][021][100][101][102]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--
R4) 0,1,0,-->
List of different nodes in T[L]

```

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,0, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1178-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][012][021][100][101][110]]$

--
Rules of T[L]:
R1) 0, -->0,0, --0,1, --
R2) 0,0, -->0,0, --
R3) 0,1, -->0,1,0, --
R4) 0,1,0, -->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,0, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1179-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][012][021][100][101][120]]$

--
Rules of T[L]:
R1) 0, -->0,0, --0,1, --
R2) 0,0, -->0,0, --
R3) 0,1, -->0,1,0, --
R4) 0,1,0, -->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,0, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1180-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][012][021][100][101][201]]$

--
Rules of T[L]:
R1) 0, -->0,0, --0,1, --
R2) 0,0, -->0,0, --
R3) 0,1, -->0,1,0, --
R4) 0,1,0, -->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :

LEN=3) 0,1,0,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1181-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][012][021][100][101][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,--

R3) 0,1,-->0,1,0,--

R4) 0,1,0,-->

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,1,0,:

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1182-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][012][021][100][102][110]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,--

R3) 0,1,-->0,1,0,--

R4) 0,1,0,-->

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,1,0,:

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1183-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][012][021][100][102][120]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,--

R3) 0,1,-->0,1,0,--

R4) 0,1,0,-->

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,1,0,:

Number new nodes in level n is given by : 1,2,1, DONE

```

-----Class
1184-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][012][021][100][102][201]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--
R4) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,0,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

```

-----Class
1185-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][012][021][100][102][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--
R4) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,0,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

```

-----Class
1186-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][012][021][100][110][120]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--
R4) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,0,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

```

-----Class

```

1187-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][012][021][100][110][201]]$

--
Rules of $T[L]$:

R1) $0,-->0,0,--0,1,--$

R2) $0,0,-->0,0,--$

R3) $0,1,-->0,1,0,--$

R4) $0,1,0,-->$

List of different nodes in $T[L]$

LEN=1) $0,:$

LEN=2) $0,0,: 0,1,:$

LEN=3) $0,1,0,:$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1188-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][012][021][100][110][210]]$

--
Rules of $T[L]$:

R1) $0,-->0,0,--0,1,--$

R2) $0,0,-->0,0,--$

R3) $0,1,-->0,1,0,--$

R4) $0,1,0,-->$

List of different nodes in $T[L]$

LEN=1) $0,:$

LEN=2) $0,0,: 0,1,:$

LEN=3) $0,1,0,:$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1189-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][012][021][100][120][201]]$

--
Rules of $T[L]$:

R1) $0,-->0,0,--0,1,--$

R2) $0,0,-->0,0,--$

R3) $0,1,-->0,1,0,--$

R4) $0,1,0,-->$

List of different nodes in $T[L]$

LEN=1) $0,:$

LEN=2) $0,0,: 0,1,:$

LEN=3) $0,1,0,:$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1190-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][012][021][100][120][210]]$


```

-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--
R4) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,0,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

```

-----Class
1191-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][012][021][100][201][210]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--
R4) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,0,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

```

-----Class
1192-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][012][021][101][102][110]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1,  DONE

```

```

-----Class
1193-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][012][021][101][102][120]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--

```

List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

1194-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][012][021][101][102][201]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

1195-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][012][021][101][102][210]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

1196-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][012][021][101][110][120]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

1197-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][012][021][101][110][201]]

--
Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 0, \rightarrow$
R2) $0, 0, \rightarrow 0, 0, \rightarrow$
List of different nodes in $T[L]$
LEN=1) $0, :$
LEN=2) $0, 0, :$
Number new nodes in level n is given by : 1,1, DONE

-----Class
1198-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][012][021][101][110][210]]$

--
Rules of $T[L]$:
R1) $0, \rightarrow 0, 0, \rightarrow 0, 0, \rightarrow$
R2) $0, 0, \rightarrow 0, 0, \rightarrow$
List of different nodes in $T[L]$
LEN=1) $0, :$
LEN=2) $0, 0, :$
Number new nodes in level n is given by : 1,1, DONE

-----Class
1199-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][012][021][101][120][201]]$

--
Rules of $T[L]$:
R1) $0, \rightarrow 0, 0, \rightarrow 0, 0, \rightarrow$
R2) $0, 0, \rightarrow 0, 0, \rightarrow$
List of different nodes in $T[L]$
LEN=1) $0, :$
LEN=2) $0, 0, :$
Number new nodes in level n is given by : 1,1, DONE

-----Class
1200-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][012][021][101][120][210]]$

--
Rules of $T[L]$:
R1) $0, \rightarrow 0, 0, \rightarrow 0, 0, \rightarrow$
R2) $0, 0, \rightarrow 0, 0, \rightarrow$
List of different nodes in $T[L]$
LEN=1) $0, :$
LEN=2) $0, 0, :$
Number new nodes in level n is given by : 1,1, DONE

-----Class
1201-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][012][021][101][201][210]]$

```
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
  Number new nodes in level n is given by : 1,1,  DONE
```

```
-----Class
1202-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][012][021][102][110][120]]
-----
```

```
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
  Number new nodes in level n is given by : 1,1,  DONE
```

```
-----Class
1203-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][012][021][102][110][201]]
-----
```

```
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
  Number new nodes in level n is given by : 1,1,  DONE
```

```
-----Class
1204-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][012][021][102][110][210]]
-----
```

```
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
  Number new nodes in level n is given by : 1,1,  DONE
```

```
-----Class
1205-----
```

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][012][021][102][120][201]]$

--
Rules of T[L]:
R1) $0, -- \rightarrow 0, 0, -- 0, 0, --$
R2) $0, 0, -- \rightarrow 0, 0, --$
List of different nodes in T[L]
LEN=1) $0, :$
LEN=2) $0, 0, :$
Number new nodes in level n is given by : 1,1, DONE

-----Class
1206-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][012][021][102][120][210]]$

--
Rules of T[L]:
R1) $0, -- \rightarrow 0, 0, -- 0, 0, --$
R2) $0, 0, -- \rightarrow 0, 0, --$
List of different nodes in T[L]
LEN=1) $0, :$
LEN=2) $0, 0, :$
Number new nodes in level n is given by : 1,1, DONE

-----Class
1207-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][012][021][102][201][210]]$

--
Rules of T[L]:
R1) $0, -- \rightarrow 0, 0, -- 0, 0, --$
R2) $0, 0, -- \rightarrow 0, 0, --$
List of different nodes in T[L]
LEN=1) $0, :$
LEN=2) $0, 0, :$
Number new nodes in level n is given by : 1,1, DONE

-----Class
1208-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][012][021][110][120][201]]$

--
Rules of T[L]:
R1) $0, -- \rightarrow 0, 0, -- 0, 0, --$
R2) $0, 0, -- \rightarrow 0, 0, --$
List of different nodes in T[L]
LEN=1) $0, :$
LEN=2) $0, 0, :$
Number new nodes in level n is given by : 1,1, DONE

```

-----Class
1209-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][012][021][110][120][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1,  DONE

```

```

-----Class
1210-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][012][021][110][201][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1,  DONE

```

```

-----Class
1211-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][012][021][120][201][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1,  DONE

```

```

-----Class
1212-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][012][100][101][102][110]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--
R4) 0,1,0,-->
List of different nodes in T[L]

```

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,0, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1213-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][012][100][101][102][120]]$

--
Rules of T[L]:
R1) 0, -->0,0, --0,1, --
R2) 0,0, -->0,0, --
R3) 0,1, -->0,1,0, --
R4) 0,1,0, -->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,0, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1214-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][012][100][101][102][201]]$

--
Rules of T[L]:
R1) 0, -->0,0, --0,1, --
R2) 0,0, -->0,0, --
R3) 0,1, -->0,1,0, --
R4) 0,1,0, -->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,0, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1215-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][012][100][101][102][210]]$

--
Rules of T[L]:
R1) 0, -->0,0, --0,1, --
R2) 0,0, -->0,0, --
R3) 0,1, -->0,1,0, --
R4) 0,1,0, -->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :

LEN=3) 0,1,0,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1216-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][012][100][101][110][120]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,--

R3) 0,1,-->0,1,0,--

R4) 0,1,0,-->

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,1,0,:

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1217-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][012][100][101][110][201]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,--

R3) 0,1,-->0,1,0,--

R4) 0,1,0,-->

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,1,0,:

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1218-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][012][100][101][110][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,--

R3) 0,1,-->0,1,0,--

R4) 0,1,0,-->

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,1,0,:

Number new nodes in level n is given by : 1,2,1, DONE


```

-----Class
1219-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][012][100][101][120][201]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--
R4) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,0,:
Number new nodes in level n is given by : 1,2,1,   DONE

```

```

-----Class
1220-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][012][100][101][120][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--
R4) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,0,:
Number new nodes in level n is given by : 1,2,1,   DONE

```

```

-----Class
1221-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][012][100][101][201][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--
R4) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,0,:
Number new nodes in level n is given by : 1,2,1,   DONE

```

```

-----Class

```

1222-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][012][100][102][110][120]]$

--
Rules of $T[L]$:

R1) $0,-->0,0,--0,1,--$

R2) $0,0,-->0,0,--$

R3) $0,1,-->0,1,0,--$

R4) $0,1,0,-->$

List of different nodes in $T[L]$

LEN=1) $0,:$

LEN=2) $0,0,: 0,1,:$

LEN=3) $0,1,0,:$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1223-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][012][100][102][110][201]]$

--
Rules of $T[L]$:

R1) $0,-->0,0,--0,1,--$

R2) $0,0,-->0,0,--$

R3) $0,1,-->0,1,0,--$

R4) $0,1,0,-->$

List of different nodes in $T[L]$

LEN=1) $0,:$

LEN=2) $0,0,: 0,1,:$

LEN=3) $0,1,0,:$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1224-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][012][100][102][110][210]]$

--
Rules of $T[L]$:

R1) $0,-->0,0,--0,1,--$

R2) $0,0,-->0,0,--$

R3) $0,1,-->0,1,0,--$

R4) $0,1,0,-->$

List of different nodes in $T[L]$

LEN=1) $0,:$

LEN=2) $0,0,: 0,1,:$

LEN=3) $0,1,0,:$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1225-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][012][100][102][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--
R4) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,0,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class
1226-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][012][100][102][120][210]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--
R4) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,0,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class
1227-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][012][100][102][201][210]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--
R4) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,0,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class
1228-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][012][100][110][120][201]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,--

R3) 0,1,-->0,1,0,--

R4) 0,1,0,-->

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,1,0,:

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1229-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][012][100][110][120][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,--

R3) 0,1,-->0,1,0,--

R4) 0,1,0,-->

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,1,0,:

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1230-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][012][100][110][201][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,--

R3) 0,1,-->0,1,0,--

R4) 0,1,0,-->

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,1,0,:

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1231-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][012][100][120][201][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--
R4) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,0,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class
1232-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][012][101][102][110][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1, DONE

-----Class
1233-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][012][101][102][110][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1, DONE

-----Class
1234-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][012][101][102][110][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1, DONE

-----Class
1235-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][012][101][102][120][201]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 0, \rightarrow$

R2) $0, 0, \rightarrow 0, 0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, :$

Number new nodes in level n is given by : 1,1, DONE

-----Class

1236-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][012][101][102][120][210]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 0, \rightarrow$

R2) $0, 0, \rightarrow 0, 0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, :$

Number new nodes in level n is given by : 1,1, DONE

-----Class

1237-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][012][101][102][201][210]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 0, \rightarrow$

R2) $0, 0, \rightarrow 0, 0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, :$

Number new nodes in level n is given by : 1,1, DONE

-----Class

1238-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][012][101][110][120][201]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 0, \rightarrow$

R2) $0, 0, \rightarrow 0, 0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0, 0, :$

Number new nodes in level n is given by : 1,1, DONE

```

-----Class
1239-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][012][101][110][120][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1,  DONE

```

```

-----Class
1240-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][012][101][110][201][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1,  DONE

```

```

-----Class
1241-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][012][101][120][201][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1,  DONE

```

```

-----Class
1242-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][012][102][110][120][201]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:

```

Number new nodes in level n is given by : 1,1, DONE

-----Class

1243-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][012][102][110][120][210]]$

--

Rules of T[L]:

R1) $0,-->0,0,--0,0,--$

R2) $0,0,-->0,0,--$

List of different nodes in T[L]

LEN=1) $0,:$

LEN=2) $0,0,:$

Number new nodes in level n is given by : 1,1, DONE

-----Class

1244-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][012][102][110][201][210]]$

--

Rules of T[L]:

R1) $0,-->0,0,--0,0,--$

R2) $0,0,-->0,0,--$

List of different nodes in T[L]

LEN=1) $0,:$

LEN=2) $0,0,:$

Number new nodes in level n is given by : 1,1, DONE

-----Class

1245-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][012][102][120][201][210]]$

--

Rules of T[L]:

R1) $0,-->0,0,--0,0,--$

R2) $0,0,-->0,0,--$

List of different nodes in T[L]

LEN=1) $0,:$

LEN=2) $0,0,:$

Number new nodes in level n is given by : 1,1, DONE

-----Class

1246-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][012][110][120][201][210]]$

--

Rules of T[L]:

R1) $0,-->0,0,--0,0,--$

R2) $0,0,-->0,0,--$

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

1247-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][021][100][101][102][110]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,--

R3) 0,1,-->0,1,0,--0,1,--

R4) 0,1,0,-->

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, : 0,1, :

LEN=3) 0,1,0, :

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1248-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][021][100][101][102][120]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,--

R3) 0,1,-->0,1,0,--0,0,--

R4) 0,1,0,-->

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, : 0,1, :

LEN=3) 0,1,0, :

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1249-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][021][100][101][102][201]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,--

R3) 0,1,-->0,1,0,--0,1,--

R4) 0,1,0,-->

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, : 0,1, :

LEN=3) 0,1,0, :

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1250-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][021][100][101][102][210]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0,0, \rightarrow 0,1, \rightarrow$

R2) $0,0, \rightarrow 0,0, \rightarrow$

R3) $0,1, \rightarrow 0,1,0, \rightarrow 0,1, \rightarrow$

R4) $0,1,0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

LEN=3) $0,1,0, :$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1251-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][021][100][101][110][120]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0,0, \rightarrow 0,1, \rightarrow$

R2) $0,0, \rightarrow 0,0, \rightarrow$

R3) $0,1, \rightarrow 0,1,0, \rightarrow 0,0, \rightarrow$

R4) $0,1,0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

LEN=3) $0,1,0, :$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1252-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][021][100][101][110][201]]$

--

Rules of T[L]:

R1) $0, \rightarrow 0,0, \rightarrow 0,1, \rightarrow$

R2) $0,0, \rightarrow 0,0, \rightarrow$

R3) $0,1, \rightarrow 0,1,0, \rightarrow 0,1, \rightarrow$

R4) $0,1,0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

LEN=3) $0,1,0, :$

Number new nodes in level n is given by : 1,2,1, DONE

```

-----Class
1253-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][021][100][101][110][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--0,1,--
R4) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,0,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

```

-----Class
1254-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][021][100][101][120][201]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--0,0,--
R4) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,0,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

```

-----Class
1255-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][021][100][101][120][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--0,0,--
R4) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,0,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

```

-----Class
1256-----

```

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][021][100][101][201][210]]$

--

Rules of $T[L]$:

R1) $0, -- \rightarrow 0, 0, -- 0, 1, --$

R2) $0, 0, -- \rightarrow 0, 0, --$

R3) $0, 1, -- \rightarrow 0, 1, 0, -- 0, 1, --$

R4) $0, 1, 0, -- \rightarrow$

List of different nodes in $T[L]$

LEN=1) $0, :$

LEN=2) $0, 0, : 0, 1, :$

LEN=3) $0, 1, 0, :$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1257-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][021][100][102][110][120]]$

--

Rules of $T[L]$:

R1) $0, -- \rightarrow 0, 0, -- 0, 1, --$

R2) $0, 0, -- \rightarrow 0, 0, --$

R3) $0, 1, -- \rightarrow 0, 1, 0, -- 0, 0, --$

R4) $0, 1, 0, -- \rightarrow$

List of different nodes in $T[L]$

LEN=1) $0, :$

LEN=2) $0, 0, : 0, 1, :$

LEN=3) $0, 1, 0, :$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1258-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][021][100][102][110][201]]$

--

Rules of $T[L]$:

R1) $0, -- \rightarrow 0, 0, -- 0, 1, --$

R2) $0, 0, -- \rightarrow 0, 0, --$

R3) $0, 1, -- \rightarrow 0, 1, 0, -- 0, 1, --$

R4) $0, 1, 0, -- \rightarrow$

List of different nodes in $T[L]$

LEN=1) $0, :$

LEN=2) $0, 0, : 0, 1, :$

LEN=3) $0, 1, 0, :$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1259-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][021][100][102][110][210]]$

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--0,1,--
R4) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,0,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

-----Class

```

1260-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][021][100][102][120][201]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--0,0,--
R4) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,0,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

-----Class

```

1261-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][021][100][102][120][210]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--0,0,--
R4) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,0,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

-----Class

```

1262-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][021][100][102][201][210]]
-----

```

```

--
Rules of T[L]:

```

R1) 0,-->0,0,--0,1,--
 R2) 0,0,-->0,0,--
 R3) 0,1,-->0,1,0,--0,1,--
 R4) 0,1,0,-->
 List of different nodes in T[L]
 LEN=1) 0,:
 LEN=2) 0,0,: 0,1,:
 LEN=3) 0,1,0,:
 Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1263-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][021][100][110][120][201]]$

--
 Rules of T[L]:
 R1) 0,-->0,0,--0,1,--
 R2) 0,0,-->0,0,--
 R3) 0,1,-->0,1,0,--0,0,--
 R4) 0,1,0,-->
 List of different nodes in T[L]
 LEN=1) 0,:
 LEN=2) 0,0,: 0,1,:
 LEN=3) 0,1,0,:
 Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1264-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][021][100][110][120][210]]$

--
 Rules of T[L]:
 R1) 0,-->0,0,--0,1,--
 R2) 0,0,-->0,0,--
 R3) 0,1,-->0,1,0,--0,0,--
 R4) 0,1,0,-->
 List of different nodes in T[L]
 LEN=1) 0,:
 LEN=2) 0,0,: 0,1,:
 LEN=3) 0,1,0,:
 Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1265-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][021][100][110][201][210]]$

--
 Rules of T[L]:
 R1) 0,-->0,0,--0,1,--
 R2) 0,0,-->0,0,--

R3) 0,1,-->0,1,0,--0,1,--
R4) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,0,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1266-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][021][100][120][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--0,0,--
R4) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,0,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1267-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][021][101][102][110][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,0,--0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

1268-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][021][101][102][110][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1, DONE

```

-----Class
1269-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][021][101][102][110][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1,  DONE

```

```

-----Class
1270-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][021][101][102][120][201]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,0,--0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

```

-----Class
1271-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][021][101][102][120][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,0,--0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

```

-----Class
1272-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][021][101][102][201][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,--

```


List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

1273-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][021][101][110][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,0,--0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

1274-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][021][101][110][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,0,--0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

1275-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][021][101][110][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, :
Number new nodes in level n is given by : 1,1, DONE

-----Class

1276-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][021][101][120][201][210]]$

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,0,--0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,   DONE

```

-----Class

```

1277-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][021][102][110][120][201]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,0,--0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,   DONE

```

-----Class

```

1278-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][021][102][110][120][210]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,0,--0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,   DONE

```

-----Class

```

1279-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][021][102][110][201][210]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1,   DONE

```

```

-----Class
1280-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][021][102][120][201][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,0,--0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

```

-----Class
1281-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][021][110][120][201][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,0,--0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

```

-----Class
1282-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][100][101][102][110][120]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--0,0,--
R4) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,0,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

```

-----Class
1283-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][100][101][102][110][201]]
-----
--

```

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,--

R3) 0,1,-->0,1,0,--0,1,--

R4) 0,1,0,-->

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,1,0,:

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1284-----

Inversion Sequences ($I_n=(n+1)!$) avoiding L=[[001][011][100][101][102][110][210]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,--

R3) 0,1,-->0,1,0,--0,1,--

R4) 0,1,0,-->

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,1,0,:

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1285-----

Inversion Sequences ($I_n=(n+1)!$) avoiding L=[[001][011][100][101][102][120][201]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,--

R3) 0,1,-->0,1,0,--0,0,--

R4) 0,1,0,-->

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,1,0,:

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1286-----

Inversion Sequences ($I_n=(n+1)!$) avoiding L=[[001][011][100][101][102][120][210]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

```

R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--0,0,--
R4) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,0,:
  Number new nodes in level n is given by : 1,2,1,   DONE

```

-----Class

```

1287-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][100][101][102][201][210]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--0,1,--
R4) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,0,:
  Number new nodes in level n is given by : 1,2,1,   DONE

```

-----Class

```

1288-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][100][101][110][120][201]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--0,0,--
R4) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,0,:
  Number new nodes in level n is given by : 1,2,1,   DONE

```

-----Class

```

1289-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][100][101][110][120][210]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--0,0,--

```

R4) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,0, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1290-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][100][101][110][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--0,1,--
R4) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,0, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1291-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][100][101][120][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--0,0,--
R4) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,0, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1292-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][100][102][110][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--0,0,--
R4) 0,1,0,-->
List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,0, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1293-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][100][102][110][120][210]]$

--
Rules of T[L]:
R1) 0, -->0,0, --0,1, --
R2) 0,0, -->0,0, --
R3) 0,1, -->0,1,0, --0,0, --
R4) 0,1,0, -->

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,0, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1294-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][100][102][110][201][210]]$

--
Rules of T[L]:
R1) 0, -->0,0, --0,1, --
R2) 0,0, -->0,0, --
R3) 0,1, -->0,1,0, --0,1, --
R4) 0,1,0, -->

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,0, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1295-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][100][102][120][201][210]]$

--
Rules of T[L]:
R1) 0, -->0,0, --0,1, --
R2) 0,0, -->0,0, --
R3) 0,1, -->0,1,0, --0,0, --
R4) 0,1,0, -->

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :

LEN=3) 0,1,0,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1296-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][100][110][120][201][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,--

R3) 0,1,-->0,1,0,--0,0,--

R4) 0,1,0,-->

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,1,0,:

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1297-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][101][102][110][120][201]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,--

R3) 0,1,-->0,0,--0,0,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

Number new nodes in level n is given by : 1,2, DONE

-----Class

1298-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][101][102][110][120][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,--

R3) 0,1,-->0,0,--0,0,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

Number new nodes in level n is given by : 1,2, DONE

-----Class

1299-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][011][101][102][110][201][210]]$


```

-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
    Number new nodes in level n is given by : 1,1,    DONE

-----Class
1300-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][101][102][120][201][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,0,--0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
    Number new nodes in level n is given by : 1,2,    DONE

-----Class
1301-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][101][110][120][201][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,0,--0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
    Number new nodes in level n is given by : 1,2,    DONE

-----Class
1302-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][011][102][110][120][201][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,0,--0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:

```

Number new nodes in level n is given by : 1,2, DONE

-----Class

1303-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][012][021][100][101][102][110]]$

Rules of T[L]:

R1) $0, \rightarrow 0,0, \rightarrow 0,1, \rightarrow$

R2) $0,0, \rightarrow 0,0, \rightarrow$

R3) $0,1, \rightarrow 0,1,0, \rightarrow 0,0, \rightarrow$

R4) $0,1,0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

LEN=3) $0,1,0, :$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1304-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][012][021][100][101][102][120]]$

Rules of T[L]:

R1) $0, \rightarrow 0,0, \rightarrow 0,1, \rightarrow$

R2) $0,0, \rightarrow 0,0, \rightarrow$

R3) $0,1, \rightarrow 0,1,0, \rightarrow 0,1, \rightarrow$

R4) $0,1,0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

LEN=3) $0,1,0, :$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1305-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][012][021][100][101][102][201]]$

Rules of T[L]:

R1) $0, \rightarrow 0,0, \rightarrow 0,1, \rightarrow$

R2) $0,0, \rightarrow 0,0, \rightarrow$

R3) $0,1, \rightarrow 0,1,0, \rightarrow 0,1, \rightarrow$

R4) $0,1,0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

LEN=3) $0,1,0, :$

Number new nodes in level n is given by : 1,2,1, DONE

```

-----Class
1306-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][012][021][100][101][102][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--0,1,--
R4) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,0,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

```

-----Class
1307-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][012][021][100][101][110][120]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--0,0,--
R4) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,0,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

```

-----Class
1308-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][012][021][100][101][110][201]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--0,0,--
R4) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,0,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

```

-----Class
1309-----

```

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][012][021][100][101][110][210]]$

--

Rules of $T[L]$:

R1) $0, -->0,0,--0,1,--$

R2) $0,0,-->0,0,--$

R3) $0,1,-->0,1,0,--0,0,--$

R4) $0,1,0,-->$

List of different nodes in $T[L]$

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

LEN=3) $0,1,0, :$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1310-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][012][021][100][101][120][201]]$

--

Rules of $T[L]$:

R1) $0, -->0,0,--0,1,--$

R2) $0,0,-->0,0,--$

R3) $0,1,-->0,1,0,--0,1,--$

R4) $0,1,0,-->$

List of different nodes in $T[L]$

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

LEN=3) $0,1,0, :$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1311-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][012][021][100][101][120][210]]$

--

Rules of $T[L]$:

R1) $0, -->0,0,--0,1,--$

R2) $0,0,-->0,0,--$

R3) $0,1,-->0,1,0,--0,1,--$

R4) $0,1,0,-->$

List of different nodes in $T[L]$

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

LEN=3) $0,1,0, :$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1312-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][012][021][100][101][201][210]]$

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--0,1,--
R4) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,0,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

-----Class

```

1313-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][012][021][100][102][110][120]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--0,0,--
R4) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,0,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

-----Class

```

1314-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][012][021][100][102][110][201]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--0,0,--
R4) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,0,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

-----Class

```

1315-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][012][021][100][102][110][210]]
-----

```

```

--
Rules of T[L]:

```

```

R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--0,0,--
R4) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,0,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

-----Class

```

1316-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][012][021][100][102][120][201]]
-----

```

Rules of T[L]:

```

R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--0,1,--
R4) 0,1,0,-->

```

List of different nodes in T[L]

```

LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,0,:

```

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

```

1317-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][012][021][100][102][120][210]]
-----

```

Rules of T[L]:

```

R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--0,1,--
R4) 0,1,0,-->

```

List of different nodes in T[L]

```

LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,0,:

```

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

```

1318-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][012][021][100][102][201][210]]
-----

```

Rules of T[L]:

```

R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--

```

R3) 0,1,-->0,1,0,--0,1,--
R4) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,0, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1319-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][012][021][100][110][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--0,0,--
R4) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,0, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1320-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][012][021][100][110][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--0,0,--
R4) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,0, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1321-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][012][021][100][110][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--0,0,--
R4) 0,1,0,-->

List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,0, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1322-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][012][021][100][120][201][210]]$

--
Rules of T[L]:
R1) 0, -->0,0, --0,1, --
R2) 0,0, -->0,0, --
R3) 0,1, -->0,1,0, --0,1, --
R4) 0,1,0, -->

List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,0, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1323-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][012][021][101][102][110][120]]$

--
Rules of T[L]:
R1) 0, -->0,0, --0,1, --
R2) 0,0, -->0,0, --
R3) 0,1, -->0,0, --0,0, --
List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class

1324-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][012][021][101][102][110][201]]$

--
Rules of T[L]:
R1) 0, -->0,0, --0,1, --
R2) 0,0, -->0,0, --
R3) 0,1, -->0,0, --0,0, --
List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE


```

-----Class
1325-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][012][021][101][102][110][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,0,--0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,   DONE

```

```

-----Class
1326-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][012][021][101][102][120][201]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1,   DONE

```

```

-----Class
1327-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][012][021][101][102][120][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1,   DONE

```

```

-----Class
1328-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][012][021][101][102][201][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:

```

LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1, DONE

-----Class

1329-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][012][021][101][110][120][201]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,--

R3) 0,1,-->0,0,--0,0,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

Number new nodes in level n is given by : 1,2, DONE

-----Class

1330-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][012][021][101][110][120][210]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,--

R3) 0,1,-->0,0,--0,0,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

Number new nodes in level n is given by : 1,2, DONE

-----Class

1331-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][012][021][101][110][201][210]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,--

R3) 0,1,-->0,0,--0,0,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

Number new nodes in level n is given by : 1,2, DONE

-----Class

1332-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][012][021][101][120][201][210]]

--

Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1, DONE

-----Class

1333-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][012][021][102][110][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,0,--0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

1334-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][012][021][102][110][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,0,--0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

1335-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][012][021][102][110][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,0,--0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

```

-----Class
1336-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][012][021][102][120][201][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1,  DONE

```

```

-----Class
1337-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][012][021][110][120][201][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,0,--0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

```

-----Class
1338-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][012][100][101][102][110][120]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--0,0,--
R4) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,0,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

```

-----Class
1339-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][012][100][101][102][110][201]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--

```

```

R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--0,0,--
R4) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,0,:
  Number new nodes in level n is given by : 1,2,1,   DONE

```

-----Class

```

1340-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][012][100][101][102][110][210]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--0,0,--
R4) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,0,:
  Number new nodes in level n is given by : 1,2,1,   DONE

```

-----Class

```

1341-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][012][100][101][102][120][201]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--0,1,--
R4) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,0,:
  Number new nodes in level n is given by : 1,2,1,   DONE

```

-----Class

```

1342-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][012][100][101][102][120][210]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--0,1,--

```

R4) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,0, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1343-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][012][100][101][102][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--0,1,--
R4) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,0, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1344-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][012][100][101][110][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--0,0,--
R4) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,0, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1345-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][012][100][101][110][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--0,0,--
R4) 0,1,0,-->
List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,0, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1346-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][012][100][101][110][201][210]]$

--
Rules of T[L]:
R1) 0, -->0,0, --0,1, --
R2) 0,0, -->0,0, --
R3) 0,1, -->0,1,0, --0,0, --
R4) 0,1,0, -->

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,0, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1347-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][012][100][101][120][201][210]]$

--
Rules of T[L]:
R1) 0, -->0,0, --0,1, --
R2) 0,0, -->0,0, --
R3) 0,1, -->0,1,0, --0,1, --
R4) 0,1,0, -->

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,0, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1348-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][012][100][102][110][120][201]]$

--
Rules of T[L]:
R1) 0, -->0,0, --0,1, --
R2) 0,0, -->0,0, --
R3) 0,1, -->0,1,0, --0,0, --
R4) 0,1,0, -->

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :

LEN=3) 0,1,0,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1349-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][012][100][102][110][120][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,--

R3) 0,1,-->0,1,0,--0,0,--

R4) 0,1,0,-->

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,1,0,:

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1350-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][012][100][102][110][201][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,--

R3) 0,1,-->0,1,0,--0,0,--

R4) 0,1,0,-->

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,1,0,:

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1351-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][012][100][102][120][201][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,--

R3) 0,1,-->0,1,0,--0,1,--

R4) 0,1,0,-->

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,1,0,:

Number new nodes in level n is given by : 1,2,1, DONE


```

-----Class
1352-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][012][100][110][120][201][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--0,0,--
R4) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,0,:
Number new nodes in level n is given by : 1,2,1,  DONE

```

```

-----Class
1353-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][012][101][102][110][120][201]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,0,--0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

```

-----Class
1354-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][012][101][102][110][120][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,0,--0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

```

-----Class
1355-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][012][101][102][110][201][210]]
-----
--

```

Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,0,--0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

1356-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][012][101][102][120][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
Number new nodes in level n is given by : 1,1, DONE

-----Class

1357-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][012][101][110][120][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,0,--0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

1358-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][012][102][110][120][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,0,--0,0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

```

-----Class
1359-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][021][100][101][102][110][120]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--0,0,--0,1,2,--
R4) 0,1,0,-->
R5) 0,1,2,-->0,0,--0,1,2,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,0,: 0,1,2,:
Number new nodes in level n is given by : 1,2,2,   DONE

```

```

-----Class
1360-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][021][100][101][102][110][201]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--0,0,--0,1,--
R4) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,0,:
Number new nodes in level n is given by : 1,2,1,   DONE

```

```

-----Class
1361-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][021][100][101][102][110][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--0,0,--0,1,--
R4) 0,1,0,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,0,:
Number new nodes in level n is given by : 1,2,1,   DONE

```

```

-----Class

```

1362-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][021][100][101][102][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--0,1,1,--0,1,2,--
R4) 0,1,0,-->
R5) 0,1,1,-->0,1,0,--0,1,1,--
R6) 0,1,2,-->0,0,--0,1,2,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,0,: 0,1,1,: 0,1,2,:
Number new nodes in level n is given by : 1,2,3, DONE

-----Class
1363-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][021][100][101][102][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--0,1,1,--0,1,2,--
R4) 0,1,0,-->
R5) 0,1,1,-->0,1,0,--0,1,1,--
R6) 0,1,2,-->0,0,--0,1,2,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,0,: 0,1,1,: 0,1,2,:
Number new nodes in level n is given by : 1,2,3, DONE

-----Class
1364-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][021][100][101][102][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--0,1,1,--0,1,--
R4) 0,1,0,-->
R5) 0,1,1,-->0,1,0,--0,1,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,0,: 0,1,1,:

Number new nodes in level n is given by : 1,2,2, DONE

-----Class

1365-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][021][100][101][110][120][201]]$

--
Rules of T[L]:

R1) $0, \rightarrow 0,0, \rightarrow 0,1, \rightarrow$

R2) $0,0, \rightarrow 0,0, \rightarrow$

R3) $0,1, \rightarrow 0,1,0, \rightarrow 0,0, \rightarrow 0,1,2, \rightarrow$

R4) $0,1,0, \rightarrow$

R5) $0,1,2, \rightarrow 0,0, \rightarrow 0,1,2, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

LEN=3) $0,1,0, : 0,1,2, :$

Number new nodes in level n is given by : 1,2,2, DONE

-----Class

1366-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][021][100][101][110][120][210]]$

--
Rules of T[L]:

R1) $0, \rightarrow 0,0, \rightarrow 0,1, \rightarrow$

R2) $0,0, \rightarrow 0,0, \rightarrow$

R3) $0,1, \rightarrow 0,1,0, \rightarrow 0,0, \rightarrow 0,1,2, \rightarrow$

R4) $0,1,0, \rightarrow$

R5) $0,1,2, \rightarrow 0,0, \rightarrow 0,1,2, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

LEN=3) $0,1,0, : 0,1,2, :$

Number new nodes in level n is given by : 1,2,2, DONE

-----Class

1367-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][021][100][101][110][201][210]]$

--
Rules of T[L]:

R1) $0, \rightarrow 0,0, \rightarrow 0,1, \rightarrow$

R2) $0,0, \rightarrow 0,0, \rightarrow$

R3) $0,1, \rightarrow 0,1,0, \rightarrow 0,0, \rightarrow 0,1, \rightarrow$

R4) $0,1,0, \rightarrow$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

LEN=3) $0,1,0, :$

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1368-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][021][100][101][120][201][210]]$

Rules of $T[L]$:

R1) $0, \rightarrow 0,0, \rightarrow 0,1, \rightarrow$

R2) $0,0, \rightarrow 0,0, \rightarrow$

R3) $0,1, \rightarrow 0,1,0, \rightarrow 0,1,1, \rightarrow 0,1,2, \rightarrow$

R4) $0,1,0, \rightarrow$

R5) $0,1,1, \rightarrow 0,1,0, \rightarrow 0,1,1, \rightarrow$

R6) $0,1,2, \rightarrow 0,0, \rightarrow 0,1,2, \rightarrow$

List of different nodes in $T[L]$

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

LEN=3) $0,1,0, : 0,1,1, : 0,1,2, :$

Number new nodes in level n is given by : 1,2,3, DONE

-----Class

1369-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][021][100][102][110][120][201]]$

Rules of $T[L]$:

R1) $0, \rightarrow 0,0, \rightarrow 0,1, \rightarrow$

R2) $0,0, \rightarrow 0,0, \rightarrow$

R3) $0,1, \rightarrow 0,1,0, \rightarrow 0,0, \rightarrow 0,1,2, \rightarrow$

R4) $0,1,0, \rightarrow$

R5) $0,1,2, \rightarrow 0,0, \rightarrow 0,1,2, \rightarrow$

List of different nodes in $T[L]$

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

LEN=3) $0,1,0, : 0,1,2, :$

Number new nodes in level n is given by : 1,2,2, DONE

-----Class

1370-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][021][100][102][110][120][210]]$

Rules of $T[L]$:

R1) $0, \rightarrow 0,0, \rightarrow 0,1, \rightarrow$

R2) $0,0, \rightarrow 0,0, \rightarrow$

R3) $0,1, \rightarrow 0,1,0, \rightarrow 0,0, \rightarrow 0,1,2, \rightarrow$

R4) $0,1,0, \rightarrow$

R5) $0,1,2, \rightarrow 0,0, \rightarrow 0,1,2, \rightarrow$

List of different nodes in $T[L]$

LEN=1) $0, :$

LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,0,: 0,1,2,:
Number new nodes in level n is given by : 1,2,2, DONE

-----Class

1371-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][021][100][102][110][201][210]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,--
- R3) 0,1,-->0,1,0,--0,0,--0,1,--
- R4) 0,1,0,-->

List of different nodes in T[L]

- LEN=1) 0,:
- LEN=2) 0,0,: 0,1,:
- LEN=3) 0,1,0,:

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1372-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][021][100][102][120][201][210]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,--
- R3) 0,1,-->0,1,0,--0,1,1,--0,1,2,--
- R4) 0,1,0,-->
- R5) 0,1,1,-->0,1,0,--0,1,1,--
- R6) 0,1,2,-->0,0,--0,1,2,--

List of different nodes in T[L]

- LEN=1) 0,:
- LEN=2) 0,0,: 0,1,:
- LEN=3) 0,1,0,: 0,1,1,: 0,1,2,:

Number new nodes in level n is given by : 1,2,3, DONE

-----Class

1373-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][021][100][110][120][201][210]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,--
- R3) 0,1,-->0,1,0,--0,0,--0,1,2,--
- R4) 0,1,0,-->
- R5) 0,1,2,-->0,0,--0,1,2,--

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,0, : 0,1,2, :
Number new nodes in level n is given by : 1,2,2, DONE

-----Class

1374-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][021][101][102][110][120][201]]$

--
Rules of T[L]:
R1) 0, -->0,0, --0,1, --
R2) 0,0, -->0,0, --
R3) 0,1, -->0,0, --0,0, --0,1,2, --
R4) 0,1,2, -->0,0, --0,1,2, --

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,2, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1375-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][021][101][102][110][120][210]]$

--
Rules of T[L]:
R1) 0, -->0,0, --0,1, --
R2) 0,0, -->0,0, --
R3) 0,1, -->0,0, --0,0, --0,1,2, --
R4) 0,1,2, -->0,0, --0,1,2, --

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,1,2, :
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1376-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][021][101][102][110][201][210]]$

--
Rules of T[L]:
R1) 0, -->0,0, --0,1, --
R2) 0,0, -->0,0, --
R3) 0,1, -->0,0, --0,0, --0,1, --

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
Number new nodes in level n is given by : 1,2, DONE

-----Class
1377-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][021][101][102][120][201][210]]$

--
Rules of $T[L]$:
R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$
R2) $0, 0, \rightarrow 0, 0, \rightarrow$
R3) $0, 1, \rightarrow 0, 0, \rightarrow 0, 1, 1, \rightarrow 0, 1, 1, \rightarrow$
R4) $0, 1, 1, \rightarrow 0, 0, \rightarrow 0, 1, 1, \rightarrow$
List of different nodes in $T[L]$
LEN=1) $0, :$
LEN=2) $0, 0, : 0, 1, :$
LEN=3) $0, 1, 1, :$
Number new nodes in level n is given by : 1,2,1, DONE

-----Class
1378-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][021][101][110][120][201][210]]$

--
Rules of $T[L]$:
R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$
R2) $0, 0, \rightarrow 0, 0, \rightarrow$
R3) $0, 1, \rightarrow 0, 0, \rightarrow 0, 0, \rightarrow 0, 1, 2, \rightarrow$
R4) $0, 1, 2, \rightarrow 0, 0, \rightarrow 0, 1, 2, \rightarrow$
List of different nodes in $T[L]$
LEN=1) $0, :$
LEN=2) $0, 0, : 0, 1, :$
LEN=3) $0, 1, 2, :$
Number new nodes in level n is given by : 1,2,1, DONE

-----Class
1379-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][021][102][110][120][201][210]]$

--
Rules of $T[L]$:
R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$
R2) $0, 0, \rightarrow 0, 0, \rightarrow$
R3) $0, 1, \rightarrow 0, 0, \rightarrow 0, 0, \rightarrow 0, 1, 2, \rightarrow$
R4) $0, 1, 2, \rightarrow 0, 0, \rightarrow 0, 1, 2, \rightarrow$
List of different nodes in $T[L]$
LEN=1) $0, :$
LEN=2) $0, 0, : 0, 1, :$
LEN=3) $0, 1, 2, :$
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1380-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][100][101][102][110][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--0,0,--0,1,--
R4) 0,1,0,-->

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,1,0,:

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1381-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][100][101][102][110][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--0,0,--0,1,--
R4) 0,1,0,-->

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,1,0,:

Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1382-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][100][101][102][110][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--0,0,--0,1,2,--
R4) 0,1,0,-->
R5) 0,1,2,-->0,1,0,--0,1,0,--0,0,--0,1,2,3,--
R6) 0,1,2,3,-->0,1,0,--0,1,0,--0,1,0,--0,0,--0,1,2,3,4,--
R7) 0,1,2,3,4,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,--0,1,2,3,4,5,--
R8) 0,1,2,3,4,5,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,--0,1,2,3,4,5,6,--
R9)
0,1,2,3,4,5,6,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,--0,1,2,3,4,5,
6,7,--
R10)
0,1,2,3,4,5,6,7,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,--0,

1,2,3,4,5,6,7,8,--

R11)

0,1,2,3,4,5,6,7,8,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,--0,1,2,3,4,5,6,7,8,9,--

R12)

0,1,2,3,4,5,6,7,8,9,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,--0,1,2,3,4,5,6,7,8,9,10,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0, : 0,1, :

LEN=3) 0,1,0, : 0,1,2, :

LEN=4) 0,1,2,3, :

LEN=5) 0,1,2,3,4, :

LEN=6) 0,1,2,3,4,5, :

LEN=7) 0,1,2,3,4,5,6, :

LEN=8) 0,1,2,3,4,5,6,7, :

LEN=9) 0,1,2,3,4,5,6,7,8, :

LEN=10) 0,1,2,3,4,5,6,7,8,9, :

LEN=11) 0,1,2,3,4,5,6,7,8,9,10, :

Number new nodes in level n is given by : 1,2,2,1,1,1,1,1,1,1,1,1,

-----Class

1383-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][100][101][102][120][201][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,--

R3) 0,1,-->0,1,0,--0,1,1,--0,1,--

R4) 0,1,0,-->

R5) 0,1,1,-->0,1,0,--0,1,1,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0, : 0,1, :

LEN=3) 0,1,0, : 0,1,1, :

Number new nodes in level n is given by : 1,2,2, DONE

-----Class

1384-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[001][100][101][110][120][201][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,--

R3) 0,1,-->0,1,0,--0,0,--0,1,--

R4) 0,1,0,-->

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,0,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1385-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][100][102][110][120][201][210]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--0,0,--0,1,--
R4) 0,1,0,-->

List of different nodes in T[L]

LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,1,0,:
Number new nodes in level n is given by : 1,2,1, DONE

-----Class

1386-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[001][101][102][110][120][201][210]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,0,--0,0,--0,1,--
List of different nodes in T[L]

LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2, DONE

-----Class

1387-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[010][011][012][021][100][101][102]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,1,--0,1,--
R3) 0,1,-->
R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R9)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,

1,--
R10)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
--0,1,--0,1,--
R11)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
0,1,--0,1,--0,1,--0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, :
LEN=4) 0,0,0,0, :
LEN=5) 0,0,0,0,0, :
LEN=6) 0,0,0,0,0,0, :
LEN=7) 0,0,0,0,0,0,0, :
LEN=8) 0,0,0,0,0,0,0,0, :
LEN=9) 0,0,0,0,0,0,0,0,0, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :
Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

-----Class

1388-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][021][100][101][110]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,1,--0,1,--
R3) 0,1,-->
R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R9)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,
1,--
R10)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
--0,1,--0,1,--
R11)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
0,1,--0,1,--0,1,--0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, :
LEN=4) 0,0,0,0, :
LEN=5) 0,0,0,0,0, :

LEN=6) 0,0,0,0,0,0,:
 LEN=7) 0,0,0,0,0,0,0,:
 LEN=8) 0,0,0,0,0,0,0,0,:
 LEN=9) 0,0,0,0,0,0,0,0,0,:
 LEN=10) 0,0,0,0,0,0,0,0,0,0,:
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,:
 Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

-----Class

1389-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][021][100][101][120]]$

--

Rules of $T[L]$:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,1,--
- R3) 0,1,-->
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
- R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
- R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R9) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R10) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R11) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in $T[L]$

LEN=1) 0,:
 LEN=2) 0,0,: 0,1,:
 LEN=3) 0,0,0,:
 LEN=4) 0,0,0,0,:
 LEN=5) 0,0,0,0,0,:
 LEN=6) 0,0,0,0,0,0,:
 LEN=7) 0,0,0,0,0,0,0,:
 LEN=8) 0,0,0,0,0,0,0,0,:
 LEN=9) 0,0,0,0,0,0,0,0,0,:
 LEN=10) 0,0,0,0,0,0,0,0,0,0,:
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,:
 Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

-----Class

1390-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][021][100][101][201]]$

--

Rules of T[L]:

R1) $0 \rightarrow 0,0,--0,1,--$

R2) $0,0 \rightarrow 0,0,0,--0,1,--0,1,--$

R3) $0,1,-->$

R4) $0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--$

R5) $0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--$

R6) $0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--$

R7) $0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--$

R8) $0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--$

R9)

$0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--$

R10)

$0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--$

R11)

$0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--$

List of different nodes in T[L]

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

LEN=3) $0,0,0, :$

LEN=4) $0,0,0,0, :$

LEN=5) $0,0,0,0,0, :$

LEN=6) $0,0,0,0,0,0, :$

LEN=7) $0,0,0,0,0,0,0, :$

LEN=8) $0,0,0,0,0,0,0,0, :$

LEN=9) $0,0,0,0,0,0,0,0,0, :$

LEN=10) $0,0,0,0,0,0,0,0,0,0, :$

LEN=11) $0,0,0,0,0,0,0,0,0,0,0, :$

Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,1,

-----Class

1391-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][021][100][101][210]]$

--

Rules of T[L]:

R1) $0 \rightarrow 0,0,--0,1,--$

R2) $0,0 \rightarrow 0,0,0,--0,1,--0,1,--$

R3) $0,1,-->$

R4) $0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--$

R5) $0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--$

R6) $0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--$

R7) $0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--$

R8) $0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--$

R9)

$0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--$

R10)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

R11)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, : 0,1, :
- LEN=3) 0,0,0, :
- LEN=4) 0,0,0,0, :
- LEN=5) 0,0,0,0,0, :
- LEN=6) 0,0,0,0,0,0, :
- LEN=7) 0,0,0,0,0,0,0, :
- LEN=8) 0,0,0,0,0,0,0,0, :
- LEN=9) 0,0,0,0,0,0,0,0,0, :
- LEN=10) 0,0,0,0,0,0,0,0,0,0, :
- LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :

Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,1,

-----Class

1392-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][021][100][102][110]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,1,--
- R3) 0,1,-->
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
- R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
- R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R9)
- 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- 1,--
- R10)
- 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- 0,1,--0,1,--
- R11)
- 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- 0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, : 0,1, :
- LEN=3) 0,0,0, :
- LEN=4) 0,0,0,0, :
- LEN=5) 0,0,0,0,0, :
- LEN=6) 0,0,0,0,0,0, :
- LEN=7) 0,0,0,0,0,0,0, :

- R2) 0,0,-->0,0,0,--0,1,--0,1,--
- R3) 0,1,-->
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
- R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
- R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R9) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R10) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R11) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, : 0,1, :
- LEN=3) 0,0,0, :
- LEN=4) 0,0,0,0, :
- LEN=5) 0,0,0,0,0, :
- LEN=6) 0,0,0,0,0,0, :
- LEN=7) 0,0,0,0,0,0,0, :
- LEN=8) 0,0,0,0,0,0,0,0, :
- LEN=9) 0,0,0,0,0,0,0,0,0, :
- LEN=10) 0,0,0,0,0,0,0,0,0,0, :
- LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :

Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,1,

-----Class

1395-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][021][100][102][210]]$

--
Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,1,--
- R3) 0,1,-->
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
- R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
- R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R9) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R10) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

R11)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
0,1,--0,1,--0,1,--0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, :
LEN=4) 0,0,0,0, :
LEN=5) 0,0,0,0,0, :
LEN=6) 0,0,0,0,0,0, :
LEN=7) 0,0,0,0,0,0,0, :
LEN=8) 0,0,0,0,0,0,0,0, :
LEN=9) 0,0,0,0,0,0,0,0,0, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :
Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

-----Class

1396-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[010][011][012][021][100][110][120]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,1,--0,1,--
R3) 0,1,-->
R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R9)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,
1,--
R10)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,
--0,1,--0,1,--
R11)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
0,1,--0,1,--0,1,--0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, :
LEN=4) 0,0,0,0, :
LEN=5) 0,0,0,0,0, :
LEN=6) 0,0,0,0,0,0, :
LEN=7) 0,0,0,0,0,0,0, :
LEN=8) 0,0,0,0,0,0,0,0, :
LEN=9) 0,0,0,0,0,0,0,0,0, :

R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
 R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
 R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
 R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 R9)
 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 1,--
 R10)
 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 --0,1,--0,1,--
 R11)
 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 0,1,--0,1,--0,1,--0,1,--
 List of different nodes in T[L]
 LEN=1) 0, :
 LEN=2) 0,0, : 0,1, :
 LEN=3) 0,0,0, :
 LEN=4) 0,0,0,0, :
 LEN=5) 0,0,0,0,0, :
 LEN=6) 0,0,0,0,0,0, :
 LEN=7) 0,0,0,0,0,0,0, :
 LEN=8) 0,0,0,0,0,0,0,0, :
 LEN=9) 0,0,0,0,0,0,0,0,0, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :
 Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

-----Class

1399-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][021][100][120][201]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--
 R2) 0,0,-->0,0,0,--0,1,--0,1,--
 R3) 0,1,-->
 R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
 R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
 R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
 R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 R9)
 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 1,--
 R10)
 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 --0,1,--0,1,--
 R11)
 0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, : 0,1, :
- LEN=3) 0,0,0, :
- LEN=4) 0,0,0,0, :
- LEN=5) 0,0,0,0,0, :
- LEN=6) 0,0,0,0,0,0, :
- LEN=7) 0,0,0,0,0,0,0, :
- LEN=8) 0,0,0,0,0,0,0,0, :
- LEN=9) 0,0,0,0,0,0,0,0,0, :
- LEN=10) 0,0,0,0,0,0,0,0,0,0, :
- LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :

Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

-----Class

1400-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[010][011][012][021][100][120][210]]

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,1,--
- R3) 0,1,-->
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
- R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
- R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R9) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R10) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R11) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, : 0,1, :
- LEN=3) 0,0,0, :
- LEN=4) 0,0,0,0, :
- LEN=5) 0,0,0,0,0, :
- LEN=6) 0,0,0,0,0,0, :
- LEN=7) 0,0,0,0,0,0,0, :
- LEN=8) 0,0,0,0,0,0,0,0, :
- LEN=9) 0,0,0,0,0,0,0,0,0, :
- LEN=10) 0,0,0,0,0,0,0,0,0,0, :
- LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :

Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

-----Class

1401-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][021][100][201][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,1,--0,1,--

R3) 0,1,-->

R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--

R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--

R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--

R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

R9)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

R10)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

R11)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,0,0,:

LEN=4) 0,0,0,0,:

LEN=5) 0,0,0,0,0,:

LEN=6) 0,0,0,0,0,0,:

LEN=7) 0,0,0,0,0,0,0,:

LEN=8) 0,0,0,0,0,0,0,0,:

LEN=9) 0,0,0,0,0,0,0,0,0,:

LEN=10) 0,0,0,0,0,0,0,0,0,0,:

LEN=11) 0,0,0,0,0,0,0,0,0,0,0,:

Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

-----Class

1402-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][021][101][102][110]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,1,--0,1,--

R3) 0,1,-->

R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--

R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--

R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R9)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,
1,--
R10)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,
--0,1,--0,1,--
R11)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
0,1,--0,1,--0,1,--0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, :
LEN=4) 0,0,0,0, :
LEN=5) 0,0,0,0,0, :
LEN=6) 0,0,0,0,0,0, :
LEN=7) 0,0,0,0,0,0,0, :
LEN=8) 0,0,0,0,0,0,0,0, :
LEN=9) 0,0,0,0,0,0,0,0,0, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :
Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

-----Class

1403-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][021][101][102][120]]$

Rules of T[L]:

R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,1,--0,1,--
R3) 0,1,-->
R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R9)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,
1,--
R10)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,
--0,1,--0,1,--
R11)
0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
0,1,--0,1,--0,1,--0,1,--
List of different nodes in T[L]

LEN=1) 0, :
 LEN=2) 0,0, : 0,1, :
 LEN=3) 0,0,0, :
 LEN=4) 0,0,0,0, :
 LEN=5) 0,0,0,0,0, :
 LEN=6) 0,0,0,0,0,0, :
 LEN=7) 0,0,0,0,0,0,0, :
 LEN=8) 0,0,0,0,0,0,0,0, :
 LEN=9) 0,0,0,0,0,0,0,0,0, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :
 Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

-----Class

1404-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][021][101][102][201]]$

--
 Rules of T[L]:
 R1) 0, -->0,0, --0,1, --
 R2) 0,0, -->0,0,0, --0,1, --0,1, --
 R3) 0,1, -->
 R4) 0,0,0, -->0,0,0,0, --0,1, --0,1, --0,1, --
 R5) 0,0,0,0, -->0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --
 R6) 0,0,0,0,0, -->0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --
 R7) 0,0,0,0,0,0, -->0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --
 R8) 0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --
 R9)
 0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --
 1, --
 R10)
 0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --
 --0,1, --0,1, --
 R11)
 0,0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --
 0,1, --0,1, --0,1, --0,1, --

List of different nodes in T[L]

LEN=1) 0, :
 LEN=2) 0,0, : 0,1, :
 LEN=3) 0,0,0, :
 LEN=4) 0,0,0,0, :
 LEN=5) 0,0,0,0,0, :
 LEN=6) 0,0,0,0,0,0, :
 LEN=7) 0,0,0,0,0,0,0, :
 LEN=8) 0,0,0,0,0,0,0,0, :
 LEN=9) 0,0,0,0,0,0,0,0,0, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :
 Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

```

-----Class
1405-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[010][011][012][021][101][102][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,1,--0,1,--
R3) 0,1,-->
R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R9)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
1,--
R10)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
--0,1,--0,1,--
R11)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
0,1,--0,1,--0,1,--0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,0,:
LEN=4) 0,0,0,0,:
LEN=5) 0,0,0,0,0,:
LEN=6) 0,0,0,0,0,0,:
LEN=7) 0,0,0,0,0,0,0,:
LEN=8) 0,0,0,0,0,0,0,0,:
LEN=9) 0,0,0,0,0,0,0,0,0,:
LEN=10) 0,0,0,0,0,0,0,0,0,0,:
LEN=11) 0,0,0,0,0,0,0,0,0,0,0,:
Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

```

```

-----Class
1406-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[010][011][012][021][101][110][120]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,1,--0,1,--
R3) 0,1,-->
R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

```

R8) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R9) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
1,--
R10) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
--0,1,--0,1,--
R11) 0,0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
0,1,--0,1,--0,1,--0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, :
LEN=4) 0,0,0,0, :
LEN=5) 0,0,0,0,0, :
LEN=6) 0,0,0,0,0,0, :
LEN=7) 0,0,0,0,0,0,0, :
LEN=8) 0,0,0,0,0,0,0,0, :
LEN=9) 0,0,0,0,0,0,0,0,0, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :
Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

-----Class
1407-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][021][101][110][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,1,--0,1,--
R3) 0,1,-->
R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R9) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
1,--
R10) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
--0,1,--0,1,--
R11) 0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
0,1,--0,1,--0,1,--0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :

LEN=3) 0,0,0,:
 LEN=4) 0,0,0,0,:
 LEN=5) 0,0,0,0,0,:
 LEN=6) 0,0,0,0,0,0,:
 LEN=7) 0,0,0,0,0,0,0,:
 LEN=8) 0,0,0,0,0,0,0,0,:
 LEN=9) 0,0,0,0,0,0,0,0,0,:
 LEN=10) 0,0,0,0,0,0,0,0,0,0,:
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,:
 Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

-----Class

1408-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][021][101][110][210]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,1,--
- R3) 0,1,-->
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
- R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
- R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R9) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R10) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R11) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0,:
 LEN=2) 0,0,: 0,1,:
 LEN=3) 0,0,0,:
 LEN=4) 0,0,0,0,:
 LEN=5) 0,0,0,0,0,:
 LEN=6) 0,0,0,0,0,0,:
 LEN=7) 0,0,0,0,0,0,0,:
 LEN=8) 0,0,0,0,0,0,0,0,:
 LEN=9) 0,0,0,0,0,0,0,0,0,:
 LEN=10) 0,0,0,0,0,0,0,0,0,0,:
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,:
 Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

-----Class

1409-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][021][101][120][201]]$

--

Rules of $T[L]$:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$

R2) $0, 0, \rightarrow 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$

R3) $0, 1, \rightarrow$

R4) $0, 0, 0, \rightarrow 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$

R5) $0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$

R6) $0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$

R7) $0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$

R8) $0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$

R9)

$0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$

R10)

$0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$

R11)

$0, 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$

List of different nodes in $T[L]$

LEN=1) $0, :$

LEN=2) $0, 0, : 0, 1, :$

LEN=3) $0, 0, 0, :$

LEN=4) $0, 0, 0, 0, :$

LEN=5) $0, 0, 0, 0, 0, :$

LEN=6) $0, 0, 0, 0, 0, 0, :$

LEN=7) $0, 0, 0, 0, 0, 0, 0, :$

LEN=8) $0, 0, 0, 0, 0, 0, 0, 0, :$

LEN=9) $0, 0, 0, 0, 0, 0, 0, 0, 0, :$

LEN=10) $0, 0, 0, 0, 0, 0, 0, 0, 0, 0, :$

LEN=11) $0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, :$

Number new nodes in level n is given by : $1, 2, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,$

-----Class

1410-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][021][101][120][210]]$

--

Rules of $T[L]$:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$

R2) $0, 0, \rightarrow 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$

R3) $0, 1, \rightarrow$

R4) $0, 0, 0, \rightarrow 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$

R5) $0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$

R6) $0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$

R7) $0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$

R8) $0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$

R9)

```

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,
1,--
R10)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,
--0,1,--0,1,--
R11)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
0,1,--0,1,--0,1,--0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,0,:
LEN=4) 0,0,0,0,:
LEN=5) 0,0,0,0,0,:
LEN=6) 0,0,0,0,0,0,:
LEN=7) 0,0,0,0,0,0,0,:
LEN=8) 0,0,0,0,0,0,0,0,:
LEN=9) 0,0,0,0,0,0,0,0,0,:
LEN=10) 0,0,0,0,0,0,0,0,0,0,:
LEN=11) 0,0,0,0,0,0,0,0,0,0,0,:
Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

```

-----Class

1411-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][021][101][201][210]]$

--

Rules of T[L]:

```

R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,1,--0,1,--
R3) 0,1,-->
R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R9)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,
1,--
R10)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,
--0,1,--0,1,--
R11)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
0,1,--0,1,--0,1,--0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,0,:
LEN=4) 0,0,0,0,:

```

LEN=5) 0,0,0,0,0, :
 LEN=6) 0,0,0,0,0,0, :
 LEN=7) 0,0,0,0,0,0,0, :
 LEN=8) 0,0,0,0,0,0,0,0, :
 LEN=9) 0,0,0,0,0,0,0,0,0, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :
 Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

-----Class

1412-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][021][102][110][120]]$

--
Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,1,--
- R3) 0,1,-->
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
- R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
- R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R9) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R10) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R11) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0, :
 LEN=2) 0,0, : 0,1, :
 LEN=3) 0,0,0, :
 LEN=4) 0,0,0,0, :
 LEN=5) 0,0,0,0,0, :
 LEN=6) 0,0,0,0,0,0, :
 LEN=7) 0,0,0,0,0,0,0, :
 LEN=8) 0,0,0,0,0,0,0,0, :
 LEN=9) 0,0,0,0,0,0,0,0,0, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :
 Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

-----Class

1413-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][021][102][110][201]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,1,--0,1,--

R3) 0,1,-->

R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--

R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--

R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--

R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

R9)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

1,--

R10)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

--0,1,--0,1,--

R11)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,0,0,:

LEN=4) 0,0,0,0,:

LEN=5) 0,0,0,0,0,:

LEN=6) 0,0,0,0,0,0,:

LEN=7) 0,0,0,0,0,0,0,:

LEN=8) 0,0,0,0,0,0,0,0,:

LEN=9) 0,0,0,0,0,0,0,0,0,:

LEN=10) 0,0,0,0,0,0,0,0,0,0,:

LEN=11) 0,0,0,0,0,0,0,0,0,0,0,:

Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,1,

-----Class

1414-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][021][102][110][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,1,--0,1,--

R3) 0,1,-->

R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--

R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--

R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--

R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

R9)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

1,--

R10)
 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

R11)
 0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, : 0,1, :
- LEN=3) 0,0,0, :
- LEN=4) 0,0,0,0, :
- LEN=5) 0,0,0,0,0, :
- LEN=6) 0,0,0,0,0,0, :
- LEN=7) 0,0,0,0,0,0,0, :
- LEN=8) 0,0,0,0,0,0,0,0, :
- LEN=9) 0,0,0,0,0,0,0,0,0, :
- LEN=10) 0,0,0,0,0,0,0,0,0,0, :
- LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :

Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,1,

-----Class

1415-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][021][102][120][201]]$

--
 Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,1,--
- R3) 0,1,-->
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
- R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
- R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R9)
 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R10)
 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R11)
 0,0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, : 0,1, :
- LEN=3) 0,0,0, :
- LEN=4) 0,0,0,0, :
- LEN=5) 0,0,0,0,0, :
- LEN=6) 0,0,0,0,0,0, :

LEN=7) 0,0,0,0,0,0,0,:
 LEN=8) 0,0,0,0,0,0,0,0,:
 LEN=9) 0,0,0,0,0,0,0,0,0,:
 LEN=10) 0,0,0,0,0,0,0,0,0,0,:
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,:
 Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

-----Class

1416-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][021][102][120][210]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,1,--
- R3) 0,1,-->
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
- R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
- R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R9) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R10) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R11) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

- LEN=1) 0,:
 - LEN=2) 0,0,: 0,1,:
 - LEN=3) 0,0,0,:
 - LEN=4) 0,0,0,0,:
 - LEN=5) 0,0,0,0,0,:
 - LEN=6) 0,0,0,0,0,0,:
 - LEN=7) 0,0,0,0,0,0,0,:
 - LEN=8) 0,0,0,0,0,0,0,0,:
 - LEN=9) 0,0,0,0,0,0,0,0,0,:
 - LEN=10) 0,0,0,0,0,0,0,0,0,0,:
 - LEN=11) 0,0,0,0,0,0,0,0,0,0,0,:
- Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

-----Class

1417-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][021][102][201][210]]$

--

Rules of T[L]:

--0,1,--0,1,--

R11)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,0,0,:

LEN=4) 0,0,0,0,:

LEN=5) 0,0,0,0,0,:

LEN=6) 0,0,0,0,0,0,:

LEN=7) 0,0,0,0,0,0,0,:

LEN=8) 0,0,0,0,0,0,0,0,:

LEN=9) 0,0,0,0,0,0,0,0,0,:

LEN=10) 0,0,0,0,0,0,0,0,0,0,:

LEN=11) 0,0,0,0,0,0,0,0,0,0,0,:

Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,1,

-----Class

1419-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[010][011][012][021][110][120][210]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,1,--0,1,--

R3) 0,1,-->

R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--

R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--

R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--

R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--

R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

R9)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,
1,--

R10)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,
--0,1,--0,1,--

R11)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,0,0,:

LEN=4) 0,0,0,0,:

LEN=5) 0,0,0,0,0,:

LEN=6) 0,0,0,0,0,0,:

LEN=7) 0,0,0,0,0,0,0,:

LEN=8) 0,0,0,0,0,0,0,0,:

LEN=9) 0,0,0,0,0,0,0,0,0,0,0,
 LEN=10) 0,0,0,0,0,0,0,0,0,0,0,0,
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,0,0,
 Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,1,

-----Class

1420-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][021][110][201][210]]$

--
 Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,1,--
- R3) 0,1,-->
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
- R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
- R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R9) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R10) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R11) 0,0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, : 0,1, :
- LEN=3) 0,0,0, :
- LEN=4) 0,0,0,0, :
- LEN=5) 0,0,0,0,0, :
- LEN=6) 0,0,0,0,0,0, :
- LEN=7) 0,0,0,0,0,0,0, :
- LEN=8) 0,0,0,0,0,0,0,0, :
- LEN=9) 0,0,0,0,0,0,0,0,0, :
- LEN=10) 0,0,0,0,0,0,0,0,0,0, :
- LEN=11) 0,0,0,0,0,0,0,0,0,0,0,0, :

Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,1,

-----Class

1421-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][021][120][201][210]]$

--
 Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,1,--

R3) 0,1,-->
 R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
 R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
 R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
 R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 R9)
 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 1,--
 R10)
 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 --0,1,--0,1,--
 R11)
 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0, :
 LEN=2) 0,0, : 0,1, :
 LEN=3) 0,0,0, :
 LEN=4) 0,0,0,0, :
 LEN=5) 0,0,0,0,0, :
 LEN=6) 0,0,0,0,0,0, :
 LEN=7) 0,0,0,0,0,0,0, :
 LEN=8) 0,0,0,0,0,0,0,0, :
 LEN=9) 0,0,0,0,0,0,0,0,0, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :

Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

-----Class

1422-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][100][101][102][110]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--
 R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
 R3) 0,1,-->
 R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
 R5) 0,0,2,-->0,1,--
 R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
 R7) 0,0,0,3,-->0,1,--0,0,2,--
 R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
 R9) 0,0,0,0,4,-->0,1,--0,0,2,--0,0,0,3,--
 R10)
 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,
 0,0,0,0,0,6,--
 R11) 0,0,0,0,0,5,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
 R12)
 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,

```

--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--
R13) 0,0,0,0,0,0,6,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,5,--
R14)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,
0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--
R15)
0,0,0,0,0,0,7,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,5,--0,0,0,0,0,6,
--
R16)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,
0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--0,0,0,0,0,0,9
,--
R17)
0,0,0,0,0,0,0,8,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,5,--0,0,0,0,0,
6,--0,0,0,0,0,7,--
R18)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--0,0,0,0,0,0,0,
,0,9,--0,0,0,0,0,0,0,0,0,10,--
R19)
0,0,0,0,0,0,0,0,9,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,5,--0,0,0,0,
0,6,--0,0,0,0,0,7,--0,0,0,0,0,0,8,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, : 0,0,2, :
LEN=4) 0,0,0,0, : 0,0,0,3, :
LEN=5) 0,0,0,0,0, : 0,0,0,0,4, :
LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,5, :
LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,6, :
LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,7, :
LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,8, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,9, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,10, :
Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,

```

-----Class

1423-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][100][101][102][120]]$

--

Rules of T[L]:

```

R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
R3) 0,1,-->
R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
R5) 0,0,2,-->0,1,--
R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
R7) 0,0,0,3,-->0,1,--0,0,2,--
R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--

```

R9) 0,0,0,0,4,-->0,1,--0,0,2,--0,0,0,3,--
R10)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,
0,0,0,0,0,6,--
R11) 0,0,0,0,0,5,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
R12)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,
--0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--
R13) 0,0,0,0,0,0,6,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
R14)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,
0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--
R15)
0,0,0,0,0,0,0,7,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,
--
R16)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,
0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,9
,--
R17)
0,0,0,0,0,0,0,0,8,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,
6,--0,0,0,0,0,0,7,--
R18)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,
,0,9,--0,0,0,0,0,0,0,0,0,10,--
R19)
0,0,0,0,0,0,0,0,9,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,
0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, : 0,0,2, :
LEN=4) 0,0,0,0, : 0,0,0,3, :
LEN=5) 0,0,0,0,0, : 0,0,0,0,4, :
LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,5, :
LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,6, :
LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,7, :
LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,8, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,9, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,10, :
Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,

-----Class

1424-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[010][011][012][100][101][102][201]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
 R3) 0,1,-->
 R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
 R5) 0,0,2,-->0,1,--
 R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
 R7) 0,0,0,3,-->0,1,--0,0,2,--
 R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
 R9) 0,0,0,0,4,-->0,1,--0,0,2,--0,0,0,3,--
 R10)
 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,
 0,0,0,0,0,6,--
 R11) 0,0,0,0,0,5,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
 R12)
 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,
 --0,0,0,0,0,6,--0,0,0,0,0,0,7,--
 R13) 0,0,0,0,0,0,6,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
 R14)
 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,
 0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--
 R15)
 0,0,0,0,0,0,0,7,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,
 --
 R16)
 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,
 0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--0,0,0,0,0,0,9
 ,--
 R17)
 0,0,0,0,0,0,0,0,8,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,
 6,--0,0,0,0,0,0,7,--
 R18)
 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
 0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--0,0,0,0,0,0,0,
 ,0,9,--0,0,0,0,0,0,0,0,0,0,10,--
 R19)
 0,0,0,0,0,0,0,0,0,9,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,
 0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--

List of different nodes in T[L]

LEN=1) 0, :
 LEN=2) 0,0, : 0,1, :
 LEN=3) 0,0,0, : 0,0,2, :
 LEN=4) 0,0,0,0, : 0,0,0,3, :
 LEN=5) 0,0,0,0,0, : 0,0,0,0,4, :
 LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,5, :
 LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,6, :
 LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,7, :
 LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,8, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,9, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,10, :

Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1425-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][100][101][102][210]]$

--

Rules of $T[L]$:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$

R2) $0, 0, \rightarrow 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow$

R3) $0, 1, \rightarrow$

R4) $0, 0, 0, \rightarrow 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow 0, 0, 0, 3, \rightarrow$

R5) $0, 0, 2, \rightarrow 0, 1, \rightarrow$

R6) $0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow 0, 0, 0, 3, \rightarrow 0, 0, 0, 0, 4, \rightarrow$

R7) $0, 0, 0, 3, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$

R8) $0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow 0, 0, 0, 3, \rightarrow 0, 0, 0, 0, 4, \rightarrow 0, 0, 0, 0, 0, 5, \rightarrow$

R9) $0, 0, 0, 0, 4, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$

R10)

$0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow 0, 0, 0, 3, \rightarrow 0, 0, 0, 0, 4, \rightarrow 0, 0, 0, 0, 0, 5, \rightarrow 0, 0, 0, 0, 0, 6, \rightarrow$

R11) $0, 0, 0, 0, 0, 5, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$

R12)

$0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow 0, 0, 0, 3, \rightarrow 0, 0, 0, 0, 4, \rightarrow 0, 0, 0, 0, 0, 5, \rightarrow 0, 0, 0, 0, 0, 0, 6, \rightarrow 0, 0, 0, 0, 0, 0, 0, 7, \rightarrow$

R13) $0, 0, 0, 0, 0, 0, 6, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$

R14)

$0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow 0, 0, 0, 3, \rightarrow 0, 0, 0, 0, 4, \rightarrow 0, 0, 0, 0, 0, 5, \rightarrow 0, 0, 0, 0, 0, 0, 6, \rightarrow 0, 0, 0, 0, 0, 0, 0, 7, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 8, \rightarrow$

R15) $0, 0, 0, 0, 0, 0, 0, 7, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$

R16)

$0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow 0, 0, 0, 3, \rightarrow 0, 0, 0, 0, 4, \rightarrow 0, 0, 0, 0, 0, 5, \rightarrow 0, 0, 0, 0, 0, 0, 0, 6, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 7, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, 8, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, 9, \rightarrow$

, --

R17) $0, 0, 0, 0, 0, 0, 0, 0, 8, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$

R18)

$0, 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow 0, 0, 0, 3, \rightarrow 0, 0, 0, 0, 4, \rightarrow 0, 0, 0, 0, 0, 5, \rightarrow 0, 0, 0, 0, 0, 0, 6, \rightarrow 0, 0, 0, 0, 0, 0, 0, 7, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 8, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, 9, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 10, \rightarrow$

R19) $0, 0, 0, 0, 0, 0, 0, 0, 0, 9, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$

List of different nodes in $T[L]$

LEN=1) $0, :$

LEN=2) $0, 0, : 0, 1, :$

LEN=3) $0, 0, 0, : 0, 0, 2, :$

LEN=4) $0, 0, 0, 0, : 0, 0, 0, 3, :$

LEN=5) $0, 0, 0, 0, 0, : 0, 0, 0, 0, 4, :$

LEN=6) $0, 0, 0, 0, 0, 0, : 0, 0, 0, 0, 0, 5, :$

LEN=7) $0, 0, 0, 0, 0, 0, 0, : 0, 0, 0, 0, 0, 0, 6, :$

LEN=8) $0, 0, 0, 0, 0, 0, 0, 0, : 0, 0, 0, 0, 0, 0, 0, 7, :$

LEN=9) $0, 0, 0, 0, 0, 0, 0, 0, 0, : 0, 0, 0, 0, 0, 0, 0, 0, 8, :$

LEN=10) $0, 0, 0, 0, 0, 0, 0, 0, 0, 0, : 0, 0, 0, 0, 0, 0, 0, 0, 0, 9, :$

LEN=11) $0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, : 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 10, :$

Number new nodes in level n is given by : $1, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2,$

-----Class

1426-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][100][101][110][120]]$

--

Rules of $T[L]$:

R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$

R2) $0, 0, \rightarrow 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow$

R3) $0, 1, \rightarrow$

R4) $0, 0, 0, \rightarrow 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow 0, 0, 0, 3, \rightarrow$

R5) $0, 0, 2, \rightarrow 0, 1, \rightarrow$

R6) $0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow 0, 0, 0, 3, \rightarrow 0, 0, 0, 0, 4, \rightarrow$

R7) $0, 0, 0, 3, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow$

R8) $0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow 0, 0, 0, 3, \rightarrow 0, 0, 0, 0, 4, \rightarrow 0, 0, 0, 0, 0, 5, \rightarrow$

R9) $0, 0, 0, 0, 4, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow 0, 0, 0, 3, \rightarrow$

R10)

$0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow 0, 0, 0, 3, \rightarrow 0, 0, 0, 0, 4, \rightarrow 0, 0, 0, 0, 0, 5, \rightarrow 0, 0, 0, 0, 0, 6, \rightarrow$

R11) $0, 0, 0, 0, 0, 5, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow 0, 0, 0, 3, \rightarrow 0, 0, 0, 0, 4, \rightarrow$

R12)

$0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow 0, 0, 0, 3, \rightarrow 0, 0, 0, 0, 4, \rightarrow 0, 0, 0, 0, 0, 5, \rightarrow 0, 0, 0, 0, 0, 0, 6, \rightarrow 0, 0, 0, 0, 0, 0, 0, 7, \rightarrow$

R13) $0, 0, 0, 0, 0, 0, 6, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow 0, 0, 0, 3, \rightarrow 0, 0, 0, 0, 4, \rightarrow 0, 0, 0, 0, 0, 5, \rightarrow$

R14)

$0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow 0, 0, 0, 3, \rightarrow 0, 0, 0, 0, 4, \rightarrow 0, 0, 0, 0, 0, 5, \rightarrow 0, 0, 0, 0, 0, 6, \rightarrow 0, 0, 0, 0, 0, 0, 7, \rightarrow 0, 0, 0, 0, 0, 0, 0, 8, \rightarrow$

R15)

$0, 0, 0, 0, 0, 0, 0, 7, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow 0, 0, 0, 3, \rightarrow 0, 0, 0, 0, 4, \rightarrow 0, 0, 0, 0, 0, 5, \rightarrow 0, 0, 0, 0, 0, 6, \rightarrow$

R16)

$0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow 0, 0, 0, 3, \rightarrow 0, 0, 0, 0, 4, \rightarrow 0, 0, 0, 0, 0, 5, \rightarrow 0, 0, 0, 0, 0, 0, 6, \rightarrow 0, 0, 0, 0, 0, 0, 0, 7, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 8, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 9, \rightarrow$

R17)

$0, 0, 0, 0, 0, 0, 0, 0, 8, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow 0, 0, 0, 3, \rightarrow 0, 0, 0, 0, 4, \rightarrow 0, 0, 0, 0, 0, 5, \rightarrow 0, 0, 0, 0, 0, 6, \rightarrow 0, 0, 0, 0, 0, 0, 7, \rightarrow$

R18)

$0, 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow 0, 0, 0, 3, \rightarrow 0, 0, 0, 0, 4, \rightarrow 0, 0, 0, 0, 0, 5, \rightarrow 0, 0, 0, 0, 0, 6, \rightarrow 0, 0, 0, 0, 0, 0, 7, \rightarrow 0, 0, 0, 0, 0, 0, 0, 8, \rightarrow 0, 0, 0, 0, 0, 0, 0, 9, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 10, \rightarrow$

R19)

$0, 0, 0, 0, 0, 0, 0, 0, 9, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow 0, 0, 0, 3, \rightarrow 0, 0, 0, 0, 4, \rightarrow 0, 0, 0, 0, 0, 5, \rightarrow 0, 0, 0, 0, 0, 6, \rightarrow 0, 0, 0, 0, 0, 0, 7, \rightarrow 0, 0, 0, 0, 0, 0, 8, \rightarrow$

List of different nodes in $T[L]$

LEN=1) $0, :$

LEN=2) $0, 0, : 0, 1, :$

LEN=3) $0, 0, 0, : 0, 0, 2, :$

LEN=4) $0, 0, 0, 0, : 0, 0, 0, 3, :$

LEN=5) $0, 0, 0, 0, 0, : 0, 0, 0, 0, 4, :$

LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,5,:
 LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,6,:
 LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,7,:
 LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,8,:
 LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,9,:
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,10,:
 Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,

-----Class

1427-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][100][101][110][201]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
- R3) 0,1,-->
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
- R5) 0,0,2,-->0,1,--
- R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
- R7) 0,0,0,3,-->0,1,--0,0,2,--
- R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
- R9) 0,0,0,0,4,-->0,1,--0,0,2,--0,0,0,3,--
- R10) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--
- R11) 0,0,0,0,0,5,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
- R12) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--
- R13) 0,0,0,0,0,0,6,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
- R14) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--
- R15) 0,0,0,0,0,0,0,7,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--
- R16) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--
- R17) 0,0,0,0,0,0,0,0,8,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--
- R18) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--0,0,0,0,0,0,0,0,0,10,--
- R19) 0,0,0,0,0,0,0,0,0,9,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,

0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,0,0,: 0,0,2,:

LEN=4) 0,0,0,0,: 0,0,0,3,:

LEN=5) 0,0,0,0,0,: 0,0,0,0,4,:

LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,5,:

LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,6,:

LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,7,:

LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,8,:

LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,9,:

LEN=11) 0,0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,10,:

Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,

-----Class

1428-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[010][011][012][100][101][110][210]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,1,--0,0,2,--

R3) 0,1,-->

R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--

R5) 0,0,2,-->0,1,--

R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--

R7) 0,0,0,3,-->0,1,--0,1,--

R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--

R9) 0,0,0,0,4,-->0,1,--0,1,--0,1,--

R10)

0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--

R11) 0,0,0,0,0,5,-->0,1,--0,1,--0,1,--0,1,--

R12)

0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--

R13) 0,0,0,0,0,0,6,-->0,1,--0,1,--0,1,--0,1,--0,1,--

R14)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--

R15) 0,0,0,0,0,0,0,7,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

R16)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9

,--

R17) 0,0,0,0,0,0,0,0,8,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

R18)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0

,0,9,--0,0,0,0,0,0,0,0,0,0,10,--
R19) 0,0,0,0,0,0,0,0,0,0,9,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
List of different nodes in T[L]

- LEN=1) 0,:
 - LEN=2) 0,0,: 0,1,:
 - LEN=3) 0,0,0,: 0,0,2,:
 - LEN=4) 0,0,0,0,: 0,0,0,3,:
 - LEN=5) 0,0,0,0,0,: 0,0,0,0,4,:
 - LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,5,:
 - LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,6,:
 - LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,7,:
 - LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,8,:
 - LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,9,:
 - LEN=11) 0,0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,10,:
- Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1429-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][100][101][120][201]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
- R3) 0,1,-->
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
- R5) 0,0,2,-->0,1,--
- R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
- R7) 0,0,0,3,-->0,1,--0,0,2,--
- R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
- R9) 0,0,0,0,4,-->0,1,--0,0,2,--0,0,0,3,--
- R10)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,
0,0,0,0,0,6,--
- R11) 0,0,0,0,0,5,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
- R12)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,
--0,0,0,0,0,6,--0,0,0,0,0,0,7,--
- R13) 0,0,0,0,0,0,6,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
- R14)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,
0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--
- R15)
0,0,0,0,0,0,0,7,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,
--
- R16)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,
0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--0,0,0,0,0,0,9,
,--
- R17)

0,0,0,0,0,0,0,0,8,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--

R18)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--0,0,0,0,0,0,0,0,0,0,10,--

R19)

0,0,0,0,0,0,0,0,0,9,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, : 0,1, :

LEN=3) 0,0,0, : 0,0,2, :

LEN=4) 0,0,0,0, : 0,0,0,3, :

LEN=5) 0,0,0,0,0, : 0,0,0,0,4, :

LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,5, :

LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,6, :

LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,7, :

LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,8, :

LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,9, :

LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,10, :

Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1430-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][100][101][120][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,1,--0,0,2,--

R3) 0,1,-->

R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--

R5) 0,0,2,-->0,1,--

R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--

R7) 0,0,0,3,-->0,1,--0,1,--

R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--

R9) 0,0,0,0,4,-->0,1,--0,1,--0,1,--

R10)

0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--

R11) 0,0,0,0,0,5,-->0,1,--0,1,--0,1,--0,1,--

R12)

0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--

R13) 0,0,0,0,0,0,6,-->0,1,--0,1,--0,1,--0,1,--

R14)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--

R15) 0,0,0,0,0,0,0,7,-->0,1,--0,1,--0,1,--0,1,--0,1,--

R16)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,
0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--0,0,0,0,0,0,0,9
,--

R17) 0,0,0,0,0,0,0,8,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

R18)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--0,0,0,0,0,0,0,
,0,9,--0,0,0,0,0,0,0,10,--

R19) 0,0,0,0,0,0,0,0,9,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,0,0,: 0,0,2,:

LEN=4) 0,0,0,0,: 0,0,0,3,:

LEN=5) 0,0,0,0,0,: 0,0,0,0,4,:

LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,5,:

LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,6,:

LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,7,:

LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,8,:

LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,9,:

LEN=11) 0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,10,:

Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1431-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][100][101][201][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,1,--0,0,2,--

R3) 0,1,-->

R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--

R5) 0,0,2,-->0,1,--

R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--

R7) 0,0,0,3,-->0,1,--0,1,--

R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--

R9) 0,0,0,0,4,-->0,1,--0,1,--0,1,--

R10)

0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,
0,0,0,0,6,--

R11) 0,0,0,0,0,5,-->0,1,--0,1,--0,1,--0,1,--

R12)

0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,
--0,0,0,0,0,6,--0,0,0,0,0,0,7,--

R13) 0,0,0,0,0,0,6,-->0,1,--0,1,--0,1,--0,1,--

R14)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,
0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--

R15) 0,0,0,0,0,0,0,7,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

R16)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--0,0,0,0,0,0,9,--

R17) 0,0,0,0,0,0,0,8,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

R18)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--0,0,0,0,0,0,9,--0,0,0,0,0,0,10,--

R19) 0,0,0,0,0,0,0,0,9,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,0,0,: 0,0,2,:

LEN=4) 0,0,0,0,: 0,0,0,3,:

LEN=5) 0,0,0,0,0,: 0,0,0,0,4,:

LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,5,:

LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,6,:

LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,7,:

LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,8,:

LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,9,:

LEN=11) 0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,10,:

Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1432-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][100][102][110][120]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,1,--0,0,2,--

R3) 0,1,-->

R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--

R5) 0,0,2,-->0,1,--

R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--

R7) 0,0,0,3,-->0,1,--0,0,2,--

R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--

R9) 0,0,0,0,4,-->0,1,--0,0,2,--0,0,0,3,--

R10)

0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--

R11) 0,0,0,0,0,5,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,4,--

R12)

0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,7,--

R13) 0,0,0,0,0,6,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,4,--0,0,0,0,5,--

R14)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,

0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--
R15)
0,0,0,0,0,0,7,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,
--
R16)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,
0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9
,--
R17)
0,0,0,0,0,0,0,8,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,
6,--0,0,0,0,0,0,7,--
R18)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--0,0,0,0,0,0,0,
,0,9,--0,0,0,0,0,0,0,0,0,10,--
R19)
0,0,0,0,0,0,0,0,9,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,
0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, : 0,0,2, :
LEN=4) 0,0,0,0, : 0,0,0,3, :
LEN=5) 0,0,0,0,0, : 0,0,0,0,4, :
LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,5, :
LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,6, :
LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,7, :
LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,8, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,9, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,10, :

Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1433-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][100][102][110][201]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
R3) 0,1,-->
R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
R5) 0,0,2,-->0,1,--
R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
R7) 0,0,0,3,-->0,1,--0,0,2,--
R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
R9) 0,0,0,0,4,-->0,1,--0,0,2,--0,0,0,3,--
R10)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,
0,0,0,0,0,6,--

R11) 0,0,0,0,0,5,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
R12)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,
--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--
R13) 0,0,0,0,0,0,6,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
R14)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,
0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--
R15)
0,0,0,0,0,0,0,7,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,
--
R16)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,
0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,9
,--
R17)
0,0,0,0,0,0,0,0,8,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,
6,--0,0,0,0,0,0,7,--
R18)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,
0,9,--0,0,0,0,0,0,0,0,0,0,10,--
R19)
0,0,0,0,0,0,0,0,0,9,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,
0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, : 0,0,2, :
LEN=4) 0,0,0,0, : 0,0,0,3, :
LEN=5) 0,0,0,0,0, : 0,0,0,0,4, :
LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,5, :
LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,6, :
LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,7, :
LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,8, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,9, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,10, :
Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,

-----Class
1434-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][100][102][110][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
R3) 0,1,-->
R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
R5) 0,0,2,-->0,1,--

R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
 R7) 0,0,0,3,-->0,1,--0,1,--
 R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
 R9) 0,0,0,0,4,-->0,1,--0,1,--0,1,--
 R10) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--
 R11) 0,0,0,0,0,5,-->0,1,--0,1,--0,1,--0,1,--
 R12) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--
 R13) 0,0,0,0,0,0,6,-->0,1,--0,1,--0,1,--0,1,--0,1,--
 R14) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--
 R15) 0,0,0,0,0,0,0,7,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 R16) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--
 R17) 0,0,0,0,0,0,0,0,8,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 R18) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--0,0,0,0,0,0,0,0,0,10,--
 R19) 0,0,0,0,0,0,0,0,0,9,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0, :
 LEN=2) 0,0, : 0,1, :
 LEN=3) 0,0,0, : 0,0,2, :
 LEN=4) 0,0,0,0, : 0,0,0,3, :
 LEN=5) 0,0,0,0,0, : 0,0,0,0,4, :
 LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,5, :
 LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,6, :
 LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,7, :
 LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,8, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,9, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,10, :
 Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1435-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][100][102][120][201]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--
 R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
 R3) 0,1,-->
 R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--

R5) 0,0,2,-->0,1,--
 R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
 R7) 0,0,0,3,-->0,1,--0,0,2,--
 R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
 R9) 0,0,0,0,4,-->0,1,--0,0,2,--0,0,0,3,--
 R10) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--
 R11) 0,0,0,0,0,5,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
 R12) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,7,--
 R13) 0,0,0,0,0,0,6,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
 R14) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,7,--0,0,0,0,0,8,--
 R15) 0,0,0,0,0,0,0,7,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--
 R16) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,7,--0,0,0,0,0,8,--0,0,0,0,0,9,--
 R17) 0,0,0,0,0,0,0,0,8,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,7,--
 R18) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,7,--0,0,0,0,0,8,--0,0,0,0,0,9,--0,0,0,0,0,10,--
 R19) 0,0,0,0,0,0,0,0,0,9,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,7,--0,0,0,0,0,8,--

List of different nodes in T[L]

LEN=1) 0, :
 LEN=2) 0,0, : 0,1, :
 LEN=3) 0,0,0, : 0,0,2, :
 LEN=4) 0,0,0,0, : 0,0,0,3, :
 LEN=5) 0,0,0,0,0, : 0,0,0,0,4, :
 LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,5, :
 LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,6, :
 LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,7, :
 LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,8, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,9, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,10, :

Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1436-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][100][102][120][210]]$

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--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
R3) 0,1,-->
R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
R5) 0,0,2,-->0,1,--
R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
R7) 0,0,0,3,-->0,1,--0,1,--
R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
R9) 0,0,0,0,4,-->0,1,--0,1,--0,1,--
R10)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,
0,0,0,0,0,6,--
R11) 0,0,0,0,0,5,-->0,1,--0,1,--0,1,--0,1,--
R12)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,
--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--
R13) 0,0,0,0,0,0,6,-->0,1,--0,1,--0,1,--0,1,--0,1,--
R14)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,
0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--
R15) 0,0,0,0,0,0,0,0,7,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R16)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,
0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9
,--
R17) 0,0,0,0,0,0,0,0,0,8,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R18)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,
0,9,--0,0,0,0,0,0,0,0,0,10,--
R19) 0,0,0,0,0,0,0,0,0,0,9,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

```

List of different nodes in T[L]

```

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, : 0,0,2, :
LEN=4) 0,0,0,0, : 0,0,0,3, :
LEN=5) 0,0,0,0,0, : 0,0,0,0,4, :
LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,5, :
LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,6, :
LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,7, :
LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,8, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,9, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,10, :
Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,

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-----Class

1437-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][100][102][201][210]]$

--

Rules of $T[L]$:

- R1) 0, -->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
- R3) 0,1,-->
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
- R5) 0,0,2,-->0,1,--
- R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
- R7) 0,0,0,3,-->0,1,--0,1,--
- R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
- R9) 0,0,0,0,4,-->0,1,--0,1,--0,1,--
- R10) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--
- R11) 0,0,0,0,0,5,-->0,1,--0,1,--0,1,--0,1,--
- R12) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--
- R13) 0,0,0,0,0,0,6,-->0,1,--0,1,--0,1,--0,1,--0,1,--
- R14) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--
- R15) 0,0,0,0,0,0,0,7,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R16) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--
- R17) 0,0,0,0,0,0,0,0,8,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R18) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--0,0,0,0,0,0,0,0,10,--
- R19) 0,0,0,0,0,0,0,0,0,9,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in $T[L]$

- LEN=1) 0, :
 - LEN=2) 0,0, : 0,1, :
 - LEN=3) 0,0,0, : 0,0,2, :
 - LEN=4) 0,0,0,0, : 0,0,0,3, :
 - LEN=5) 0,0,0,0,0, : 0,0,0,0,4, :
 - LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,5, :
 - LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,6, :
 - LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,7, :
 - LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,8, :
 - LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,9, :
 - LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,10, :
- Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,

-----Class

1438-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][100][110][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
R3) 0,1,-->
R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
R5) 0,0,2,-->0,1,--
R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
R7) 0,0,0,3,-->0,1,--0,0,2,--
R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
R9) 0,0,0,0,0,4,-->0,1,--0,0,2,--0,0,0,3,--
R10)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,
0,0,0,0,0,6,--
R11) 0,0,0,0,0,5,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
R12)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,
--0,0,0,0,0,6,--0,0,0,0,0,0,7,--
R13) 0,0,0,0,0,0,6,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
R14)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,
0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--
R15)
0,0,0,0,0,0,0,7,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,
--
R16)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,
0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--0,0,0,0,0,0,9
,--
R17)
0,0,0,0,0,0,0,0,8,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,
6,--0,0,0,0,0,7,--
R18)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--0,0,0,0,0,0,0,
0,9,--0,0,0,0,0,0,0,10,--
R19)
0,0,0,0,0,0,0,0,0,9,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,
0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, : 0,0,2, :
LEN=4) 0,0,0,0, : 0,0,0,3, :
LEN=5) 0,0,0,0,0, : 0,0,0,0,4, :
LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,5, :
LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,6, :

LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,7, :
 LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,8, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,9, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,10, :
 Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,

-----Class

1439-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][100][110][120][210]]$

--
 Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
- R3) 0,1,-->
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
- R5) 0,0,2,-->0,1,--
- R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
- R7) 0,0,0,3,-->0,1,--0,1,--
- R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
- R9) 0,0,0,0,4,-->0,1,--0,1,--0,1,--
- R10) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--
- R11) 0,0,0,0,0,5,-->0,1,--0,1,--0,1,--0,1,--
- R12) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--
- R13) 0,0,0,0,0,0,6,-->0,1,--0,1,--0,1,--0,1,--0,1,--
- R14) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--
- R15) 0,0,0,0,0,0,0,7,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R16) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--
- R17) 0,0,0,0,0,0,0,0,0,8,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R18) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--0,0,0,0,0,0,0,0,10,--
- R19) 0,0,0,0,0,0,0,0,0,9,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, : 0,1, :
- LEN=3) 0,0,0, : 0,0,2, :
- LEN=4) 0,0,0,0, : 0,0,0,3, :
- LEN=5) 0,0,0,0,0, : 0,0,0,0,4, :
- LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,5, :

LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,6,:
 LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,7,:
 LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,8,:
 LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,9,:
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,10,:
 Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,

-----Class

1440-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][100][110][201][210]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
- R3) 0,1,-->
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
- R5) 0,0,2,-->0,1,--
- R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
- R7) 0,0,0,3,-->0,1,--0,1,--
- R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
- R9) 0,0,0,0,4,-->0,1,--0,1,--0,1,--
- R10) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--
- R11) 0,0,0,0,0,5,-->0,1,--0,1,--0,1,--0,1,--
- R12) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--
- R13) 0,0,0,0,0,0,6,-->0,1,--0,1,--0,1,--0,1,--0,1,--
- R14) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--
- R15) 0,0,0,0,0,0,0,7,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R16) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--
- R17) 0,0,0,0,0,0,0,0,8,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R18) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--0,0,0,0,0,0,0,0,0,10,--
- R19) 0,0,0,0,0,0,0,0,0,9,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

- LEN=1) 0,:
- LEN=2) 0,0,: 0,1,:
- LEN=3) 0,0,0,: 0,0,2,:
- LEN=4) 0,0,0,0,: 0,0,0,3,:
- LEN=5) 0,0,0,0,0,: 0,0,0,0,4,:

LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,5,:
 LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,6,:
 LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,7,:
 LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,8,:
 LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,9,:
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,10,:
 Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,

-----Class

1441-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][100][120][201][210]]$

--
 Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
- R3) 0,1,-->
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
- R5) 0,0,2,-->0,1,--
- R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
- R7) 0,0,0,3,-->0,1,--0,1,--
- R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
- R9) 0,0,0,0,4,-->0,1,--0,1,--0,1,--
- R10) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--
- R11) 0,0,0,0,0,5,-->0,1,--0,1,--0,1,--0,1,--
- R12) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--
- R13) 0,0,0,0,0,0,6,-->0,1,--0,1,--0,1,--0,1,--0,1,--
- R14) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--
- R15) 0,0,0,0,0,0,0,7,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R16) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--
- R17) 0,0,0,0,0,0,0,0,8,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R18) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--0,0,0,0,0,0,0,0,0,0,10,--
- R19) 0,0,0,0,0,0,0,0,0,9,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

- LEN=1) 0,:
- LEN=2) 0,0,: 0,1,:
- LEN=3) 0,0,0,: 0,0,2,:
- LEN=4) 0,0,0,0,: 0,0,0,3,:

LEN=5) 0,0,0,0,0,: 0,0,0,0,4,:
 LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,5,:
 LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,6,:
 LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,7,:
 LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,8,:
 LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,9,:
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,10,:
 Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1442-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][101][102][110][120]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
- R3) 0,1,-->
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
- R5) 0,0,2,-->0,1,--
- R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
- R7) 0,0,0,3,-->0,1,--0,0,2,--
- R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
- R9) 0,0,0,0,4,-->0,1,--0,0,2,--0,0,0,3,--
- R10) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--
- R11) 0,0,0,0,0,5,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
- R12) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--
- R13) 0,0,0,0,0,0,6,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
- R14) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--
- R15) 0,0,0,0,0,0,0,7,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--
- R16) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--
- R17) 0,0,0,0,0,0,0,0,8,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--
- R18) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--0,0,0,0,0,0,0,0,0,10,--
- R19)

0,0,0,0,0,0,0,0,0,9,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--

List of different nodes in T[L]

- LEN=1) 0,:
- LEN=2) 0,0,: 0,1,:
- LEN=3) 0,0,0,: 0,0,2,:
- LEN=4) 0,0,0,0,: 0,0,0,3,:
- LEN=5) 0,0,0,0,0,: 0,0,0,0,4,:
- LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,5,:
- LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,6,:
- LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,7,:
- LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,8,:
- LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,9,:
- LEN=11) 0,0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,10,:

Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1443-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][101][102][110][201]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
- R3) 0,1,-->
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
- R5) 0,0,2,-->0,1,--
- R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
- R7) 0,0,0,3,-->0,1,--0,0,2,--
- R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
- R9) 0,0,0,0,4,-->0,1,--0,0,2,--0,0,0,3,--
- R10) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--
- R11) 0,0,0,0,0,5,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
- R12) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--
- R13) 0,0,0,0,0,0,6,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
- R14) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--
- R15) 0,0,0,0,0,0,0,7,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--
- R16) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--
- R17) ,--

0,0,0,0,0,0,0,0,8,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--

R18)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--0,0,0,0,0,0,0,0,0,0,10,--

R19)

0,0,0,0,0,0,0,0,0,9,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,0,0,: 0,0,2,:

LEN=4) 0,0,0,0,: 0,0,0,3,:

LEN=5) 0,0,0,0,0,: 0,0,0,0,4,:

LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,5,:

LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,6,:

LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,7,:

LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,8,:

LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,9,:

LEN=11) 0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,10,:

Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1444-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][101][102][110][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,1,--0,0,2,--

R3) 0,1,-->

R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--

R5) 0,0,2,-->0,1,--

R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--

R7) 0,0,0,3,-->0,1,--0,1,--

R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--

R9) 0,0,0,0,4,-->0,1,--0,1,--0,1,--

R10)

0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--

R11) 0,0,0,0,0,5,-->0,1,--0,1,--0,1,--0,1,--

R12)

0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--

R13) 0,0,0,0,0,0,6,-->0,1,--0,1,--0,1,--0,1,--0,1,--

R14)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--

R15) 0,0,0,0,0,0,0,7,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

R16)
 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,
 0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--0,0,0,0,0,0,0,9
 ,--

R17) 0,0,0,0,0,0,0,8,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

R18)
 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
 0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--0,0,0,0,0,0,0,
 ,0,9,--0,0,0,0,0,0,0,0,0,10,--

R19) 0,0,0,0,0,0,0,0,9,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,0,0,: 0,0,2,:

LEN=4) 0,0,0,0,: 0,0,0,3,:

LEN=5) 0,0,0,0,0,: 0,0,0,0,4,:

LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,5,:

LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,6,:

LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,7,:

LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,8,:

LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,9,:

LEN=11) 0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,10,:

Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1445-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][101][102][120][201]]$

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Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,1,--0,0,2,--

R3) 0,1,-->

R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--

R5) 0,0,2,-->0,1,--

R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--

R7) 0,0,0,3,-->0,1,--0,0,2,--

R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--

R9) 0,0,0,0,4,-->0,1,--0,0,2,--0,0,0,3,--

R10)

0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,
 0,0,0,0,0,6,--

R11) 0,0,0,0,0,5,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--

R12)

0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,
 --0,0,0,0,0,6,--0,0,0,0,0,0,7,--

R13) 0,0,0,0,0,0,6,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--

R14)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,
 0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--

R15)
0,0,0,0,0,0,0,7,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,
--

R16)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,
0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9
,--

R17)
0,0,0,0,0,0,0,0,8,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,
6,--0,0,0,0,0,0,0,7,--

R18)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,
,0,9,--0,0,0,0,0,0,0,0,0,0,10,--

R19)
0,0,0,0,0,0,0,0,0,9,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,
0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,0,0,: 0,0,2,:

LEN=4) 0,0,0,0,: 0,0,0,3,:

LEN=5) 0,0,0,0,0,: 0,0,0,0,4,:

LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,5,:

LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,6,:

LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,7,:

LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,8,:

LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,9,:

LEN=11) 0,0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,10,:

Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1446-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][101][102][120][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,1,--0,0,2,--

R3) 0,1,-->

R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--

R5) 0,0,2,-->0,1,--

R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--

R7) 0,0,0,3,-->0,1,--0,1,--

R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--

R9) 0,0,0,0,4,-->0,1,--0,1,--0,1,--

R10)

0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,
0,0,0,0,0,6,--

R11) 0,0,0,0,0,5,-->0,1,--0,1,--0,1,--0,1,--

R12) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,
--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--
R13) 0,0,0,0,0,0,6,-->0,1,--0,1,--0,1,--0,1,--0,1,--
R14) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,
0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--
R15) 0,0,0,0,0,0,0,7,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R16) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,
0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,9
,--
R17) 0,0,0,0,0,0,0,0,8,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R18) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0
,0,9,--0,0,0,0,0,0,0,0,0,10,--
R19) 0,0,0,0,0,0,0,0,0,9,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, : 0,0,2, :
LEN=4) 0,0,0,0, : 0,0,0,3, :
LEN=5) 0,0,0,0,0, : 0,0,0,0,4, :
LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,5, :
LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,6, :
LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,7, :
LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,8, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,9, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,10, :

Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1447-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][101][102][201][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
R3) 0,1,-->
R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
R5) 0,0,2,-->0,1,--
R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
R7) 0,0,0,3,-->0,1,--0,1,--
R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
R9) 0,0,0,0,4,-->0,1,--0,1,--0,1,--
R10) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,
0,0,0,0,0,6,--

R11) 0,0,0,0,0,5,-->0,1,--0,1,--0,1,--0,1,--
R12)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,
--0,0,0,0,0,6,--0,0,0,0,0,0,7,--
R13) 0,0,0,0,0,0,6,-->0,1,--0,1,--0,1,--0,1,--0,1,--
R14)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,
0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--
R15) 0,0,0,0,0,0,0,0,7,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R16)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,
0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9
,--
R17) 0,0,0,0,0,0,0,0,0,8,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R18)
0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,
0,9,--0,0,0,0,0,0,0,0,0,10,--
R19) 0,0,0,0,0,0,0,0,0,0,9,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, : 0,0,2, :
LEN=4) 0,0,0,0, : 0,0,0,3, :
LEN=5) 0,0,0,0,0, : 0,0,0,0,4, :
LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,5, :
LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,6, :
LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,7, :
LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,8, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,9, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,10, :

Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1448-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][101][110][120][201]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
R3) 0,1,-->
R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
R5) 0,0,2,-->0,1,--
R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
R7) 0,0,0,3,-->0,1,--0,0,2,--
R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
R9) 0,0,0,0,4,-->0,1,--0,0,2,--0,0,0,3,--
R10)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,

0,0,0,0,0,6,--
 R11) 0,0,0,0,0,5,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
 R12)
 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,
 --0,0,0,0,0,6,--0,0,0,0,0,0,7,--
 R13) 0,0,0,0,0,0,6,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
 R14)
 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,
 0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--
 R15)
 0,0,0,0,0,0,0,7,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,
 --
 R16)
 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,
 0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,9
 ,--
 R17)
 0,0,0,0,0,0,0,0,8,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,
 6,--0,0,0,0,0,0,7,--
 R18)
 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
 0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,
 0,9,--0,0,0,0,0,0,0,0,0,0,10,--
 R19)
 0,0,0,0,0,0,0,0,0,9,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,
 0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--
 List of different nodes in T[L]
 LEN=1) 0, :
 LEN=2) 0,0, : 0,1, :
 LEN=3) 0,0,0, : 0,0,2, :
 LEN=4) 0,0,0,0, : 0,0,0,3, :
 LEN=5) 0,0,0,0,0, : 0,0,0,0,4, :
 LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,5, :
 LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,6, :
 LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,7, :
 LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,8, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,9, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,10, :
 Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,

-----Class

1449-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][101][110][120][210]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
- R3) 0,1,-->
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--

R5) 0,0,2,-->0,1,--
 R6) 0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
 R7) 0,0,0,3,-->0,1,--0,1,--
 R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
 R9) 0,0,0,0,4,-->0,1,--0,1,--0,1,--
 R10) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--
 R11) 0,0,0,0,0,0,5,-->0,1,--0,1,--0,1,--0,1,--
 R12) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--
 R13) 0,0,0,0,0,0,6,-->0,1,--0,1,--0,1,--0,1,--0,1,--
 R14) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--
 R15) 0,0,0,0,0,0,0,0,7,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 R16) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--
 R17) 0,0,0,0,0,0,0,0,0,8,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 R18) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--0,0,0,0,0,0,0,0,0,10,--
 R19) 0,0,0,0,0,0,0,0,0,0,9,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0, :
 LEN=2) 0,0, : 0,1, :
 LEN=3) 0,0,0, : 0,0,2, :
 LEN=4) 0,0,0,0, : 0,0,0,3, :
 LEN=5) 0,0,0,0,0, : 0,0,0,0,4, :
 LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,5, :
 LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,6, :
 LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,7, :
 LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,8, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,9, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,10, :
 Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,

-----Class

1450-----
 Inversion Sequences (I_n=(n+1)!) avoiding L=[[010][011][012][101][110][201][210]]

Rules of T[L]:

R1) 0,-->0,0,--0,1,--
 R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
 R3) 0,1,-->

R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
 R5) 0,0,2,-->0,1,--
 R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
 R7) 0,0,0,3,-->0,1,--0,1,--
 R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
 R9) 0,0,0,0,4,-->0,1,--0,1,--0,1,--
 R10) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--
 R11) 0,0,0,0,0,0,5,-->0,1,--0,1,--0,1,--0,1,--
 R12) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,7,--
 R13) 0,0,0,0,0,0,6,-->0,1,--0,1,--0,1,--0,1,--0,1,--
 R14) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--
 R15) 0,0,0,0,0,0,0,7,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 R16) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--
 R17) 0,0,0,0,0,0,0,0,0,8,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 R18) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--0,0,0,0,0,0,0,0,0,10,--
 R19) 0,0,0,0,0,0,0,0,0,0,9,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0, :
 LEN=2) 0,0, : 0,1, :
 LEN=3) 0,0,0, : 0,0,2, :
 LEN=4) 0,0,0,0, : 0,0,0,3, :
 LEN=5) 0,0,0,0,0, : 0,0,0,0,4, :
 LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,5, :
 LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,6, :
 LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,7, :
 LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,8, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,9, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,10, :
 Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,

-----Class

1451-----
 Inversion Sequences (I_n=(n+1)!) avoiding L=[[010][011][012][101][120][201][210]]

--
 Rules of T[L]:

R1) 0,-->0,0,--0,1,--
 R2) 0,0,-->0,0,0,--0,1,--0,0,2,--

R3) 0,1,-->
R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
R5) 0,0,2,-->0,1,--
R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
R7) 0,0,0,3,-->0,1,--0,1,--
R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
R9) 0,0,0,0,4,-->0,1,--0,1,--0,1,--
R10)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,
0,0,0,0,0,6,--
R11) 0,0,0,0,0,5,-->0,1,--0,1,--0,1,--0,1,--
R12)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,
--0,0,0,0,0,6,--0,0,0,0,0,0,7,--
R13) 0,0,0,0,0,0,6,-->0,1,--0,1,--0,1,--0,1,--0,1,--
R14)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,
0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--
R15) 0,0,0,0,0,0,0,7,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R16)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,
0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,9
,--
R17) 0,0,0,0,0,0,0,0,8,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R18)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,
,0,9,--0,0,0,0,0,0,0,0,10,--
R19) 0,0,0,0,0,0,0,0,0,9,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, : 0,0,2, :
LEN=4) 0,0,0,0, : 0,0,0,3, :
LEN=5) 0,0,0,0,0, : 0,0,0,0,4, :
LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,5, :
LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,6, :
LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,7, :
LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,8, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,9, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,10, :
Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,

-----Class

1452-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[010][011][012][102][110][120][201]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
 R3) 0,1,-->
 R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
 R5) 0,0,2,-->0,1,--
 R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
 R7) 0,0,0,3,-->0,1,--0,0,2,--
 R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
 R9) 0,0,0,0,4,-->0,1,--0,0,2,--0,0,0,3,--
 R10)
 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,
 0,0,0,0,0,6,--
 R11) 0,0,0,0,0,5,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
 R12)
 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,
 --0,0,0,0,0,6,--0,0,0,0,0,0,7,--
 R13) 0,0,0,0,0,0,6,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
 R14)
 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,
 0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--
 R15)
 0,0,0,0,0,0,0,7,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,
 --
 R16)
 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,
 0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--0,0,0,0,0,0,9
 ,--
 R17)
 0,0,0,0,0,0,0,0,8,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,
 6,--0,0,0,0,0,0,7,--
 R18)
 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
 0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--0,0,0,0,0,0,0,
 ,0,9,--0,0,0,0,0,0,0,0,0,0,10,--
 R19)
 0,0,0,0,0,0,0,0,0,9,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,
 0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, : 0,1, :

LEN=3) 0,0,0, : 0,0,2, :

LEN=4) 0,0,0,0, : 0,0,0,3, :

LEN=5) 0,0,0,0,0, : 0,0,0,0,4, :

LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,5, :

LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,6, :

LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,7, :

LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,8, :

LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,9, :

LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,10, :

Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1453-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][102][110][120][210]]$

--

Rules of $T[L]$:

R1) $0, -->0,0, --0,1, --$

R2) $0,0, -->0,0,0, --0,1, --0,0,2, --$

R3) $0,1, -->$

R4) $0,0,0, -->0,0,0,0, --0,1, --0,0,2, --0,0,0,3, --$

R5) $0,0,2, -->0,1, --$

R6) $0,0,0,0, -->0,0,0,0,0, --0,1, --0,0,2, --0,0,0,3, --0,0,0,0,4, --$

R7) $0,0,0,3, -->0,1, --0,1, --$

R8) $0,0,0,0,0, -->0,0,0,0,0,0, --0,1, --0,0,2, --0,0,0,3, --0,0,0,0,4, --0,0,0,0,0,5, --$

R9) $0,0,0,0,4, -->0,1, --0,1, --0,1, --$

R10)

$0,0,0,0,0,0, -->0,0,0,0,0,0,0, --0,1, --0,0,2, --0,0,0,3, --0,0,0,0,4, --0,0,0,0,0,5, --0,0,0,0,0,6, --$

R11) $0,0,0,0,0,5, -->0,1, --0,1, --0,1, --0,1, --$

R12)

$0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0, --0,1, --0,0,2, --0,0,0,3, --0,0,0,0,4, --0,0,0,0,0,5, --0,0,0,0,0,0,6, --0,0,0,0,0,0,0,7, --$

R13) $0,0,0,0,0,0,6, -->0,1, --0,1, --0,1, --0,1, --0,1, --$

R14)

$0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0, --0,1, --0,0,2, --0,0,0,3, --0,0,0,0,4, --0,0,0,0,0,5, --0,0,0,0,0,0,6, --0,0,0,0,0,0,0,7, --0,0,0,0,0,0,0,0,8, --$

R15) $0,0,0,0,0,0,0,7, -->0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --$

R16)

$0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0, --0,1, --0,0,2, --0,0,0,3, --0,0,0,0,4, --0,0,0,0,0,5, --0,0,0,0,0,0,6, --0,0,0,0,0,0,0,7, --0,0,0,0,0,0,0,0,8, --0,0,0,0,0,0,0,0,0,9, --$

, --

R17) $0,0,0,0,0,0,0,0,8, -->0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --$

R18)

$0,0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,0,0, --0,1, --0,0,2, --0,0,0,3, --0,0,0,0,4, --0,0,0,0,0,5, --0,0,0,0,0,0,6, --0,0,0,0,0,0,0,7, --0,0,0,0,0,0,0,0,8, --0,0,0,0,0,0,0,0,0,9, --0,0,0,0,0,0,0,0,0,0,10, --$

R19) $0,0,0,0,0,0,0,0,0,9, -->0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --$

List of different nodes in $T[L]$

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

LEN=3) $0,0,0, : 0,0,2, :$

LEN=4) $0,0,0,0, : 0,0,0,3, :$

LEN=5) $0,0,0,0,0, : 0,0,0,0,4, :$

LEN=6) $0,0,0,0,0,0, : 0,0,0,0,0,5, :$

LEN=7) $0,0,0,0,0,0,0, : 0,0,0,0,0,0,6, :$

LEN=8) $0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,7, :$

LEN=9) $0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,8, :$

LEN=10) $0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,9, :$

LEN=11) $0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,10, :$

Number new nodes in level n is given by : $1,2,2,2,2,2,2,2,2,2,2,2,$

-----Class

1454-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][102][110][201][210]]$

--

Rules of $T[L]$:

- R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$
- R2) $0, 0, \rightarrow 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow$
- R3) $0, 1, \rightarrow$
- R4) $0, 0, 0, \rightarrow 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow 0, 0, 0, 3, \rightarrow$
- R5) $0, 0, 2, \rightarrow 0, 1, \rightarrow$
- R6) $0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow 0, 0, 0, 3, \rightarrow 0, 0, 0, 0, 4, \rightarrow$
- R7) $0, 0, 0, 3, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$
- R8) $0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow 0, 0, 0, 3, \rightarrow 0, 0, 0, 0, 4, \rightarrow 0, 0, 0, 0, 0, 5, \rightarrow$
- R9) $0, 0, 0, 0, 4, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$
- R10) $0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow 0, 0, 0, 3, \rightarrow 0, 0, 0, 0, 4, \rightarrow 0, 0, 0, 0, 0, 5, \rightarrow 0, 0, 0, 0, 0, 6, \rightarrow$
- R11) $0, 0, 0, 0, 0, 5, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$
- R12) $0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow 0, 0, 0, 3, \rightarrow 0, 0, 0, 0, 4, \rightarrow 0, 0, 0, 0, 0, 5, \rightarrow 0, 0, 0, 0, 0, 0, 6, \rightarrow 0, 0, 0, 0, 0, 0, 0, 7, \rightarrow$
- R13) $0, 0, 0, 0, 0, 0, 6, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$
- R14) $0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow 0, 0, 0, 3, \rightarrow 0, 0, 0, 0, 4, \rightarrow 0, 0, 0, 0, 0, 5, \rightarrow 0, 0, 0, 0, 0, 0, 6, \rightarrow 0, 0, 0, 0, 0, 0, 0, 7, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 8, \rightarrow$
- R15) $0, 0, 0, 0, 0, 0, 0, 7, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$
- R16) $0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow 0, 0, 0, 3, \rightarrow 0, 0, 0, 0, 4, \rightarrow 0, 0, 0, 0, 0, 5, \rightarrow 0, 0, 0, 0, 0, 0, 0, 6, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 7, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, 8, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, 9, \rightarrow$
- R17) $0, 0, 0, 0, 0, 0, 0, 0, 8, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$
- R18) $0, 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow 0, 0, 0, 3, \rightarrow 0, 0, 0, 0, 4, \rightarrow 0, 0, 0, 0, 0, 5, \rightarrow 0, 0, 0, 0, 0, 0, 6, \rightarrow 0, 0, 0, 0, 0, 0, 0, 7, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 8, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, 9, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 10, \rightarrow$
- R19) $0, 0, 0, 0, 0, 0, 0, 0, 0, 9, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$

List of different nodes in $T[L]$

- LEN=1) $0, :$
- LEN=2) $0, 0, : 0, 1, :$
- LEN=3) $0, 0, 0, : 0, 0, 2, :$
- LEN=4) $0, 0, 0, 0, : 0, 0, 0, 3, :$
- LEN=5) $0, 0, 0, 0, 0, : 0, 0, 0, 0, 4, :$
- LEN=6) $0, 0, 0, 0, 0, 0, : 0, 0, 0, 0, 0, 5, :$
- LEN=7) $0, 0, 0, 0, 0, 0, 0, : 0, 0, 0, 0, 0, 0, 6, :$
- LEN=8) $0, 0, 0, 0, 0, 0, 0, 0, : 0, 0, 0, 0, 0, 0, 0, 7, :$
- LEN=9) $0, 0, 0, 0, 0, 0, 0, 0, 0, : 0, 0, 0, 0, 0, 0, 0, 0, 8, :$
- LEN=10) $0, 0, 0, 0, 0, 0, 0, 0, 0, 0, : 0, 0, 0, 0, 0, 0, 0, 0, 0, 9, :$
- LEN=11) $0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, : 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 10, :$

Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,

-----Class

1455-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][012][102][120][201][210]]$

--

Rules of $T[L]$:

- R1) $0, \rightarrow 0,0, \rightarrow 0,1, \rightarrow$
- R2) $0,0, \rightarrow 0,0,0, \rightarrow 0,1, \rightarrow 0,0,2, \rightarrow$
- R3) $0,1, \rightarrow$
- R4) $0,0,0, \rightarrow 0,0,0,0, \rightarrow 0,1, \rightarrow 0,0,2, \rightarrow 0,0,0,3, \rightarrow$
- R5) $0,0,2, \rightarrow 0,1, \rightarrow$
- R6) $0,0,0,0, \rightarrow 0,0,0,0,0, \rightarrow 0,1, \rightarrow 0,0,2, \rightarrow 0,0,0,3, \rightarrow 0,0,0,0,4, \rightarrow$
- R7) $0,0,0,3, \rightarrow 0,1, \rightarrow 0,1, \rightarrow$
- R8) $0,0,0,0,0, \rightarrow 0,0,0,0,0,0, \rightarrow 0,1, \rightarrow 0,0,2, \rightarrow 0,0,0,3, \rightarrow 0,0,0,0,4, \rightarrow 0,0,0,0,0,5, \rightarrow$
- R9) $0,0,0,0,4, \rightarrow 0,1, \rightarrow 0,1, \rightarrow 0,1, \rightarrow$
- R10) $0,0,0,0,0,0, \rightarrow 0,0,0,0,0,0,0, \rightarrow 0,1, \rightarrow 0,0,2, \rightarrow 0,0,0,3, \rightarrow 0,0,0,0,4, \rightarrow 0,0,0,0,0,5, \rightarrow 0,0,0,0,0,6, \rightarrow$
- R11) $0,0,0,0,0,5, \rightarrow 0,1, \rightarrow 0,1, \rightarrow 0,1, \rightarrow 0,1, \rightarrow$
- R12) $0,0,0,0,0,0,0, \rightarrow 0,0,0,0,0,0,0,0, \rightarrow 0,1, \rightarrow 0,0,2, \rightarrow 0,0,0,3, \rightarrow 0,0,0,0,4, \rightarrow 0,0,0,0,0,5, \rightarrow 0,0,0,0,0,0,6, \rightarrow 0,0,0,0,0,0,0,7, \rightarrow$
- R13) $0,0,0,0,0,0,6, \rightarrow 0,1, \rightarrow 0,1, \rightarrow 0,1, \rightarrow 0,1, \rightarrow 0,1, \rightarrow$
- R14) $0,0,0,0,0,0,0,0, \rightarrow 0,0,0,0,0,0,0,0,0, \rightarrow 0,1, \rightarrow 0,0,2, \rightarrow 0,0,0,3, \rightarrow 0,0,0,0,4, \rightarrow 0,0,0,0,0,5, \rightarrow 0,0,0,0,0,0,6, \rightarrow 0,0,0,0,0,0,0,7, \rightarrow 0,0,0,0,0,0,0,0,8, \rightarrow$
- R15) $0,0,0,0,0,0,0,7, \rightarrow 0,1, \rightarrow 0,1, \rightarrow 0,1, \rightarrow 0,1, \rightarrow 0,1, \rightarrow 0,1, \rightarrow$
- R16) $0,0,0,0,0,0,0,0,0, \rightarrow 0,0,0,0,0,0,0,0,0,0, \rightarrow 0,1, \rightarrow 0,0,2, \rightarrow 0,0,0,3, \rightarrow 0,0,0,0,4, \rightarrow 0,0,0,0,0,5, \rightarrow 0,0,0,0,0,0,6, \rightarrow 0,0,0,0,0,0,0,7, \rightarrow 0,0,0,0,0,0,0,0,8, \rightarrow 0,0,0,0,0,0,0,0,0,9, \rightarrow$
- R17) $0,0,0,0,0,0,0,0,8, \rightarrow 0,1, \rightarrow 0,1, \rightarrow 0,1, \rightarrow 0,1, \rightarrow 0,1, \rightarrow 0,1, \rightarrow 0,1, \rightarrow 0,1, \rightarrow$
- R18) $0,0,0,0,0,0,0,0,0,0, \rightarrow 0,0,0,0,0,0,0,0,0,0,0, \rightarrow 0,1, \rightarrow 0,0,2, \rightarrow 0,0,0,3, \rightarrow 0,0,0,0,4, \rightarrow 0,0,0,0,0,5, \rightarrow 0,0,0,0,0,0,6, \rightarrow 0,0,0,0,0,0,0,7, \rightarrow 0,0,0,0,0,0,0,0,8, \rightarrow 0,0,0,0,0,0,0,0,0,9, \rightarrow 0,0,0,0,0,0,0,0,0,0,10, \rightarrow$
- R19) $0,0,0,0,0,0,0,0,0,9, \rightarrow 0,1, \rightarrow 0,1, \rightarrow 0,1, \rightarrow 0,1, \rightarrow 0,1, \rightarrow 0,1, \rightarrow 0,1, \rightarrow 0,1, \rightarrow$

List of different nodes in $T[L]$

- LEN=1) $0, :$
- LEN=2) $0,0, : 0,1, :$
- LEN=3) $0,0,0, : 0,0,2, :$
- LEN=4) $0,0,0,0, : 0,0,0,3, :$
- LEN=5) $0,0,0,0,0, : 0,0,0,0,4, :$
- LEN=6) $0,0,0,0,0,0, : 0,0,0,0,0,5, :$
- LEN=7) $0,0,0,0,0,0,0, : 0,0,0,0,0,0,6, :$
- LEN=8) $0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,7, :$
- LEN=9) $0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,8, :$
- LEN=10) $0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,9, :$

LEN=11) 0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,10, :
Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1456-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[010][011][012][110][120][201][210]]

--

Rules of T[L]:

- R1) 0, -->0,0, --0,1, --
- R2) 0,0, -->0,0,0, --0,1, --0,0,2, --
- R3) 0,1, -->
- R4) 0,0,0, -->0,0,0,0, --0,1, --0,0,2, --0,0,0,3, --
- R5) 0,0,2, -->0,1, --
- R6) 0,0,0,0, -->0,0,0,0,0, --0,1, --0,0,2, --0,0,0,3, --0,0,0,0,4, --
- R7) 0,0,0,3, -->0,1, --0,1, --
- R8) 0,0,0,0,0, -->0,0,0,0,0,0, --0,1, --0,0,2, --0,0,0,3, --0,0,0,0,4, --0,0,0,0,0,5, --
- R9) 0,0,0,0,4, -->0,1, --0,1, --0,1, --
- R10)
0,0,0,0,0,0, -->0,0,0,0,0,0,0, --0,1, --0,0,2, --0,0,0,3, --0,0,0,0,4, --0,0,0,0,0,5, --0,
0,0,0,0,0,6, --
- R11) 0,0,0,0,0,5, -->0,1, --0,1, --0,1, --0,1, --
- R12)
0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0, --0,1, --0,0,2, --0,0,0,3, --0,0,0,0,4, --0,0,0,0,0,5,
--0,0,0,0,0,0,6, --0,0,0,0,0,0,0,7, --
- R13) 0,0,0,0,0,0,6, -->0,1, --0,1, --0,1, --0,1, --0,1, --
- R14)
0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0, --0,1, --0,0,2, --0,0,0,3, --0,0,0,0,4, --0,0,0,0,
0,5, --0,0,0,0,0,0,6, --0,0,0,0,0,0,0,7, --0,0,0,0,0,0,0,8, --
- R15) 0,0,0,0,0,0,0,7, -->0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --
- R16)
0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0, --0,1, --0,0,2, --0,0,0,3, --0,0,0,0,4, --0,0,
0,0,0,5, --0,0,0,0,0,0,6, --0,0,0,0,0,0,0,7, --0,0,0,0,0,0,0,0,8, --0,0,0,0,0,0,0,0,9
, --
- R17) 0,0,0,0,0,0,0,0,8, -->0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --
- R18)
0,0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,0,0,0, --0,1, --0,0,2, --0,0,0,3, --0,0,0,0,4, --
0,0,0,0,0,5, --0,0,0,0,0,0,6, --0,0,0,0,0,0,0,7, --0,0,0,0,0,0,0,0,8, --0,0,0,0,0,0,0,0,
0,9, --0,0,0,0,0,0,0,0,0,0,10, --
- R19) 0,0,0,0,0,0,0,0,0,9, -->0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, : 0,1, :
- LEN=3) 0,0,0, : 0,0,2, :
- LEN=4) 0,0,0,0, : 0,0,0,3, :
- LEN=5) 0,0,0,0,0, : 0,0,0,0,4, :
- LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,5, :
- LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,6, :
- LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,7, :
- LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,8, :

LEN=2) 0,0,: 0,1,:
 LEN=3) 0,0,0,: 0,0,1,:
 LEN=4) 0,0,0,0,: 0,0,0,1,:
 LEN=5) 0,0,0,0,0,: 0,0,0,0,1,:
 LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,1,:
 LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,1,:
 LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,1,:
 LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,1,:
 LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,1,:
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,1,:
 Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,

-----Class

1458-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][021][100][101][102][120]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
- R3) 0,1,-->0,1,--
- R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
- R5) 0,0,1,-->0,0,1,--0,1,--
- R6) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R7) 0,0,0,1,-->0,0,0,1,--0,0,1,--0,1,--
- R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--
- R9) 0,0,0,0,1,-->0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R10) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--
- R11) 0,0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R12) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--
- R13) 0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R14) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--
- R15) 0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R16) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,1,--0,0,1,--
- R17) 0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,1,--0,0,1,--
- R18) 0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,1,--0,0,1,--

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,1,--

R19)

0,0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, : 0,1, :
- LEN=3) 0,0,0, : 0,0,1, :
- LEN=4) 0,0,0,0, : 0,0,0,1, :
- LEN=5) 0,0,0,0,0, : 0,0,0,0,1, :
- LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, :
- LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, :
- LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, :
- LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, :
- LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, :
- LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, :

Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1459-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][021][100][101][102][201]]$

- Rules of T[L]:
- R1) 0,-->0,0,--0,1,--
 - R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
 - R3) 0,1,-->0,1,--
 - R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
 - R5) 0,0,1,-->0,0,1,--0,1,--
 - R6) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 - R7) 0,0,0,1,-->0,0,0,1,--0,0,1,--0,1,--
 - R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 - R9) 0,0,0,0,1,-->0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 - R10) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--
 - R11) 0,0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 - R12) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
 - R13) 0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 - R14) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
 - R15) 0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,1,--

R16)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--0,1,--

R17)
0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--0,1,--

R18)
0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,1,--0,1,--

R19)
0,0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,1,--0,1,--

List of different nodes in T[L]

- LEN=1) 0, :
 - LEN=2) 0,0, : 0,1, :
 - LEN=3) 0,0,0, : 0,0,1, :
 - LEN=4) 0,0,0,0, : 0,0,0,1, :
 - LEN=5) 0,0,0,0,0, : 0,0,0,0,1, :
 - LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, :
 - LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, :
 - LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, :
 - LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, :
 - LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, :
 - LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, :
- Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1460-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[010][011][021][100][101][102][210]]

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
- R3) 0,1,-->0,1,--
- R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
- R5) 0,0,1,-->0,0,1,--0,1,--
- R6) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R7) 0,0,0,1,-->0,0,0,1,--0,0,1,--0,1,--
- R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R9) 0,0,0,0,1,-->0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R10)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,1,--
- R11) 0,0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R12)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,1,--

R13)
0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--

R14)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--

R15)
0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,1,--

R16)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--0,1,--

R17)
0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--

R18)
0,0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--

R19)
0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--

List of different nodes in T[L]

- LEN=1) 0, :
 - LEN=2) 0,0, : 0,1, :
 - LEN=3) 0,0,0, : 0,0,1, :
 - LEN=4) 0,0,0,0, : 0,0,0,1, :
 - LEN=5) 0,0,0,0,0, : 0,0,0,0,1, :
 - LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, :
 - LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, :
 - LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, :
 - LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, :
 - LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, :
 - LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, :
- Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,

-----Class

1461-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][021][100][101][110][120]]$

--

Rules of T[L]:

- R1) 0, -->0,0,--0,1,--
- R2) 0,0, -->0,0,0,--0,0,1,--0,1,--
- R3) 0,1, -->0,1,--
- R4) 0,0,0, -->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
- R5) 0,0,1, -->0,0,1,--0,1,--
- R6) 0,0,0,0, -->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R7) 0,0,0,1, -->0,0,0,1,--0,0,1,--0,1,--
- R8) 0,0,0,0,0, -->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--

R9) 0,0,0,0,1,-->0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R10)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
0,0,1,--0,1,--
R11) 0,0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R12)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--
0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R13)
0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R14)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,
0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R15)
0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,
0,1,--0,0,1,--0,1,--
R16)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,
--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
,--
R17)
0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,
0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R18)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,
0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,
,0,1,--0,0,0,1,--0,0,1,--0,1,--
R19)
0,0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--
0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, : 0,0,1, :
LEN=4) 0,0,0,0, : 0,0,0,1, :
LEN=5) 0,0,0,0,0, : 0,0,0,0,1, :
LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, :
LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, :
LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, :
LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, :
Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1462-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[010][011][021][100][101][110][201]]

--

Rules of T[L]:

- R1) 0, -->0,0, --0,1, --
- R2) 0,0, -->0,0,0, --0,0,1, --0,1, --
- R3) 0,1, -->0,1, --
- R4) 0,0,0, -->0,0,0,0, --0,0,0,1, --0,0,1, --0,1, --
- R5) 0,0,1, -->0,0,1, --0,1, --
- R6) 0,0,0,0, -->0,0,0,0,0, --0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --
- R7) 0,0,0,1, -->0,0,0,1, --0,0,1, --0,1, --
- R8) 0,0,0,0,0, -->0,0,0,0,0,0, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,1, --0,1, --
- R9) 0,0,0,0,1, -->0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --
- R10) 0,0,0,0,0,0, -->0,0,0,0,0,0,0, --0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --
- R11) 0,0,0,0,0,1, -->0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --
- R12) 0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,1, --0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --
- R13) 0,0,0,0,0,0,1, -->0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --
- R14) 0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,1, --0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --
- R15) 0,0,0,0,0,0,0,1, -->0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --
- R16) 0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --
- R17) 0,0,0,0,0,0,0,0,1, -->0,0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --
- R18) 0,0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --
- R19) 0,0,0,0,0,0,0,0,0,1, -->0,0,0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,1, --0,0,1, --

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, : 0,1, :
- LEN=3) 0,0,0, : 0,0,1, :
- LEN=4) 0,0,0,0, : 0,0,0,1, :
- LEN=5) 0,0,0,0,0, : 0,0,0,0,1, :
- LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, :
- LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, :
- LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, :
- LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, :
- LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, :
- LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, :

Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,

-----Class

1463-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][021][100][101][110][210]]$

--

Rules of $T[L]$:

R1) $0, \rightarrow 0,0, \rightarrow 0,1, \rightarrow$

R2) $0,0, \rightarrow 0,0,0, \rightarrow 0,0,1, \rightarrow 0,1, \rightarrow$

R3) $0,1, \rightarrow 0,1, \rightarrow$

R4) $0,0,0, \rightarrow 0,0,0,0, \rightarrow 0,0,0,1, \rightarrow 0,0,1, \rightarrow 0,1, \rightarrow$

R5) $0,0,1, \rightarrow 0,0,1, \rightarrow 0,1, \rightarrow$

R6) $0,0,0,0, \rightarrow 0,0,0,0,0, \rightarrow 0,0,0,0,1, \rightarrow 0,0,0,1, \rightarrow 0,0,1, \rightarrow 0,1, \rightarrow$

R7) $0,0,0,1, \rightarrow 0,0,0,1, \rightarrow 0,0,1, \rightarrow 0,1, \rightarrow$

R8) $0,0,0,0,0, \rightarrow 0,0,0,0,0,0, \rightarrow 0,0,0,0,0,1, \rightarrow 0,0,0,0,1, \rightarrow 0,0,0,1, \rightarrow 0,0,1, \rightarrow 0,1, \rightarrow$

R9) $0,0,0,0,1, \rightarrow 0,0,0,0,1, \rightarrow 0,0,0,1, \rightarrow 0,0,1, \rightarrow 0,1, \rightarrow$

R10)

$0,0,0,0,0,0, \rightarrow 0,0,0,0,0,0,0, \rightarrow 0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,1, \rightarrow 0,0,0,0,1, \rightarrow 0,0,0,1, \rightarrow 0,0,1, \rightarrow 0,1, \rightarrow$

R11) $0,0,0,0,0,1, \rightarrow 0,0,0,0,0,1, \rightarrow 0,0,0,0,1, \rightarrow 0,0,0,1, \rightarrow 0,0,1, \rightarrow 0,1, \rightarrow$

R12)

$0,0,0,0,0,0,0, \rightarrow 0,0,0,0,0,0,0,0, \rightarrow 0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,1, \rightarrow 0,0,0,0,1, \rightarrow 0,0,0,1, \rightarrow 0,0,1, \rightarrow$

R13)

$0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,1, \rightarrow 0,0,0,0,1, \rightarrow 0,0,0,1, \rightarrow 0,0,1, \rightarrow 0,1, \rightarrow$

R14)

$0,0,0,0,0,0,0,0, \rightarrow 0,0,0,0,0,0,0,0,0, \rightarrow 0,0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,1, \rightarrow 0,0,0,0,1, \rightarrow 0,0,0,0,1, \rightarrow 0,0,0,1, \rightarrow 0,0,1, \rightarrow$

R15)

$0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,1, \rightarrow 0,0,0,0,1, \rightarrow 0,0,0,1, \rightarrow 0,0,1, \rightarrow 0,1, \rightarrow$

R16)

$0,0,0,0,0,0,0,0,0, \rightarrow 0,0,0,0,0,0,0,0,0,0, \rightarrow 0,0,0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,1, \rightarrow 0,0,0,0,1, \rightarrow 0,0,0,1, \rightarrow 0,0,1, \rightarrow$

R17)

$0,0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,1, \rightarrow 0,0,0,0,1, \rightarrow 0,0,0,1, \rightarrow 0,0,1, \rightarrow$

R18)

$0,0,0,0,0,0,0,0,0,0, \rightarrow 0,0,0,0,0,0,0,0,0,0,0, \rightarrow 0,0,0,0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,1, \rightarrow 0,0,0,0,1, \rightarrow 0,0,0,1, \rightarrow 0,0,1, \rightarrow$

R19)

$0,0,0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,1, \rightarrow 0,0,0,0,1, \rightarrow 0,0,0,1, \rightarrow 0,0,1, \rightarrow$

R19)

$0,0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,1, \rightarrow 0,0,0,0,1, \rightarrow 0,0,0,1, \rightarrow 0,0,1, \rightarrow$

List of different nodes in $T[L]$

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

LEN=3) $0,0,0, : 0,0,1, :$

LEN=4) 0,0,0,0, : 0,0,0,1, :
 LEN=5) 0,0,0,0,0, : 0,0,0,0,1, :
 LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, :
 LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, :
 LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, :
 LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, :
 Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1464-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][021][100][101][120][201]]$

--

Rules of $T[L]$:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
- R3) 0,1,-->0,1,--
- R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
- R5) 0,0,1,-->0,0,1,--0,1,--
- R6) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R7) 0,0,0,1,-->0,0,0,1,--0,0,1,--0,1,--
- R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--
- R9) 0,0,0,0,1,-->0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R10) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--
- R11) 0,0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R12) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--
- R13) 0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R14) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--
- R15) 0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R16) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R17) 0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R18) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--

,0,1,--0,0,0,1,--0,0,1,--0,1,--
R19)
0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--
0,0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--

List of different nodes in T[L]

- LEN=1) 0,:
- LEN=2) 0,0,: 0,1,:
- LEN=3) 0,0,0,: 0,0,1,:
- LEN=4) 0,0,0,0,: 0,0,0,1,:
- LEN=5) 0,0,0,0,0,: 0,0,0,0,1,:
- LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,1,:
- LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,1,:
- LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,1,:
- LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,1,:
- LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,1,:
- LEN=11) 0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,1,:

Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1465-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][021][100][101][120][210]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
- R3) 0,1,-->0,1,--
- R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
- R5) 0,0,1,-->0,0,1,--0,1,--
- R6) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R7) 0,0,0,1,-->0,0,0,1,--0,0,1,--0,1,--
- R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R9) 0,0,0,0,1,-->0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R10)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--
0,0,1,--0,1,--
- R11) 0,0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R12)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--
0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R13)
0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R14)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,
0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R15)
0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,
0,1,--0,0,1,--0,1,--
- R16)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,

--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--0,1,--

R17)

0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R18)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,1,--0,1,--

R19)

0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

List of different nodes in $T[L]$

LEN=1) 0, :

LEN=2) 0,0, : 0,1, :

LEN=3) 0,0,0, : 0,0,1, :

LEN=4) 0,0,0,0, : 0,0,0,1, :

LEN=5) 0,0,0,0,0, : 0,0,0,0,1, :

LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, :

LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, :

LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, :

LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, :

LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, :

LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, :

Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1466-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][021][100][101][201][210]]$

Rules of $T[L]$:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,0,1,--0,1,--

R3) 0,1,-->0,1,--

R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--

R5) 0,0,1,-->0,0,1,--0,1,--

R6) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R7) 0,0,0,1,-->0,0,0,1,--0,0,1,--0,1,--

R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R9) 0,0,0,0,1,-->0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R10)

0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,0,1,--0,0,1,--

R11) 0,0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R12)

0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--

R13)

0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R14)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,
0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,1,--

R15)

0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,
0,1,--0,0,1,--0,1,--

R16)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,
--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--0,1,
,--

R17)

0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,
0,1,--0,0,0,1,--0,0,1,--0,1,--0,1,--

R18)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,
0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,
,0,1,--0,0,0,1,--0,0,1,--0,1,--

R19)

0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--
0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,0,0,: 0,0,1,:

LEN=4) 0,0,0,0,: 0,0,0,1,:

LEN=5) 0,0,0,0,0,: 0,0,0,0,1,:

LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,1,:

LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,1,:

LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,1,:

LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,1,:

LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,1,:

LEN=11) 0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,1,:

Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1467-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[010][011][021][100][102][110][120]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,0,1,--0,1,--

R3) 0,1,-->0,1,--

R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--

R5) 0,0,1,-->0,0,1,--0,1,--

R6) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R7) 0,0,0,1,-->0,0,0,1,--0,0,1,--0,1,--

R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--

R9) 0,0,0,0,1,-->0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R10)

0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R11) 0,0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R12)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--
R13)
0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R14)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--
R15)
0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R16)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,1,--0,1,--
R17)
0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--
R18)
0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--
R19)
0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, : 0,0,1, :
LEN=4) 0,0,0,0, : 0,0,0,1, :
LEN=5) 0,0,0,0,0, : 0,0,0,0,1, :
LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, :
LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, :
LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, :
LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, :
Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,

-----Class

1468-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[010][011][021][100][102][110][201]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,0,1,--0,1,--

R3) 0,1,-->0,1,--
 R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
 R5) 0,0,1,-->0,0,1,--0,1,--
 R6) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 R7) 0,0,0,1,-->0,0,0,1,--0,0,1,--0,1,--
 R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,1,--
 R9) 0,0,0,0,1,-->0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 R10)
 0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
 0,0,1,--0,1,--
 R11) 0,0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 R12)
 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--
 0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 R13)
 0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 R14)
 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,
 0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 R15)
 0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,
 0,1,--0,0,1,--0,1,--
 R16)
 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,
 --0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--0,1,--
 ,--
 R17)
 0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,
 0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 R18)
 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,
 0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,
 ,0,1,--0,0,0,1,--0,0,1,--0,1,--
 R19)
 0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--
 0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0, :
 LEN=2) 0,0, : 0,1, :
 LEN=3) 0,0,0, : 0,0,1, :
 LEN=4) 0,0,0,0, : 0,0,0,1, :
 LEN=5) 0,0,0,0,0, : 0,0,0,0,1, :
 LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, :
 LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, :
 LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, :
 LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, :

Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1469-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][021][100][102][110][210]]$

--

Rules of $T[L]$:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,0,1,--0,1,--

R3) 0,1,-->0,1,--

R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--

R5) 0,0,1,-->0,0,1,--0,1,--

R6) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R7) 0,0,0,1,-->0,0,0,1,--0,0,1,--0,1,--

R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R9) 0,0,0,0,1,-->0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R10)

0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R11) 0,0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R12)

0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R13)

0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R14)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R15)

0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--

R16)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,1,--0,1,--

,--

R17)

0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--

R18)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--

,0,1,--0,0,0,1,--0,0,1,--0,1,--

R19)

0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--

List of different nodes in $T[L]$

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,0,0,: 0,0,1,:

LEN=4) 0,0,0,0,: 0,0,0,1,:

LEN=5) 0,0,0,0,0,: 0,0,0,0,1,:

LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, :
 LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, :
 LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, :
 LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, :
 Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,

-----Class

1470-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][021][100][102][120][201]]$

--

Rules of $T[L]$:

- R1) 0, -->0,0, --0,1, --
- R2) 0,0, -->0,0,0, --0,0,1, --0,1, --
- R3) 0,1, -->0,1, --
- R4) 0,0,0, -->0,0,0,0, --0,0,0,1, --0,0,1, --0,1, --
- R5) 0,0,1, -->0,0,1, --0,1, --
- R6) 0,0,0,0, -->0,0,0,0,0, --0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --
- R7) 0,0,0,1, -->0,0,0,1, --0,0,1, --0,1, --
- R8) 0,0,0,0,0, -->0,0,0,0,0,0, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,1, --0,1, --
- R9) 0,0,0,0,1, -->0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --
- R10) 0,0,0,0,0,0, -->0,0,0,0,0,0,0, --0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --
- R11) 0,0,0,0,0,1, -->0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --
- R12) 0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,1, --0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,1, --
- R13) 0,0,0,0,0,0,1, -->0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --
- R14) 0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,1, --0,0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --
- R15) 0,0,0,0,0,0,0,1, -->0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --
- R16) 0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --
- R17) 0,0,0,0,0,0,0,0,1, -->0,0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --
- R18) 0,0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,1, --0,0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --
- R19) 0,0,0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,1, --0,0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --

0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--
0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, : 0,1, :
- LEN=3) 0,0,0, : 0,0,1, :
- LEN=4) 0,0,0,0, : 0,0,0,1, :
- LEN=5) 0,0,0,0,0, : 0,0,0,0,1, :
- LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, :
- LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, :
- LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, :
- LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, :
- LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, :
- LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, :

Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1471-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][021][100][102][120][210]]$

--

Rules of T[L]:

- R1) 0, -->0,0, --0,1, --
- R2) 0,0, -->0,0,0, --0,0,1, --0,1, --
- R3) 0,1, -->0,1, --
- R4) 0,0,0, -->0,0,0,0, --0,0,0,1, --0,0,1, --0,1, --
- R5) 0,0,1, -->0,0,1, --0,1, --
- R6) 0,0,0,0, -->0,0,0,0,0, --0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --
- R7) 0,0,0,1, -->0,0,0,1, --0,0,1, --0,1, --
- R8) 0,0,0,0,0, -->0,0,0,0,0,0, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --
- R9) 0,0,0,0,1, -->0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --
- R10) 0,0,0,0,0,0, -->0,0,0,0,0,0,0, --0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --
- R11) 0,0,0,0,0,1, -->0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --
- R12) 0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,1, --0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,1, --
- R13) 0,0,0,0,0,0,1, -->0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,1, --0,1, --
- R14) 0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,1, --0,0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,0,1, --0,0,1, --
- R15) 0,0,0,0,0,0,0,1, -->0,0,0,0,0,0,0,1, --0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,1, --
- R16) 0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,1, --0,0,0,0,1, --0,0,1, --

, --

R17)
 0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,
 0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R18)
 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,
 0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,
 ,0,1,--0,0,0,1,--0,0,1,--0,1,--

R19)
 0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--
 0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--

List of different nodes in T[L]

- LEN=1) 0, :
 - LEN=2) 0,0, : 0,1, :
 - LEN=3) 0,0,0, : 0,0,1, :
 - LEN=4) 0,0,0,0, : 0,0,0,1, :
 - LEN=5) 0,0,0,0,0, : 0,0,0,0,1, :
 - LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, :
 - LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, :
 - LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, :
 - LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, :
 - LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, :
 - LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, :
- Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1472-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][021][100][102][201][210]]$

--
 Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
- R3) 0,1,-->0,1,--
- R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
- R5) 0,0,1,-->0,0,1,--0,1,--
- R6) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R7) 0,0,0,1,-->0,0,0,1,--0,0,1,--0,1,--
- R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--
- R9) 0,0,0,0,1,-->0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R10)
 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
 0,0,1,--0,1,--
- R11) 0,0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R12)
 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--
 0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R13)
 0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,1,--
- R14)
 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,

0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 R15)
 0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,
 0,1,--0,0,1,--0,1,--
 R16)
 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,
 --0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--0,1,
 ,--
 R17)
 0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,
 0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 R18)
 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,
 0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,
 ,0,1,--0,0,0,1,--0,0,1,--0,1,--
 R19)
 0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--
 0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, : 0,1, :
- LEN=3) 0,0,0, : 0,0,1, :
- LEN=4) 0,0,0,0, : 0,0,0,1, :
- LEN=5) 0,0,0,0,0, : 0,0,0,0,1, :
- LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, :
- LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, :
- LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, :
- LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, :
- LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, :
- LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, :

Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1473-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][021][100][110][120][201]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
- R3) 0,1,-->0,1,--
- R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
- R5) 0,0,1,-->0,0,1,--0,1,--
- R6) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R7) 0,0,0,1,-->0,0,0,1,--0,0,1,--0,1,--
- R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R9) 0,0,0,0,1,-->0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R10)
 0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
 0,0,1,--0,1,--

R11) 0,0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R12) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--
0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R13) 0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R14) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,
0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R15) 0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,
0,1,--0,0,1,--0,1,--
R16) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,
--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
,--
R17) 0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,
0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R18) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,
0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,
,0,1,--0,0,0,1,--0,0,1,--0,1,--
R19) 0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--
0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, : 0,0,1, :
LEN=4) 0,0,0,0, : 0,0,0,1, :
LEN=5) 0,0,0,0,0, : 0,0,0,0,1, :
LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, :
LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, :
LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, :
LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, :
Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,

-----Class

1474-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[010][011][021][100][110][120][210]]

--
Rules of T[L]:

R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
R3) 0,1,-->0,1,--
R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--

R5) 0,0,1,-->0,0,1,--0,1,--
 R6) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 R7) 0,0,0,1,-->0,0,0,1,--0,0,1,--0,1,--
 R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 R9) 0,0,0,0,1,-->0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 R10) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--
 R11) 0,0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 R12) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--
 R13) 0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 R14) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--
 R15) 0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,1,--
 R16) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 R17) 0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,1,--
 R18) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,1,--0,1,--
 R19) 0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0, :
 LEN=2) 0,0, : 0,1, :
 LEN=3) 0,0,0, : 0,0,1, :
 LEN=4) 0,0,0,0, : 0,0,0,1, :
 LEN=5) 0,0,0,0,0, : 0,0,0,0,1, :
 LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, :
 LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, :
 LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, :
 LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, :
 Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][021][100][110][201][210]]$

--

Rules of $T[L]$:

R1) $0, -->0,0, --0,1, --$

R2) $0,0, -->0,0,0, --0,0,1, --0,1, --$

R3) $0,1, -->0,1, --$

R4) $0,0,0, -->0,0,0,0, --0,0,0,1, --0,0,1, --0,1, --$

R5) $0,0,1, -->0,0,1, --0,1, --$

R6) $0,0,0,0, -->0,0,0,0,0, --0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --$

R7) $0,0,0,1, -->0,0,0,1, --0,0,1, --0,1, --$

R8) $0,0,0,0,0, -->0,0,0,0,0,0, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --$

R9) $0,0,0,0,1, -->0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --$

R10)

$0,0,0,0,0,0, -->0,0,0,0,0,0,0, --0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --$

R11) $0,0,0,0,0,1, -->0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --$

R12)

$0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,1, --0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --$

R13)

$0,0,0,0,0,0,1, -->0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --$

R14)

$0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,1, --0,0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --$

R15)

$0,0,0,0,0,0,0,1, -->0,0,0,0,0,0,0,1, --0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --$

R16)

$0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,1, --0,0,0,0,1, --0,0,1, --0,1, --$

R17)

$0,0,0,0,0,0,0,0,1, -->0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,1, --0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --$

R18)

$0,0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --$

R19)

$0,0,0,0,0,0,0,0,0,1, -->0,0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --$

List of different nodes in $T[L]$

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

LEN=3) $0,0,0, : 0,0,1, :$

LEN=4) $0,0,0,0, : 0,0,0,1, :$

LEN=5) $0,0,0,0,0, : 0,0,0,0,1, :$

LEN=6) $0,0,0,0,0,0, : 0,0,0,0,0,1, :$

LEN=7) $0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, :$

LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, :
 LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, :
 Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,

-----Class

1476-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][021][100][120][201][210]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
- R3) 0,1,-->0,1,--
- R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
- R5) 0,0,1,-->0,0,1,--0,1,--
- R6) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R7) 0,0,0,1,-->0,0,0,1,--0,0,1,--0,1,--
- R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--
- R9) 0,0,0,0,1,-->0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R10) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,1,--
- R11) 0,0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R12) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--
- R13) 0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R14) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,1,--
- R15) 0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R16) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--
- R17) 0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R18) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,1,--
- R19) 0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

List of different nodes in T[L]

- LEN=1) 0,:
 - LEN=2) 0,0,: 0,1,:
 - LEN=3) 0,0,0,: 0,0,1,:
 - LEN=4) 0,0,0,0,: 0,0,0,1,:
 - LEN=5) 0,0,0,0,0,: 0,0,0,0,1,:
 - LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,1,:
 - LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,1,:
 - LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,1,:
 - LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,1,:
 - LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,1,:
 - LEN=11) 0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,1,:
- Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,

-----Class

1477-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][021][101][102][110][120]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
- R3) 0,1,-->0,1,--
- R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
- R5) 0,0,1,-->0,0,1,--0,1,--
- R6) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R7) 0,0,0,1,-->0,0,0,1,--0,0,1,--0,1,--
- R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R9) 0,0,0,0,1,-->0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R10) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--
- R11) 0,0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R12) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--
- R13) 0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R14) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--
- R15) 0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R16) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R17) 0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 R18)
 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,
 0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,
 ,0,1,--0,0,0,1,--0,0,1,--0,1,--
 R19)
 0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--
 0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 List of different nodes in T[L]
 LEN=1) 0, :
 LEN=2) 0,0, : 0,1, :
 LEN=3) 0,0,0, : 0,0,1, :
 LEN=4) 0,0,0,0, : 0,0,0,1, :
 LEN=5) 0,0,0,0,0, : 0,0,0,0,1, :
 LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, :
 LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, :
 LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, :
 LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, :
 Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,

-----Class
 1478-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][021][101][102][110][201]]$

 --
 Rules of T[L]:
 R1) 0,-->0,0,--0,1,--
 R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
 R3) 0,1,-->0,1,--
 R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
 R5) 0,0,1,-->0,0,1,--0,1,--
 R6) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 R7) 0,0,0,1,-->0,0,0,1,--0,0,1,--0,1,--
 R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 R9) 0,0,0,0,1,-->0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 R10)
 0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
 0,0,1,--0,1,--
 R11) 0,0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 R12)
 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--
 0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 R13)
 0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 R14)
 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,
 0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 R15)

0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R16)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--0,1,--0,1,--

R17)

0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--

R18)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--0,1,--

R19)

0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, : 0,1, :

LEN=3) 0,0,0, : 0,0,1, :

LEN=4) 0,0,0,0, : 0,0,0,1, :

LEN=5) 0,0,0,0,0, : 0,0,0,0,1, :

LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, :

LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, :

LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, :

LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, :

LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, :

LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, :

Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1479-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[010][011][021][101][102][110][210]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,0,1,--0,1,--

R3) 0,1,-->0,1,--

R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--

R5) 0,0,1,-->0,0,1,--0,1,--

R6) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R7) 0,0,0,1,-->0,0,0,1,--0,0,1,--0,1,--

R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R9) 0,0,0,0,1,-->0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R10)

0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,1,--

R11) 0,0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R12)

0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--
0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R13)

0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R14)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,
0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R15)

0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,
0,1,--0,0,1,--0,1,--

R16)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,
--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--0,1,--
,--

R17)

0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,
0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R18)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,
0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,
,0,1,--0,0,0,1,--0,0,1,--0,1,--

R19)

0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--
0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

List of different nodes in T[L]

- LEN=1) 0, :
 - LEN=2) 0,0, : 0,1, :
 - LEN=3) 0,0,0, : 0,0,1, :
 - LEN=4) 0,0,0,0, : 0,0,0,1, :
 - LEN=5) 0,0,0,0,0, : 0,0,0,0,1, :
 - LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, :
 - LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, :
 - LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, :
 - LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, :
 - LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, :
 - LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, :
- Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1480-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][021][101][102][120][201]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
- R3) 0,1,-->0,1,--
- R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
- R5) 0,0,1,-->0,0,1,--0,1,--
- R6) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R7) 0,0,0,1,-->0,0,0,1,--0,0,1,--0,1,--
 R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,1,--
 R9) 0,0,0,0,1,-->0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 R10)
 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
 0,0,1,--0,1,--
 R11) 0,0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 R12)
 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--
 0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 R13)
 0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 R14)
 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--
 0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 R15)
 0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--
 0,1,--0,0,1,--0,1,--
 R16)
 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--
 --0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 ,--
 R17)
 0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--
 0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 R18)
 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--
 0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,0,1,--
 ,0,1,--0,0,0,1,--0,0,1,--0,1,--
 R19)
 0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--
 0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0, :
 LEN=2) 0,0, : 0,1, :
 LEN=3) 0,0,0, : 0,0,1, :
 LEN=4) 0,0,0,0, : 0,0,0,1, :
 LEN=5) 0,0,0,0,0, : 0,0,0,0,1, :
 LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, :
 LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, :
 LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, :
 LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, :

Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1481-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][021][101][102][120][210]]$

--

Rules of T[L]:

R1) 0, -->0,0,--0,1,--

R2) 0,0, -->0,0,0,--0,0,1,--0,1,--

R3) 0,1, -->0,1,--

R4) 0,0,0, -->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--

R5) 0,0,1, -->0,0,1,--0,1,--

R6) 0,0,0,0, -->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R7) 0,0,0,1, -->0,0,0,1,--0,0,1,--0,1,--

R8) 0,0,0,0,0, -->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--

R9) 0,0,0,0,1, -->0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R10)

0,0,0,0,0,0, -->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--

R11) 0,0,0,0,0,1, -->0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R12)

0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--

R13)

0,0,0,0,0,0,1, -->0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R14)

0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--

R15)

0,0,0,0,0,0,0,1, -->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--

R16)

0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,1,--0,0,1,--

R17)

0,0,0,0,0,0,0,0,1, -->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--

R18)

0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--

R19)

0,0,0,0,0,0,0,0,0,1, -->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--

0,0,0,0,0,0,0,1, -->0,0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, : 0,1, :

LEN=3) 0,0,0, : 0,0,1, :

LEN=4) 0,0,0,0, : 0,0,0,1, :

LEN=5) 0,0,0,0,0, : 0,0,0,0,1, :

LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, :

LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, :

LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, :

LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, :

LEN=2) 0,0,: 0,1,:
 LEN=3) 0,0,0,: 0,0,1,:
 LEN=4) 0,0,0,0,: 0,0,0,1,:
 LEN=5) 0,0,0,0,0,: 0,0,0,0,1,:
 LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,1,:
 LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,1,:
 LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,1,:
 LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,1,:
 LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,1,:
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,1,:
 Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,

-----Class

1483-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][021][101][110][120][201]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,0,1,--0,1,--

R3) 0,1,-->0,1,--

R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--

R5) 0,0,1,-->0,0,1,--0,1,--

R6) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R7) 0,0,0,1,-->0,0,0,1,--0,0,1,--0,1,--

R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--

R9) 0,0,0,0,1,-->0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R10)

0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--

0,0,1,--0,1,--

R11) 0,0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R12)

0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--

0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R13)

0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R14)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,

0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R15)

0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,

0,1,--0,0,1,--0,1,--

R16)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,

--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--0,1,

--

R17)

0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,

0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--0,1,--

R18)

R16)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,
--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--0,1,--
,--
R17)
0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,
0,1,--0,0,0,1,--0,0,1,--0,0,1,--0,1,--
R18)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,
0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,
,0,1,--0,0,0,1,--0,0,1,--0,1,--
R19)
0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--
0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, : 0,0,1, :
LEN=4) 0,0,0,0, : 0,0,0,1, :
LEN=5) 0,0,0,0,0, : 0,0,0,0,1, :
LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, :
LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, :
LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, :
LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, :
Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1485-----
Inversion Sequences ($I_n=(n+1)!$) avoiding L=[[010][011][021][101][110][201][210]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
R3) 0,1,-->0,1,--
R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
R5) 0,0,1,-->0,0,1,--0,1,--
R6) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R7) 0,0,0,1,-->0,0,0,1,--0,0,1,--0,1,--
R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R9) 0,0,0,0,1,-->0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R10)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
0,0,1,--0,1,--
R11) 0,0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R12)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--
0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R13)
0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--

R14)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,1,--0,1,--

R15)
0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,1,--

R16)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,1,--0,1,--

R17)
0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--

R18)
0,0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,1,--

R19)
0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--

List of different nodes in T[L]

- LEN=1) 0, :
 - LEN=2) 0,0, : 0,1, :
 - LEN=3) 0,0,0, : 0,0,1, :
 - LEN=4) 0,0,0,0, : 0,0,0,1, :
 - LEN=5) 0,0,0,0,0, : 0,0,0,0,1, :
 - LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, :
 - LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, :
 - LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, :
 - LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, :
 - LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, :
 - LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, :
- Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,

-----Class

1486-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][021][101][120][201][210]]$

--

Rules of T[L]:

- R1) 0, -->0,0,--0,1,--
- R2) 0,0, -->0,0,0,--0,0,1,--0,1,--
- R3) 0,1, -->0,1,--
- R4) 0,0,0, -->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
- R5) 0,0,1, -->0,0,1,--0,1,--
- R6) 0,0,0,0, -->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R7) 0,0,0,1, -->0,0,0,1,--0,0,1,--0,1,--
- R8) 0,0,0,0,0, -->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R9) 0,0,0,0,1,-->0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R10)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
0,0,1,--0,1,--
R11) 0,0,0,0,1,-->0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--0,1,--
R12)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--
0,0,0,1,--0,0,1,--0,0,1,--0,1,--
R13)
0,0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R14)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--
0,0,0,1,--0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R15)
0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
0,1,--0,0,1,--0,1,--
R16)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--
--
R17)
0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--
0,1,--0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R18)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
0,0,0,1,--0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
,0,1,--0,0,1,--0,0,1,--0,1,--
R19)
0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, : 0,0,1, :
LEN=4) 0,0,0,0, : 0,0,0,1, :
LEN=5) 0,0,0,0,0, : 0,0,0,0,1, :
LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, :
LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, :
LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, :
LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, :
Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,

-----Class

1487-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[010][011][021][102][110][120][201]]

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
- R3) 0,1,-->0,1,--
- R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
- R5) 0,0,1,-->0,0,1,--0,1,--
- R6) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R7) 0,0,0,1,-->0,0,0,1,--0,0,1,--0,1,--
- R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--
- R9) 0,0,0,0,1,-->0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R10) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--
- R11) 0,0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R12) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
- R13) 0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R14) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--
- R15) 0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R16) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,1,--0,0,1,--
- R17) 0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--
- R18) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--
- R19) 0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, : 0,1, :
- LEN=3) 0,0,0, : 0,0,1, :
- LEN=4) 0,0,0,0, : 0,0,0,1, :
- LEN=5) 0,0,0,0,0, : 0,0,0,0,1, :
- LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, :
- LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, :
- LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, :
- LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, :
- LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, :
- LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, :

Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,

-----Class

1488-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][021][102][110][120][210]]$

--

Rules of $T[L]$:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
- R3) 0,1,-->0,1,--
- R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
- R5) 0,0,1,-->0,0,1,--0,1,--
- R6) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R7) 0,0,0,1,-->0,0,0,1,--0,0,1,--0,1,--
- R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R9) 0,0,0,0,1,-->0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R10) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--
- R11) 0,0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R12) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,1,--
- R13) 0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R14) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,1,--
- R15) 0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,1,--
- R16) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,1,--
- R17) 0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,1,--
- R18) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,1,--
- R19) 0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,1,--

List of different nodes in $T[L]$

- LEN=1) 0,:
- LEN=2) 0,0,: 0,1,:
- LEN=3) 0,0,0,: 0,0,1,:

LEN=4) 0,0,0,0, : 0,0,0,1, :
 LEN=5) 0,0,0,0,0, : 0,0,0,0,1, :
 LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, :
 LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, :
 LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, :
 LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, :
 Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1489-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][021][102][110][201][210]]$

--

Rules of $T[L]$:

- R1) 0, -->0,0, --0,1, --
- R2) 0,0, -->0,0,0, --0,0,1, --0,1, --
- R3) 0,1, -->0,1, --
- R4) 0,0,0, -->0,0,0,0, --0,0,0,1, --0,0,1, --0,1, --
- R5) 0,0,1, -->0,0,1, --0,1, --
- R6) 0,0,0,0, -->0,0,0,0,0, --0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --
- R7) 0,0,0,1, -->0,0,0,1, --0,0,1, --0,1, --
- R8) 0,0,0,0,0, -->0,0,0,0,0,0, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,1, --0,1, --
- R9) 0,0,0,0,1, -->0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --
- R10) 0,0,0,0,0,0, -->0,0,0,0,0,0,0, --0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --
- R11) 0,0,0,0,0,1, -->0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --
- R12) 0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,1, --0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --
- R13) 0,0,0,0,0,0,1, -->0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --
- R14) 0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,1, --0,0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --
- R15) 0,0,0,0,0,0,0,1, -->0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --
- R16) 0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,1, --0,0,0,0,1, --0,0,1, --0,1, --
- R17) 0,0,0,0,0,0,0,0,1, -->0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,1, --0,0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --
- R18) 0,0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --

,0,1,--0,0,0,1,--0,0,1,--0,1,--
R19)
0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--
0,0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

List of different nodes in T[L]

- LEN=1) 0,:
- LEN=2) 0,0,: 0,1,:
- LEN=3) 0,0,0,: 0,0,1,:
- LEN=4) 0,0,0,0,: 0,0,0,1,:
- LEN=5) 0,0,0,0,0,: 0,0,0,0,1,:
- LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,1,:
- LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,1,:
- LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,1,:
- LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,1,:
- LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,1,:
- LEN=11) 0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,1,:

Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1490-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][021][102][120][201][210]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
- R3) 0,1,-->0,1,--
- R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
- R5) 0,0,1,-->0,0,1,--0,1,--
- R6) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R7) 0,0,0,1,-->0,0,0,1,--0,0,1,--0,1,--
- R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R9) 0,0,0,0,1,-->0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R10)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
0,0,1,--0,1,--
- R11) 0,0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R12)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--
0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R13)
0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R14)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,
0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R15)
0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,
0,1,--0,0,1,--0,1,--
- R16)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,

--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--0,1,--
 ,--
 R17)
 0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,
 0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--0,1,--

R18)
 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,
 0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,
 ,0,1,--0,0,0,1,--0,0,1,--0,1,--0,1,--

R19)
 0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--
 0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--0,1,--

List of different nodes in $T[L]$
 LEN=1) 0, :
 LEN=2) 0,0, : 0,1, :
 LEN=3) 0,0,0, : 0,0,1, :
 LEN=4) 0,0,0,0, : 0,0,0,1, :
 LEN=5) 0,0,0,0,0, : 0,0,0,0,1, :
 LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, :
 LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, :
 LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, :
 LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, :
 Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class
 1491-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][021][110][120][201][210]]$

--
 Rules of $T[L]$:
 R1) 0,-->0,0,--0,1,--
 R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
 R3) 0,1,-->0,1,--
 R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
 R5) 0,0,1,-->0,0,1,--0,1,--
 R6) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 R7) 0,0,0,1,-->0,0,0,1,--0,0,1,--0,1,--
 R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 R9) 0,0,0,0,1,-->0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 R10)
 0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--
 0,0,1,--0,1,--
 R11) 0,0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 R12)
 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--
 0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 R13)
 0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R14)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,
0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R15)

0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,
0,1,--0,0,1,--0,1,--

R16)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,
--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--0,1,--
,--

R17)

0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,
0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R18)

0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,
0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,
,0,1,--0,0,0,1,--0,0,1,--0,1,--

R19)

0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--
0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,0,0,: 0,0,1,:

LEN=4) 0,0,0,0,: 0,0,0,1,:

LEN=5) 0,0,0,0,0,: 0,0,0,0,1,:

LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,1,:

LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,1,:

LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,1,:

LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,1,:

LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,1,:

LEN=11) 0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,1,:

Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1492-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][100][101][102][110][120]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,0,1,--0,0,2,--

R3) 0,1,-->0,1,--

R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,0,2,--0,0,0,3,--

R5) 0,0,1,-->0,0,1,--0,0,2,--

R6) 0,0,2,-->0,0,2,1,--0,1,--

R7) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R8) 0,0,0,1,-->0,0,0,1,--0,0,0,2,--0,0,0,3,--

R9) 0,0,0,2,-->0,0,2,1,--0,0,1,--0,0,2,--

R10) 0,0,0,3,-->0,0,0,3,1,--0,0,0,3,1,--0,1,--

R11) 0,0,2,1,-->
R12)
0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--
0,0,0,0,0,5,--
R13) 0,0,0,0,1,-->0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
R14) 0,0,0,0,2,-->0,0,2,1,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
R15) 0,0,0,0,3,-->0,0,0,3,1,--0,0,0,3,1,--0,0,1,--0,0,2,--
R16) 0,0,0,0,4,-->0,0,0,0,4,1,--0,0,0,0,4,2,--0,0,0,0,4,1,--0,1,--
R17) 0,0,0,3,1,-->0,0,2,1,--
R18)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,
0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--
R19)
0,0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,
--
R20) 0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
R21) 0,0,0,0,0,3,-->0,0,0,3,1,--0,0,0,3,1,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
R22) 0,0,0,0,0,4,-->0,0,0,0,4,1,--0,0,0,0,4,2,--0,0,0,0,4,1,--0,0,1,--0,0,2,--
R23)
0,0,0,0,0,5,-->0,0,0,0,0,5,1,--0,0,0,0,0,5,2,--0,0,0,0,0,5,3,--0,0,0,0,0,5,1,--0,1,
--
R24) 0,0,0,0,4,1,-->0,0,0,3,1,--0,0,0,3,1,--
R25) 0,0,0,0,4,2,-->0,0,2,1,--0,0,2,1,--
R26)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,
0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--
R27)
0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,
0,0,0,0,0,5,--0,0,0,0,0,0,6,--
R28)
0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--
0,0,0,0,0,5,--
R29)
0,0,0,0,0,0,3,-->0,0,0,3,1,--0,0,0,3,1,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,
0,4,--
R30)
0,0,0,0,0,0,4,-->0,0,0,0,4,1,--0,0,0,0,4,2,--0,0,0,0,4,1,--0,0,0,1,--0,0,0,2,--0,0,
0,3,--
R31)
0,0,0,0,0,0,5,-->0,0,0,0,0,5,1,--0,0,0,0,0,5,2,--0,0,0,0,0,5,3,--0,0,0,0,0,5,1,--0,
0,1,--0,0,2,--
R32)
0,0,0,0,0,0,6,-->0,0,0,0,0,0,6,1,--0,0,0,0,0,0,6,2,--0,0,0,0,0,0,6,3,--0,0,0,0,0,0,
6,4,--0,0,0,0,0,0,6,1,--0,1,--
R33) 0,0,0,0,0,5,1,-->0,0,0,0,4,1,--0,0,0,0,4,2,--0,0,0,0,4,1,--
R34) 0,0,0,0,0,5,2,-->0,0,2,1,--0,0,0,0,3,1,--0,0,0,0,3,1,--
R35) 0,0,0,0,0,5,3,-->0,0,0,3,1,--0,0,0,3,1,--0,0,2,1,--
R36)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,
0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0

,0,0,0,0,7,--0,0,0,0,0,0,0,8,--
R37) 0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--
R38) 0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--
R39) 0,0,0,0,0,0,3,-->0,0,0,3,1,--0,0,0,3,1,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--
R40) 0,0,0,0,0,0,4,-->0,0,0,0,4,1,--0,0,0,0,4,2,--0,0,0,0,4,1,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
R41) 0,0,0,0,0,0,5,-->0,0,0,0,0,5,1,--0,0,0,0,0,5,2,--0,0,0,0,0,5,3,--0,0,0,0,0,5,1,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--
R42) 0,0,0,0,0,0,6,-->0,0,0,0,0,0,6,1,--0,0,0,0,0,0,6,2,--0,0,0,0,0,0,6,3,--0,0,0,0,0,0,6,4,--0,0,0,0,0,0,6,1,--0,0,1,--0,0,2,--
R43) 0,0,0,0,0,0,7,-->0,0,0,0,0,0,0,7,1,--0,0,0,0,0,0,0,7,2,--0,0,0,0,0,0,0,7,3,--0,0,0,0,0,0,0,7,4,--0,0,0,0,0,0,0,7,5,--0,0,0,0,0,0,0,7,1,--0,1,--
R44) 0,0,0,0,0,0,6,1,-->0,0,0,0,0,0,5,1,--0,0,0,0,0,0,5,2,--0,0,0,0,0,0,5,3,--0,0,0,0,0,0,5,1,--
R45) 0,0,0,0,0,0,6,2,-->0,0,2,1,--0,0,0,0,0,4,1,--0,0,0,0,0,4,2,--0,0,0,0,0,4,1,--
R46) 0,0,0,0,0,0,6,3,-->0,0,0,3,1,--0,0,0,3,1,--0,0,0,3,1,--0,0,0,3,1,--
R47) 0,0,0,0,0,0,6,4,-->0,0,0,0,4,1,--0,0,0,0,4,2,--0,0,0,0,4,1,--0,0,2,1,--
R48) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--
R49) 0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--
R50) 0,0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--
R51) 0,0,0,0,0,0,0,0,3,-->0,0,0,3,1,--0,0,0,3,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--
R52) 0,0,0,0,0,0,0,0,4,-->0,0,0,0,4,1,--0,0,0,0,4,2,--0,0,0,0,4,1,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--
R53) 0,0,0,0,0,0,0,0,5,-->0,0,0,0,0,0,5,1,--0,0,0,0,0,0,5,2,--0,0,0,0,0,0,5,3,--0,0,0,0,0,0,5,1,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--
R54) 0,0,0,0,0,0,0,0,6,-->0,0,0,0,0,0,6,1,--0,0,0,0,0,0,6,2,--0,0,0,0,0,0,6,3,--0,0,0,0,0,0,6,4,--0,0,0,0,0,0,6,1,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--

R55)

0,0,0,0,0,0,0,0,7,-->0,0,0,0,0,0,0,7,1,--0,0,0,0,0,0,0,7,2,--0,0,0,0,0,0,0,7,3,--0,0,0,0,0,0,0,7,4,--0,0,0,0,0,0,0,7,5,--0,0,0,0,0,0,0,7,1,--0,0,1,--0,0,2,--

R56)

0,0,0,0,0,0,0,0,8,-->0,0,0,0,0,0,0,8,1,--0,0,0,0,0,0,0,8,2,--0,0,0,0,0,0,0,8,3,--0,0,0,0,0,0,0,8,4,--0,0,0,0,0,0,0,8,5,--0,0,0,0,0,0,0,8,6,--0,0,0,0,0,0,0,0,8,1,--0,1,--

R57)

0,0,0,0,0,0,0,7,1,-->0,0,0,0,0,0,6,1,--0,0,0,0,0,0,6,2,--0,0,0,0,0,0,6,3,--0,0,0,0,0,0,6,4,--0,0,0,0,0,0,6,1,--

R58)

0,0,0,0,0,0,0,7,2,-->0,0,2,1,--0,0,0,0,0,5,1,--0,0,0,0,0,5,2,--0,0,0,0,0,5,3,--0,0,0,0,5,1,--

R59)

0,0,0,0,0,0,0,7,3,-->0,0,0,3,1,--0,0,0,3,1,--0,0,0,0,4,1,--0,0,0,0,4,2,--0,0,0,0,4,1,--

R60)

0,0,0,0,0,0,0,7,4,-->0,0,0,0,4,1,--0,0,0,0,4,2,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,0,3,1,--

R61)

0,0,0,0,0,0,0,7,5,-->0,0,0,0,0,5,1,--0,0,0,0,0,5,2,--0,0,0,0,0,5,3,--0,0,0,0,0,5,1,--0,0,2,1,--

R62)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,0,0,9,--0,0,0,0,0,0,0,0,0,0,0,10,--

R63)

0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--

R64)

0,0,0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--

R65)

0,0,0,0,0,0,0,0,0,3,-->0,0,0,3,1,--0,0,0,3,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--

R66)

0,0,0,0,0,0,0,0,0,4,-->0,0,0,0,4,1,--0,0,0,0,4,2,--0,0,0,0,4,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--

R67)

0,0,0,0,0,0,0,0,0,5,-->0,0,0,0,0,5,1,--0,0,0,0,0,5,2,--0,0,0,0,0,5,3,--0,0,0,0,0,5,1,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--

R68)

0,0,0,0,0,0,0,0,0,6,-->0,0,0,0,0,6,1,--0,0,0,0,0,6,2,--0,0,0,0,0,6,3,--0,0,0,0,0,6,4,--0,0,0,0,0,6,1,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R69)

0,0,0,0,0,0,0,0,0,7,-->0,0,0,0,0,0,0,7,1,--0,0,0,0,0,0,0,7,2,--0,0,0,0,0,0,0,7,3,--

0,0,0,0,0,0,7,4,--0,0,0,0,0,0,7,5,--0,0,0,0,0,0,7,1,--0,0,0,1,--0,0,0,2,--0,0,0,3,--

R70)

0,0,0,0,0,0,0,8,-->0,0,0,0,0,0,0,8,1,--0,0,0,0,0,0,0,8,2,--0,0,0,0,0,0,0,8,3,--0,0,0,0,0,0,0,8,4,--0,0,0,0,0,0,0,8,5,--0,0,0,0,0,0,0,8,6,--0,0,0,0,0,0,0,8,1,--0,0,1,--0,0,2,--

R71)

0,0,0,0,0,0,0,9,-->0,0,0,0,0,0,0,9,1,--0,0,0,0,0,0,0,9,2,--0,0,0,0,0,0,0,9,3,--0,0,0,0,0,0,0,9,4,--0,0,0,0,0,0,0,9,5,--0,0,0,0,0,0,0,9,6,--0,0,0,0,0,0,0,9,7,--0,0,0,0,0,0,0,9,1,--0,1,--

R72)

0,0,0,0,0,0,0,8,1,-->0,0,0,0,0,0,0,7,1,--0,0,0,0,0,0,0,7,2,--0,0,0,0,0,0,0,7,3,--0,0,0,0,0,0,0,7,4,--0,0,0,0,0,0,0,7,5,--0,0,0,0,0,0,0,7,1,--

R73)

0,0,0,0,0,0,0,8,2,-->0,0,2,1,--0,0,0,0,0,0,6,1,--0,0,0,0,0,0,6,2,--0,0,0,0,0,0,6,3,--0,0,0,0,0,0,6,4,--0,0,0,0,0,0,6,1,--

R74)

0,0,0,0,0,0,0,8,3,-->0,0,0,3,1,--0,0,0,3,1,--0,0,0,0,0,5,1,--0,0,0,0,0,5,2,--0,0,0,0,0,5,3,--0,0,0,0,0,5,1,--

R75)

0,0,0,0,0,0,0,8,4,-->0,0,0,0,4,1,--0,0,0,0,4,2,--0,0,0,0,4,1,--0,0,0,0,4,1,--0,0,0,0,4,2,--0,0,0,0,4,1,--

R76)

0,0,0,0,0,0,0,8,5,-->0,0,0,0,0,5,1,--0,0,0,0,0,5,2,--0,0,0,0,0,5,3,--0,0,0,0,0,5,1,--0,0,0,3,1,--0,0,0,3,1,--

R77)

0,0,0,0,0,0,0,8,6,-->0,0,0,0,0,0,6,1,--0,0,0,0,0,0,6,2,--0,0,0,0,0,0,6,3,--0,0,0,0,0,0,6,4,--0,0,0,0,0,0,6,1,--0,0,2,1,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,0,0,: 0,0,1,: 0,0,2,:

LEN=4) 0,0,0,0,: 0,0,0,1,: 0,0,0,2,: 0,0,0,3,: 0,0,2,1,:

LEN=5) 0,0,0,0,0,: 0,0,0,0,1,: 0,0,0,0,2,: 0,0,0,0,3,: 0,0,0,0,4,: 0,0,0,3,1,:

LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,1,: 0,0,0,0,0,2,: 0,0,0,0,0,3,: 0,0,0,0,0,4,:

0,0,0,0,0,5, : 0,0,0,0,4,1, : 0,0,0,0,4,2, :

LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, : 0,0,0,0,0,0,2, : 0,0,0,0,0,0,3, :

0,0,0,0,0,0,4, : 0,0,0,0,0,0,5, : 0,0,0,0,0,0,6, : 0,0,0,0,0,5,1, : 0,0,0,0,0,5,2, :

0,0,0,0,0,5,3, :

LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,2, : 0,0,0,0,0,0,0,3, :

0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,7, :

0,0,0,0,0,0,6,1, : 0,0,0,0,0,0,6,2, : 0,0,0,0,0,0,6,3, : 0,0,0,0,0,0,6,4, :

LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,2, :

0,0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,0,6, :

0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,8, : 0,0,0,0,0,0,0,7,1, : 0,0,0,0,0,0,0,7,2, :

0,0,0,0,0,0,0,7,3, : 0,0,0,0,0,0,0,7,4, : 0,0,0,0,0,0,0,7,5, :

LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,0,2, :

0,0,0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,0,5, :

0,0,0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,0,8, :

0,0,0,0,0,0,0,0,0,9, : 0,0,0,0,0,0,0,0,8,1, : 0,0,0,0,0,0,0,0,8,2, :

0,0,0,0,0,0,0,0,8,3,: 0,0,0,0,0,0,0,0,8,4,: 0,0,0,0,0,0,0,0,8,5,:
 0,0,0,0,0,0,0,0,8,6,:
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,0,0,0,2,:
 0,0,0,0,0,0,0,0,0,0,3,: 0,0,0,0,0,0,0,0,0,0,4,: 0,0,0,0,0,0,0,0,0,0,5,:
 0,0,0,0,0,0,0,0,0,0,6,: 0,0,0,0,0,0,0,0,0,0,7,: 0,0,0,0,0,0,0,0,0,0,8,:
 0,0,0,0,0,0,0,0,0,0,9,: 0,0,0,0,0,0,0,0,0,0,10,: 0,0,0,0,0,0,0,0,0,0,9,1,:
 0,0,0,0,0,0,0,0,0,0,9,2,: 0,0,0,0,0,0,0,0,0,0,9,3,: 0,0,0,0,0,0,0,0,0,0,9,4,:
 0,0,0,0,0,0,0,0,0,0,9,5,: 0,0,0,0,0,0,0,0,0,0,9,6,: 0,0,0,0,0,0,0,0,0,0,9,7,:
 Number new nodes in level n is given by : 1,2,3,5,6,8,10,12,14,16,18,

-----Class

1493-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][100][101][102][110][201]]$

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Rules of $T[L]$:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,0,1,--0,0,2,--
- R3) 0,1,-->0,1,--
- R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
- R5) 0,0,1,-->0,0,1,--0,0,2,--
- R6) 0,0,2,-->0,0,2,1,--0,0,2,--
- R7) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
- R8) 0,0,0,1,-->0,0,0,1,--0,0,0,2,--0,0,0,3,--
- R9) 0,0,0,2,-->0,0,2,1,--0,0,0,2,--0,0,0,3,--
- R10) 0,0,0,3,-->0,0,2,1,--0,0,0,3,2,--0,0,0,3,--
- R11) 0,0,2,1,-->
- R12)
 - 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--
- R13) 0,0,0,0,1,-->0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
- R14) 0,0,0,0,2,-->0,0,2,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
- R15) 0,0,0,0,3,-->0,0,2,1,--0,0,0,0,3,2,--0,0,0,0,3,--0,0,0,0,4,--
- R16) 0,0,0,0,4,-->0,0,2,1,--0,0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,4,--
- R17) 0,0,0,3,2,-->0,0,2,1,--
- R18)
 - 0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--
- R19)
 - 0,0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--
-
- R20)
 - 0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--
- R21)
 - 0,0,0,0,0,3,-->0,0,2,1,--0,0,0,0,3,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--
- R22)
 - 0,0,0,0,0,4,-->0,0,2,1,--0,0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--
- R23)
 - 0,0,0,0,0,5,-->0,0,2,1,--0,0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,5,--
- R24) 0,0,0,0,4,3,-->0,0,2,1,--0,0,0,0,3,2,--

R25)

0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--

R26)

0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--

R27)

0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--

R28)

0,0,0,0,0,0,3,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--

R29)

0,0,0,0,0,0,4,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--

R30)

0,0,0,0,0,0,5,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--

R31)

0,0,0,0,0,0,6,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,0,6,5,--0,0,0,0,0,0,6,--

R32) 0,0,0,0,0,0,5,4,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--

R33)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--

R34)

0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--

R35)

0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--

R36)

0,0,0,0,0,0,0,3,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--

R37)

0,0,0,0,0,0,0,4,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--

R38)

0,0,0,0,0,0,0,5,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--

R39)

0,0,0,0,0,0,0,6,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,0,0,6,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--

R40)

0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,0,0,6,5,--0,0,0,0,0,0,0,7,6,--0,0,0,0,0,0,0,7,--

R41) 0,0,0,0,0,0,0,6,5,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--

R42)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,0,

0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,
,--0,0,0,0,0,0,0,0,9,--

R57)

0,0,0,0,0,0,0,0,5,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,
0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,
,0,0,0,0,0,0,9,--

R58)

0,0,0,0,0,0,0,0,6,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,
0,0,6,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,
,0,0,0,0,0,9,--

R59)

0,0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,
0,0,6,5,--0,0,0,0,0,0,0,7,6,--0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,
,0,0,0,0,9,--

R60)

0,0,0,0,0,0,0,0,8,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,
0,0,6,5,--0,0,0,0,0,0,0,7,6,--0,0,0,0,0,0,0,0,8,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,
,0,0,0,0,9,--

R61)

0,0,0,0,0,0,0,0,9,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,
0,0,6,5,--0,0,0,0,0,0,0,7,6,--0,0,0,0,0,0,0,0,8,7,--0,0,0,0,0,0,0,0,9,8,--0,0,0,0,
,0,0,0,0,9,--

R62)

0,0,0,0,0,0,0,0,8,7,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,
0,0,6,5,--0,0,0,0,0,0,0,7,6,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,0,0,: 0,0,1, : 0,0,2,:

LEN=4) 0,0,0,0,: 0,0,0,1, : 0,0,0,2, : 0,0,0,3, : 0,0,2,1,:

LEN=5) 0,0,0,0,0,: 0,0,0,0,1, : 0,0,0,0,2, : 0,0,0,0,3, : 0,0,0,0,4, : 0,0,0,3,2,:

LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,1, : 0,0,0,0,0,2, : 0,0,0,0,0,3, : 0,0,0,0,0,4, :
0,0,0,0,0,5, : 0,0,0,0,4,3,:

LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,1, : 0,0,0,0,0,0,2, : 0,0,0,0,0,0,3, :
0,0,0,0,0,0,4, : 0,0,0,0,0,0,5, : 0,0,0,0,0,0,6, : 0,0,0,0,0,5,4,:

LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,2, : 0,0,0,0,0,0,0,3, :
0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,7, :
0,0,0,0,0,0,6,5,:

LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,2, :
0,0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,0,6, :
0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,8, : 0,0,0,0,0,0,0,7,6,:

LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,2, :
0,0,0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,5, :
0,0,0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,0,8, :
0,0,0,0,0,0,0,0,0,9, : 0,0,0,0,0,0,0,0,0,8,7, :

LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,0,2, :
0,0,0,0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,0,5, :
0,0,0,0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,0,8, :
0,0,0,0,0,0,0,0,0,0,9, : 0,0,0,0,0,0,0,0,0,0,10, : 0,0,0,0,0,0,0,0,0,9,8, :

Number new nodes in level n is given by : 1,2,3,5,6,7,8,9,10,11,12,

-----Class

1494-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][100][101][102][110][210]]$

--

Rules of $T[L]$:

R1) $0, -->0,0, --0,1, --$

R2) $0,0, -->0,0,0, --0,0,1, --0,0,2, --$

R3) $0,1, -->0,1, --$

R4) $0,0,0, -->0,0,0,0, --0,0,0,1, --0,0,0,2, --0,0,0,3, --$

R5) $0,0,1, -->0,0,1, --0,0,2, --$

R6) $0,0,2, -->0,0,2,1, --0,0,2, --$

R7) $0,0,0,0, -->0,0,0,0,0, --0,0,0,0,1, --0,0,0,0,2, --0,0,0,0,3, --0,0,0,0,4, --$

R8) $0,0,0,1, -->0,0,0,1, --0,0,0,2, --0,0,0,3, --$

R9) $0,0,0,2, -->0,0,2,1, --0,0,0,2, --0,0,0,2,4, --$

R10) $0,0,0,3, -->0,0,0,3,1, --0,0,2,1, --0,0,0,3, --$

R11) $0,0,2,1, -->$

R12)

$0,0,0,0,0, -->0,0,0,0,0,0, --0,0,0,0,0,1, --0,0,0,0,0,2, --0,0,0,0,0,3, --0,0,0,0,0,4, --$
 $0,0,0,0,0,5, --$

R13) $0,0,0,0,1, -->0,0,0,0,1, --0,0,0,0,2, --0,0,0,0,3, --0,0,0,0,4, --$

R14) $0,0,0,0,2, -->0,0,2,1, --0,0,0,0,2, --0,0,0,0,2,4, --0,0,0,0,2,5, --$

R15) $0,0,0,0,3, -->0,0,0,3,1, --0,0,2,1, --0,0,0,0,3, --0,0,0,0,3,5, --$

R16) $0,0,0,0,4, -->0,0,0,0,4,1, --0,0,0,3,1, --0,0,2,1, --0,0,0,0,4, --$

R17) $0,0,0,2,4, -->0,0,2,1, --0,0,2,1, --0,0,0,2,4, --$

R18) $0,0,0,3,1, -->0,0,2,1, --$

R19)

$0,0,0,0,0,0, -->0,0,0,0,0,0,0, --0,0,0,0,0,0,1, --0,0,0,0,0,0,2, --0,0,0,0,0,0,3, --0,0,$
 $0,0,0,0,4, --0,0,0,0,0,0,5, --0,0,0,0,0,0,6, --$

R20)

$0,0,0,0,0,1, -->0,0,0,0,0,1, --0,0,0,0,0,2, --0,0,0,0,0,3, --0,0,0,0,0,4, --0,0,0,0,0,5,$

--

R21)

$0,0,0,0,0,2, -->0,0,2,1, --0,0,0,0,0,2, --0,0,0,0,0,2,4, --0,0,0,0,0,2,5, --0,0,0,0,0,2,$
 $6, --$

R22)

$0,0,0,0,0,3, -->0,0,0,3,1, --0,0,2,1, --0,0,0,0,0,3, --0,0,0,0,0,3,5, --0,0,0,0,0,3,6, --$

R23)

$0,0,0,0,0,4, -->0,0,0,0,4,1, --0,0,0,3,1, --0,0,2,1, --0,0,0,0,0,4, --0,0,0,0,0,4,6, --$

R24)

$0,0,0,0,0,5, -->0,0,0,0,0,5,1, --0,0,0,0,4,1, --0,0,0,3,1, --0,0,2,1, --0,0,0,0,0,5, --$

R25) $0,0,0,0,2,4, -->0,0,2,1, --0,0,2,1, --0,0,0,0,2,4, --0,0,0,0,2,4,6, --$

R26) $0,0,0,0,2,5, -->0,0,2,1, --0,0,0,3,1, --0,0,2,1, --0,0,0,0,2,5, --$

R27) $0,0,0,0,3,5, -->0,0,0,3,1, --0,0,2,1, --0,0,2,1, --0,0,0,0,3,5, --$

R28) $0,0,0,0,4,1, -->0,0,0,3,1, --0,0,2,1, --$

R29)

$0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,2, --0,0,0,0,0,0,$
 $0,3, --0,0,0,0,0,0,0,4, --0,0,0,0,0,0,0,5, --0,0,0,0,0,0,0,6, --0,0,0,0,0,0,0,7, --$

R30)

0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--

R31)

0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,2,4,--0,0,0,0,0,0,2,5,--0,0,0,0,0,0,2,6,--0,0,0,0,0,0,2,7,--

R32)

0,0,0,0,0,0,3,-->0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,3,--0,0,0,0,0,0,3,5,--0,0,0,0,0,0,3,6,--0,0,0,0,0,0,3,7,--

R33)

0,0,0,0,0,0,4,-->0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,4,--0,0,0,0,0,0,4,6,--0,0,0,0,0,0,4,7,--

R34)

0,0,0,0,0,0,5,-->0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,5,--0,0,0,0,0,0,5,7,--

R35)

0,0,0,0,0,0,6,-->0,0,0,0,0,0,6,1,--0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,6,--

R36)

0,0,0,0,0,2,4,-->0,0,2,1,--0,0,2,1,--0,0,0,0,0,2,4,--0,0,0,0,0,2,4,6,--0,0,0,0,0,2,4,7,--

R37)

0,0,0,0,0,2,5,-->0,0,2,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,2,5,--0,0,0,0,0,2,5,7,--

R38)

0,0,0,0,0,2,6,-->0,0,2,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,2,6,--

R39)

0,0,0,0,0,3,5,-->0,0,0,3,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,3,5,--0,0,0,0,0,3,5,7,--

R40)

0,0,0,0,0,3,6,-->0,0,0,3,1,--0,0,2,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,3,6,--

R41)

0,0,0,0,0,4,6,-->0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,4,6,--

R42)

0,0,0,0,0,5,1,-->0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--

R43)

0,0,0,0,2,4,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,2,4,6,--

R44)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--

R45)

0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--

R46)

0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,2,4,--0,0,0,0,0,0,2,5,--0,0,0,0,0,0,2,6,--0,0,0,0,0,0,2,7,--0,0,0,0,0,0,2,8,--

R47)

0,0,0,0,0,0,3,-->0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,3,--0,0,0,0,0,0,3,5,--0,0,0,0,0,0,3,6,--0,0,0,0,0,0,3,7,--0,0,0,0,0,0,3,8,--

R48)

0,0,0,0,0,0,4,-->0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,4,--0,0,0,0,0,0,4,6,--0,0,0,0,0,0,4,7,--0,0,0,0,0,0,4,8,--

R49)

R50)

0,0,0,0,0,0,0,6,-->0,0,0,0,0,0,6,1,--0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,6,--0,0,0,0,0,0,6,8,--

R51)

0,0,0,0,0,0,0,7,-->0,0,0,0,0,0,7,1,--0,0,0,0,0,6,1,--0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,7,--

R52)

0,0,0,0,0,0,2,4,-->0,0,2,1,--0,0,2,1,--0,0,0,0,0,2,4,--0,0,0,0,0,2,4,6,--0,0,0,0,0,2,4,7,--0,0,0,0,0,2,4,8,--

R53)

0,0,0,0,0,0,2,5,-->0,0,2,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,2,5,--0,0,0,0,0,2,5,7,--0,0,0,0,0,2,5,8,--

R54)

0,0,0,0,0,0,2,6,-->0,0,2,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,2,6,--0,0,0,0,0,2,6,8,--

R55)

0,0,0,0,0,0,2,7,-->0,0,2,1,--0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,2,7,--

R56)

0,0,0,0,0,0,3,5,-->0,0,0,3,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,3,5,--0,0,0,0,0,3,5,7,--0,0,0,0,0,3,5,8,--

R57)

0,0,0,0,0,0,3,6,-->0,0,0,3,1,--0,0,2,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,3,6,--0,0,0,0,0,3,6,8,--

R58)

0,0,0,0,0,0,3,7,-->0,0,0,3,1,--0,0,2,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,3,7,--

R59)

0,0,0,0,0,0,4,6,-->0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,4,6,--0,0,0,0,0,4,6,8,--

R60)

0,0,0,0,0,0,4,7,-->0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,4,7,--

R61)

0,0,0,0,0,0,5,7,-->0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,5,7,--

R62) 0,0,0,0,0,0,6,1,-->0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--

R63)

0,0,0,0,0,2,4,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,2,4,6,--0,0,0,0,0,2,4,6,8,--

R64)

0,0,0,0,0,2,4,7,-->0,0,2,1,--0,0,2,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,2,4,7,--

R65)

0,0,0,0,0,2,5,7,-->0,0,2,1,--0,0,0,3,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,2,5,7,--

R66)

0,0,0,0,0,3,5,7,-->0,0,0,3,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,3,5,7,--

R67)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--

R68)

0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,3,--0,
0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--0,0,0,
,0,0,0,0,0,8,--

R69)

0,0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,2,4,--0,0,0,0,0,
0,0,0,2,5,--0,0,0,0,0,0,0,0,2,6,--0,0,0,0,0,0,0,0,2,7,--0,0,0,0,0,0,0,0,2,8,--0,0,0,
,0,0,0,0,0,2,9,--

R70)

0,0,0,0,0,0,0,0,3,-->0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,3,5,
--0,0,0,0,0,0,0,0,3,6,--0,0,0,0,0,0,0,0,3,7,--0,0,0,0,0,0,0,0,3,8,--0,0,0,0,0,0,0,0,
,3,9,--

R71)

0,0,0,0,0,0,0,0,4,-->0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,0,0,4,--0,0,0,
0,0,0,0,0,4,6,--0,0,0,0,0,0,0,0,4,7,--0,0,0,0,0,0,0,0,4,8,--0,0,0,0,0,0,0,0,4,9,--

R72)

0,0,0,0,0,0,0,0,5,-->0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,
0,0,0,5,--0,0,0,0,0,0,0,0,5,7,--0,0,0,0,0,0,0,0,5,8,--0,0,0,0,0,0,0,0,5,9,--

R73)

0,0,0,0,0,0,0,0,6,-->0,0,0,0,0,0,6,1,--0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,
0,2,1,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,6,8,--0,0,0,0,0,0,0,0,6,9,--

R74)

0,0,0,0,0,0,0,0,7,-->0,0,0,0,0,0,0,7,1,--0,0,0,0,0,0,6,1,--0,0,0,0,0,5,1,--0,0,0,0,
4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,7,9,--

R75)

0,0,0,0,0,0,0,0,8,-->0,0,0,0,0,0,0,8,1,--0,0,0,0,0,0,7,1,--0,0,0,0,0,6,1,--0,
0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,0,8,--

R76)

0,0,0,0,0,0,0,2,4,-->0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,2,4,--0,0,0,0,0,0,2,4,6,--
0,0,0,0,0,0,0,2,4,7,--0,0,0,0,0,0,2,4,8,--0,0,0,0,0,0,2,4,9,--

R77)

0,0,0,0,0,0,0,2,5,-->0,0,2,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,2,5,--0,0,0,0,0,
0,0,2,5,7,--0,0,0,0,0,0,2,5,8,--0,0,0,0,0,0,2,5,9,--

R78)

0,0,0,0,0,0,0,2,6,-->0,0,2,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,2,
6,--0,0,0,0,0,0,2,6,8,--0,0,0,0,0,0,2,6,9,--

R79)

0,0,0,0,0,0,0,2,7,-->0,0,2,1,--0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--
0,0,0,0,0,0,0,2,7,--0,0,0,0,0,0,2,7,9,--

R80)

0,0,0,0,0,0,0,2,8,-->0,0,2,1,--0,0,0,0,0,6,1,--0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,
0,3,1,--0,0,2,1,--0,0,0,0,0,0,2,8,--

R81)

0,0,0,0,0,0,0,3,5,-->0,0,0,3,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,3,5,--0,0,0,0,0,
0,0,3,5,7,--0,0,0,0,0,0,3,5,8,--0,0,0,0,0,0,3,5,9,--

R82)

0,0,0,0,0,0,0,3,6,-->0,0,0,3,1,--0,0,2,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,3,6,
--0,0,0,0,0,0,3,6,8,--0,0,0,0,0,0,3,6,9,--

R83)

0,0,0,0,0,0,0,3,7,-->0,0,0,3,1,--0,0,2,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,

0,0,0,0,0,3,7,--0,0,0,0,0,0,0,3,7,9,--

R84)

0,0,0,0,0,0,0,3,8,-->0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,
--0,0,2,1,--0,0,0,0,0,0,0,3,8,--

R85)

0,0,0,0,0,0,0,4,6,-->0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,4,
6,--0,0,0,0,0,0,0,4,6,8,--0,0,0,0,0,0,0,4,6,9,--

R86)

0,0,0,0,0,0,0,4,7,-->0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,3,1,--0,0,2,1,--0,0,
0,0,0,0,0,4,7,--0,0,0,0,0,0,0,4,7,9,--

R87)

0,0,0,0,0,0,0,4,8,-->0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,4,1,--0,0,0,3,1,--
0,0,2,1,--0,0,0,0,0,0,0,4,8,--

R88)

0,0,0,0,0,0,0,5,7,-->0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,2,1,--
0,0,0,0,0,0,0,5,7,--0,0,0,0,0,0,0,5,7,9,--

R89)

0,0,0,0,0,0,0,5,8,-->0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,3,1,
--0,0,2,1,--0,0,0,0,0,0,0,5,8,--

R90)

0,0,0,0,0,0,0,6,8,-->0,0,0,0,0,0,6,1,--0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,
0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,6,8,--

R91)

0,0,0,0,0,0,0,7,1,-->0,0,0,0,0,0,6,1,--0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,
0,2,1,--

R92)

0,0,0,0,0,0,2,4,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,2,4,6,--0,0,0,0,0,0,
2,4,6,8,--0,0,0,0,0,0,2,4,6,9,--

R93)

0,0,0,0,0,0,2,4,7,-->0,0,2,1,--0,0,2,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,2,4,7,--
0,0,0,0,0,0,2,4,7,9,--

R94)

0,0,0,0,0,0,2,4,8,-->0,0,2,1,--0,0,2,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,
0,0,0,2,4,8,--

R95)

0,0,0,0,0,0,2,5,7,-->0,0,2,1,--0,0,0,3,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,2,5,7,--
0,0,0,0,0,0,2,5,7,9,--

R96)

0,0,0,0,0,0,2,5,8,-->0,0,2,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,
0,0,2,5,8,--

R97)

0,0,0,0,0,0,2,6,8,-->0,0,2,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,2,1,--0,0,0,
0,0,0,2,6,8,--

R98)

0,0,0,0,0,0,3,5,7,-->0,0,0,3,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,3,5,7,--
0,0,0,0,0,0,3,5,7,9,--

R99)

0,0,0,0,0,0,3,5,8,-->0,0,0,3,1,--0,0,2,1,--0,0,2,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,
0,0,3,5,8,--

R100)

0,0,0,0,0,0,3,6,8,-->0,0,0,3,1,--0,0,2,1,--0,0,0,3,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,
0,0,3,6,8,--

R101)

0,0,0,0,0,0,4,6,8,-->0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,
0,0,0,4,6,8,--

R102)

0,0,0,0,0,2,4,6,8,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,2,4,6,8,--

R103)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,
0,0,0,0,2,--0,0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,0,5,-
-0,0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,
0,0,0,0,0,9,--0,0,0,0,0,0,0,0,0,0,10,--

R104)

0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,
0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,
,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--

R105)

0,0,0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,2,4,--0,0,
0,0,0,0,0,0,0,2,5,--0,0,0,0,0,0,0,0,0,2,6,--0,0,0,0,0,0,0,0,0,2,7,--0,0,0,0,0,0,0,0,
,0,2,8,--0,0,0,0,0,0,0,0,0,2,9,--0,0,0,0,0,0,0,0,0,2,10,--

R106)

0,0,0,0,0,0,0,0,0,3,-->0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,
0,3,5,--0,0,0,0,0,0,0,0,0,3,6,--0,0,0,0,0,0,0,0,0,3,7,--0,0,0,0,0,0,0,0,0,3,8,--0,0,
,0,0,0,0,0,0,0,3,9,--0,0,0,0,0,0,0,0,0,3,10,--

R107)

0,0,0,0,0,0,0,0,0,4,-->0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,0,0,0,4,--0,
0,0,0,0,0,0,0,0,4,6,--0,0,0,0,0,0,0,0,4,7,--0,0,0,0,0,0,0,0,4,8,--0,0,0,0,0,0,0,
,0,0,4,9,--0,0,0,0,0,0,0,0,4,10,--

R108)

0,0,0,0,0,0,0,0,0,5,-->0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,
0,0,0,0,0,5,--0,0,0,0,0,0,0,0,5,7,--0,0,0,0,0,0,0,0,5,8,--0,0,0,0,0,0,0,0,5,9,
,--0,0,0,0,0,0,0,0,5,10,--

R109)

0,0,0,0,0,0,0,0,0,6,-->0,0,0,0,0,6,1,--0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--
0,0,2,1,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,6,8,--0,0,0,0,0,0,0,0,6,9,--0,0,
,0,0,0,0,0,6,10,--

R110)

0,0,0,0,0,0,0,0,0,7,-->0,0,0,0,0,0,7,1,--0,0,0,0,0,6,1,--0,0,0,0,5,1,--0,0,0,
0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,7,9,--0,0,0,0,
,0,0,0,0,7,10,--

R111)

0,0,0,0,0,0,0,0,0,8,-->0,0,0,0,0,0,8,1,--0,0,0,0,0,7,1,--0,0,0,0,6,1,--
0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,8,--0,0,0,0,
,0,0,0,8,10,--

R112)

0,0,0,0,0,0,0,0,0,9,-->0,0,0,0,0,0,9,1,--0,0,0,0,0,8,1,--0,0,0,0,0,0,
7,1,--0,0,0,0,6,1,--0,0,0,0,5,1,--0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,
,0,0,0,9,--

R113)

0,0,0,0,0,0,0,2,4,-->0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,2,4,--0,0,0,0,0,0,2,

4,6,--0,0,0,0,0,0,0,2,4,7,--0,0,0,0,0,0,0,2,4,8,--0,0,0,0,0,0,0,2,4,9,--0,0,0,0,0,0,0,2,4,10,--

R114)

0,0,0,0,0,0,0,2,5,-->0,0,2,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,0,2,5,--0,0,0,0,0,0,0,2,5,7,--0,0,0,0,0,0,0,2,5,8,--0,0,0,0,0,0,0,2,5,9,--0,0,0,0,0,0,0,2,5,10,--

R115)

0,0,0,0,0,0,0,2,6,-->0,0,2,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,0,2,6,--0,0,0,0,0,0,0,2,6,8,--0,0,0,0,0,0,0,2,6,9,--0,0,0,0,0,0,0,2,6,10,--

R116)

0,0,0,0,0,0,0,2,7,-->0,0,2,1,--0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,0,2,7,--0,0,0,0,0,0,0,2,7,9,--0,0,0,0,0,0,0,2,7,10,--

R117)

0,0,0,0,0,0,0,2,8,-->0,0,2,1,--0,0,0,0,0,0,6,1,--0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,0,2,8,--0,0,0,0,0,0,0,2,8,10,--

R118)

0,0,0,0,0,0,0,2,9,-->0,0,2,1,--0,0,0,0,0,0,0,7,1,--0,0,0,0,0,0,6,1,--0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,0,2,9,--

R119)

0,0,0,0,0,0,0,3,5,-->0,0,0,3,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,3,5,--0,0,0,0,0,0,0,3,5,7,--0,0,0,0,0,0,0,3,5,8,--0,0,0,0,0,0,0,3,5,9,--0,0,0,0,0,0,0,3,5,10,--

R120)

0,0,0,0,0,0,0,3,6,-->0,0,0,3,1,--0,0,2,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,0,3,6,--0,0,0,0,0,0,0,3,6,8,--0,0,0,0,0,0,0,3,6,9,--0,0,0,0,0,0,0,3,6,10,--

R121)

0,0,0,0,0,0,0,3,7,-->0,0,0,3,1,--0,0,2,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,0,3,7,--0,0,0,0,0,0,0,3,7,9,--0,0,0,0,0,0,0,3,7,10,--

R122)

0,0,0,0,0,0,0,3,8,-->0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,0,3,8,--0,0,0,0,0,0,0,3,8,10,--

R123)

0,0,0,0,0,0,0,3,9,-->0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,6,1,--0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,0,3,9,--

R124)

0,0,0,0,0,0,0,4,6,-->0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,4,6,--0,0,0,0,0,0,0,4,6,8,--0,0,0,0,0,0,0,4,6,9,--0,0,0,0,0,0,0,4,6,10,--

R125)

0,0,0,0,0,0,0,4,7,-->0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,0,4,7,--0,0,0,0,0,0,0,4,7,9,--0,0,0,0,0,0,0,4,7,10,--

R126)

0,0,0,0,0,0,0,4,8,-->0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,0,4,8,--0,0,0,0,0,0,0,4,8,10,--

R127)

0,0,0,0,0,0,0,4,9,-->0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,0,4,9,--

R128)

0,0,0,0,0,0,0,5,7,-->0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,5,7,--0,0,0,0,0,0,0,5,7,9,--0,0,0,0,0,0,0,5,7,10,--

R129)

0,0,0,0,0,0,0,0,5,8,-->0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,0,0,5,8,--0,0,0,0,0,0,0,0,5,8,10,--

R130)

0,0,0,0,0,0,0,0,5,9,-->0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,0,0,5,9,--

R131)

0,0,0,0,0,0,0,0,6,8,-->0,0,0,0,0,0,6,1,--0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,6,8,--0,0,0,0,0,0,0,0,6,8,10,--

R132)

0,0,0,0,0,0,0,0,6,9,-->0,0,0,0,0,0,6,1,--0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,0,0,6,9,--

R133)

0,0,0,0,0,0,0,0,7,9,-->0,0,0,0,0,0,7,1,--0,0,0,0,0,0,6,1,--0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,7,9,--

R134)

0,0,0,0,0,0,0,0,8,1,-->0,0,0,0,0,0,7,1,--0,0,0,0,0,0,6,1,--0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--

R135)

0,0,0,0,0,0,0,2,4,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,2,4,6,--0,0,0,0,0,0,0,2,4,6,8,--0,0,0,0,0,0,0,2,4,6,9,--0,0,0,0,0,0,0,2,4,6,10,--

R136)

0,0,0,0,0,0,0,2,4,7,-->0,0,2,1,--0,0,2,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,0,2,4,7,--0,0,0,0,0,0,0,2,4,7,9,--0,0,0,0,0,0,0,2,4,7,10,--

R137)

0,0,0,0,0,0,0,2,4,8,-->0,0,2,1,--0,0,2,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,2,4,8,--0,0,0,0,0,0,0,2,4,8,10,--

R138)

0,0,0,0,0,0,0,2,4,9,-->0,0,2,1,--0,0,2,1,--0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,2,4,9,--

R139)

0,0,0,0,0,0,0,2,5,7,-->0,0,2,1,--0,0,0,3,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,2,5,7,--0,0,0,0,0,0,0,2,5,7,9,--0,0,0,0,0,0,0,2,5,7,10,--

R140)

0,0,0,0,0,0,0,2,5,8,-->0,0,2,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,2,5,8,--0,0,0,0,0,0,0,2,5,8,10,--

R141)

0,0,0,0,0,0,0,2,5,9,-->0,0,2,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,2,5,9,--

R142)

0,0,0,0,0,0,0,2,6,8,-->0,0,2,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,2,6,8,--0,0,0,0,0,0,0,2,6,8,10,--

R143)

0,0,0,0,0,0,0,2,6,9,-->0,0,2,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,2,6,9,--

R144)

0,0,0,0,0,0,0,2,7,9,-->0,0,2,1,--0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,2,7,9,--

R145)

0,0,0,0,0,0,0,3,5,7,-->0,0,0,3,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,3,5,7,--0,0,0,0,0,0,0,3,5,7,9,--0,0,0,0,0,0,0,3,5,7,10,--

R146)

0,0,0,0,0,0,0,3,5,8,-->0,0,0,3,1,--0,0,2,1,--0,0,2,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,
0,0,0,0,3,5,8,--0,0,0,0,0,0,0,3,5,8,10,--

R147)

0,0,0,0,0,0,0,3,5,9,-->0,0,0,3,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,
0,2,1,--0,0,0,0,0,0,0,3,5,9,--

R148)

0,0,0,0,0,0,0,3,6,8,-->0,0,0,3,1,--0,0,2,1,--0,0,0,3,1,--0,0,2,1,--0,0,2,1,--0,0,0,
0,0,0,0,3,6,8,--0,0,0,0,0,0,0,3,6,8,10,--

R149)

0,0,0,0,0,0,0,3,6,9,-->0,0,0,3,1,--0,0,2,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,3,1,--0,0,
2,1,--0,0,0,0,0,0,0,3,6,9,--

R150)

0,0,0,0,0,0,0,3,7,9,-->0,0,0,3,1,--0,0,2,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,
0,2,1,--0,0,0,0,0,0,0,3,7,9,--

R151)

0,0,0,0,0,0,0,4,6,8,-->0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,
0,0,0,0,0,4,6,8,--0,0,0,0,0,0,0,4,6,8,10,--

R152)

0,0,0,0,0,0,0,4,6,9,-->0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,2,1,--0,0,0,3,1,--0,
0,2,1,--0,0,0,0,0,0,0,4,6,9,--

R153)

0,0,0,0,0,0,0,4,7,9,-->0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,3,1,--0,0,2,1,--0,
0,2,1,--0,0,0,0,0,0,0,4,7,9,--

R154)

0,0,0,0,0,0,0,5,7,9,-->0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,2,1,
--0,0,2,1,--0,0,0,0,0,0,0,5,7,9,--

R155)

0,0,0,0,0,0,2,4,6,8,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,2,4,6,8,
--0,0,0,0,0,0,2,4,6,8,10,--

R156)

0,0,0,0,0,0,2,4,6,9,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,
0,0,2,4,6,9,--

R157)

0,0,0,0,0,0,2,4,7,9,-->0,0,2,1,--0,0,2,1,--0,0,0,3,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,
0,0,2,4,7,9,--

R158)

0,0,0,0,0,0,2,5,7,9,-->0,0,2,1,--0,0,0,3,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,
0,0,2,5,7,9,--

R159)

0,0,0,0,0,0,3,5,7,9,-->0,0,0,3,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,
0,0,3,5,7,9,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, : 0,1, :

LEN=3) 0,0,0, : 0,0,1, : 0,0,2, :

LEN=4) 0,0,0,0, : 0,0,0,1, : 0,0,0,2, : 0,0,0,3, : 0,0,2,1, :

LEN=5) 0,0,0,0,0, : 0,0,0,0,1, : 0,0,0,0,2, : 0,0,0,0,3, : 0,0,0,0,4, : 0,0,0,2,4, :
0,0,0,3,1, :

LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, : 0,0,0,0,0,2, : 0,0,0,0,0,3, : 0,0,0,0,0,4, :

0,0,0,0,0,5,: 0,0,0,0,2,4,: 0,0,0,0,2,5,: 0,0,0,0,3,5,: 0,0,0,0,4,1,:
LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,1,: 0,0,0,0,0,0,2,: 0,0,0,0,0,0,3,:
0,0,0,0,0,0,4,: 0,0,0,0,0,0,5,: 0,0,0,0,0,0,6,: 0,0,0,0,0,2,4,: 0,0,0,0,0,2,5,:
0,0,0,0,0,2,6,: 0,0,0,0,0,3,5,: 0,0,0,0,0,3,6,: 0,0,0,0,0,4,6,: 0,0,0,0,0,5,1,:
0,0,0,0,2,4,6,:
LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,2,: 0,0,0,0,0,0,0,3,:
0,0,0,0,0,0,0,4,: 0,0,0,0,0,0,0,5,: 0,0,0,0,0,0,0,6,: 0,0,0,0,0,0,0,7,:
0,0,0,0,0,0,2,4,: 0,0,0,0,0,0,2,5,: 0,0,0,0,0,0,2,6,: 0,0,0,0,0,0,2,7,:
0,0,0,0,0,0,3,5,: 0,0,0,0,0,0,3,6,: 0,0,0,0,0,0,3,7,: 0,0,0,0,0,0,4,6,:
0,0,0,0,0,0,4,7,: 0,0,0,0,0,0,5,7,: 0,0,0,0,0,0,6,1,: 0,0,0,0,0,2,4,6,:
0,0,0,0,0,2,4,7,: 0,0,0,0,0,2,5,7,: 0,0,0,0,0,3,5,7,:
LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,0,2,:
0,0,0,0,0,0,0,0,0,3,: 0,0,0,0,0,0,0,0,0,4,: 0,0,0,0,0,0,0,0,0,5,: 0,0,0,0,0,0,0,0,0,6,:
0,0,0,0,0,0,0,0,0,7,: 0,0,0,0,0,0,0,0,0,8,: 0,0,0,0,0,0,0,0,2,4,: 0,0,0,0,0,0,0,0,2,5,:
0,0,0,0,0,0,0,0,2,6,: 0,0,0,0,0,0,0,0,2,7,: 0,0,0,0,0,0,0,0,2,8,: 0,0,0,0,0,0,0,0,3,5,:
0,0,0,0,0,0,0,0,3,6,: 0,0,0,0,0,0,0,0,3,7,: 0,0,0,0,0,0,0,0,3,8,: 0,0,0,0,0,0,0,0,4,6,:
0,0,0,0,0,0,0,0,4,7,: 0,0,0,0,0,0,0,0,4,8,: 0,0,0,0,0,0,0,0,5,7,: 0,0,0,0,0,0,0,0,5,8,:
0,0,0,0,0,0,0,0,6,8,: 0,0,0,0,0,0,0,0,7,1,: 0,0,0,0,0,0,0,2,4,6,: 0,0,0,0,0,0,0,2,4,7,:
0,0,0,0,0,0,0,2,4,8,: 0,0,0,0,0,0,0,2,5,7,: 0,0,0,0,0,0,0,2,5,8,: 0,0,0,0,0,0,0,2,6,8,:
0,0,0,0,0,0,0,3,5,7,: 0,0,0,0,0,0,0,3,5,8,: 0,0,0,0,0,0,0,3,6,8,: 0,0,0,0,0,0,0,4,6,8,:
0,0,0,0,0,2,4,6,8,:
LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,0,0,0,2,:
0,0,0,0,0,0,0,0,0,0,0,3,: 0,0,0,0,0,0,0,0,0,0,0,4,: 0,0,0,0,0,0,0,0,0,0,0,5,:
0,0,0,0,0,0,0,0,0,0,0,0,6,: 0,0,0,0,0,0,0,0,0,0,0,0,7,: 0,0,0,0,0,0,0,0,0,0,0,0,8,:
0,0,0,0,0,0,0,0,0,0,0,0,0,9,: 0,0,0,0,0,0,0,0,0,0,2,4,: 0,0,0,0,0,0,0,0,0,2,5,:
0,0,0,0,0,0,0,0,0,0,2,6,: 0,0,0,0,0,0,0,0,0,2,7,: 0,0,0,0,0,0,0,0,0,2,8,:
0,0,0,0,0,0,0,0,0,0,2,9,: 0,0,0,0,0,0,0,0,0,3,5,: 0,0,0,0,0,0,0,0,0,3,6,:
0,0,0,0,0,0,0,0,0,3,7,: 0,0,0,0,0,0,0,0,0,3,8,: 0,0,0,0,0,0,0,0,0,3,9,:
0,0,0,0,0,0,0,0,0,4,6,: 0,0,0,0,0,0,0,0,0,4,7,: 0,0,0,0,0,0,0,0,0,4,8,:
0,0,0,0,0,0,0,0,0,4,9,: 0,0,0,0,0,0,0,0,0,5,7,: 0,0,0,0,0,0,0,0,0,5,8,:
0,0,0,0,0,0,0,0,0,5,9,: 0,0,0,0,0,0,0,0,0,6,8,: 0,0,0,0,0,0,0,0,0,6,9,:
0,0,0,0,0,0,0,0,0,7,9,: 0,0,0,0,0,0,0,0,0,8,1,: 0,0,0,0,0,0,0,2,4,6,:
0,0,0,0,0,0,0,0,2,4,7,: 0,0,0,0,0,0,0,0,2,4,8,: 0,0,0,0,0,0,0,0,2,4,9,:
0,0,0,0,0,0,0,0,2,5,7,: 0,0,0,0,0,0,0,0,2,5,8,: 0,0,0,0,0,0,0,0,2,5,9,:
0,0,0,0,0,0,0,0,2,6,8,: 0,0,0,0,0,0,0,0,2,6,9,: 0,0,0,0,0,0,0,0,2,7,9,:
0,0,0,0,0,0,0,0,3,5,7,: 0,0,0,0,0,0,0,0,3,5,8,: 0,0,0,0,0,0,0,0,3,5,9,:
0,0,0,0,0,0,0,0,3,6,8,: 0,0,0,0,0,0,0,0,3,6,9,: 0,0,0,0,0,0,0,0,3,7,9,:
0,0,0,0,0,0,0,0,4,6,8,: 0,0,0,0,0,0,0,0,4,6,9,: 0,0,0,0,0,0,0,0,4,7,9,:
0,0,0,0,0,0,0,0,5,7,9,: 0,0,0,0,0,0,0,2,4,6,8,: 0,0,0,0,0,0,0,2,4,6,9,:
0,0,0,0,0,0,0,2,4,7,9,: 0,0,0,0,0,0,0,2,5,7,9,: 0,0,0,0,0,0,0,3,5,7,9,:
LEN=11) 0,0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,0,0,0,0,0,2,:
0,0,0,0,0,0,0,0,0,0,0,0,0,3,: 0,0,0,0,0,0,0,0,0,0,0,0,0,4,: 0,0,0,0,0,0,0,0,0,0,0,0,0,5,:
0,0,0,0,0,0,0,0,0,0,0,0,0,0,6,: 0,0,0,0,0,0,0,0,0,0,0,0,0,0,7,: 0,0,0,0,0,0,0,0,0,0,0,0,0,0,8,:
0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,9,: 0,0,0,0,0,0,0,0,0,0,0,0,0,10,: 0,0,0,0,0,0,0,0,0,0,2,4,:
0,0,0,0,0,0,0,0,0,0,0,2,5,: 0,0,0,0,0,0,0,0,0,0,2,6,: 0,0,0,0,0,0,0,0,0,0,2,7,:
0,0,0,0,0,0,0,0,0,0,0,2,8,: 0,0,0,0,0,0,0,0,0,0,2,9,: 0,0,0,0,0,0,0,0,0,0,2,10,:
0,0,0,0,0,0,0,0,0,0,3,5,: 0,0,0,0,0,0,0,0,0,0,3,6,: 0,0,0,0,0,0,0,0,0,0,3,7,:
0,0,0,0,0,0,0,0,0,0,3,8,: 0,0,0,0,0,0,0,0,0,0,3,9,: 0,0,0,0,0,0,0,0,0,0,3,10,:
0,0,0,0,0,0,0,0,0,0,4,6,: 0,0,0,0,0,0,0,0,0,0,4,7,: 0,0,0,0,0,0,0,0,0,0,4,8,:
0,0,0,0,0,0,0,0,0,0,4,9,: 0,0,0,0,0,0,0,0,0,0,4,10,: 0,0,0,0,0,0,0,0,0,0,5,7,:

0,0,0,0,0,0,0,0,0,5,8,: 0,0,0,0,0,0,0,0,0,5,9,: 0,0,0,0,0,0,0,0,0,5,10,:
 0,0,0,0,0,0,0,0,0,6,8,: 0,0,0,0,0,0,0,0,0,6,9,: 0,0,0,0,0,0,0,0,0,6,10,:
 0,0,0,0,0,0,0,0,0,7,9,: 0,0,0,0,0,0,0,0,0,7,10,: 0,0,0,0,0,0,0,0,0,8,10,:
 0,0,0,0,0,0,0,0,0,9,1,: 0,0,0,0,0,0,0,0,2,4,6,: 0,0,0,0,0,0,0,0,2,4,7,:
 0,0,0,0,0,0,0,0,2,4,8,: 0,0,0,0,0,0,0,0,2,4,9,: 0,0,0,0,0,0,0,0,2,4,10,:
 0,0,0,0,0,0,0,0,2,5,7,: 0,0,0,0,0,0,0,0,2,5,8,: 0,0,0,0,0,0,0,0,2,5,9,:
 0,0,0,0,0,0,0,0,2,5,10,: 0,0,0,0,0,0,0,0,2,6,8,: 0,0,0,0,0,0,0,0,2,6,9,:
 0,0,0,0,0,0,0,0,2,6,10,: 0,0,0,0,0,0,0,0,2,7,9,: 0,0,0,0,0,0,0,0,2,7,10,:
 0,0,0,0,0,0,0,0,2,8,10,: 0,0,0,0,0,0,0,0,3,5,7,: 0,0,0,0,0,0,0,0,3,5,8,:
 0,0,0,0,0,0,0,0,3,5,9,: 0,0,0,0,0,0,0,0,3,5,10,: 0,0,0,0,0,0,0,0,3,6,8,:
 0,0,0,0,0,0,0,0,3,6,9,: 0,0,0,0,0,0,0,0,3,6,10,: 0,0,0,0,0,0,0,0,3,7,9,:
 0,0,0,0,0,0,0,0,3,7,10,: 0,0,0,0,0,0,0,0,3,8,10,: 0,0,0,0,0,0,0,0,4,6,8,:
 0,0,0,0,0,0,0,0,4,6,9,: 0,0,0,0,0,0,0,0,4,6,10,: 0,0,0,0,0,0,0,0,4,7,9,:
 0,0,0,0,0,0,0,0,4,7,10,: 0,0,0,0,0,0,0,0,4,8,10,: 0,0,0,0,0,0,0,0,5,7,9,:
 0,0,0,0,0,0,0,0,5,7,10,: 0,0,0,0,0,0,0,0,5,8,10,: 0,0,0,0,0,0,0,0,6,8,10,:
 0,0,0,0,0,0,0,2,4,6,8,: 0,0,0,0,0,0,0,2,4,6,9,: 0,0,0,0,0,0,0,2,4,6,10,:
 0,0,0,0,0,0,0,2,4,7,9,: 0,0,0,0,0,0,0,2,4,7,10,: 0,0,0,0,0,0,0,2,4,8,10,:
 0,0,0,0,0,0,0,2,5,7,9,: 0,0,0,0,0,0,0,2,5,7,10,: 0,0,0,0,0,0,0,2,5,8,10,:
 0,0,0,0,0,0,0,2,6,8,10,: 0,0,0,0,0,0,0,3,5,7,9,: 0,0,0,0,0,0,0,3,5,7,10,:
 0,0,0,0,0,0,0,3,5,8,10,: 0,0,0,0,0,0,0,3,6,8,10,: 0,0,0,0,0,0,0,4,6,8,10,:
 0,0,0,0,0,0,2,4,6,8,10,:

Number new nodes in level n is given by : 1,2,3,5,7,10,15,23,36,57,91,

-----Class

1495-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][100][101][102][120][201]]$

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Rules of $T[L]$:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,0,1,--0,0,2,--
- R3) 0,1,-->0,1,--
- R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
- R5) 0,0,1,-->0,0,1,--0,0,2,--
- R6) 0,0,2,-->0,0,2,1,--0,1,--
- R7) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
- R8) 0,0,0,1,-->0,0,0,1,--0,0,0,2,--0,0,0,3,--
- R9) 0,0,0,2,-->0,0,2,1,--0,0,1,--0,0,2,--
- R10) 0,0,0,3,-->0,0,2,1,--0,0,0,3,2,--0,1,--
- R11) 0,0,2,1,-->
- R12) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--
- R13) 0,0,0,0,1,-->0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
- R14) 0,0,0,0,2,-->0,0,2,1,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
- R15) 0,0,0,0,3,-->0,0,2,1,--0,0,0,3,2,--0,0,1,--0,0,2,--
- R16) 0,0,0,0,4,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,1,--
- R17) 0,0,0,3,2,-->0,0,2,1,--
- R18) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,

0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--
R19)
0,0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,
--
R20) 0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
R21) 0,0,0,0,0,3,-->0,0,2,1,--0,0,0,3,2,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
R22) 0,0,0,0,0,4,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,1,--0,0,2,--
R23) 0,0,0,0,0,5,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,1,--
R24) 0,0,0,0,4,3,-->0,0,2,1,--0,0,0,3,2,--
R25)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,
0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--
R26)
0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,
0,0,0,0,0,5,--0,0,0,0,0,6,--
R27)
0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--
0,0,0,0,5,--
R28)
0,0,0,0,0,0,3,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,
4,--
R29)
0,0,0,0,0,0,4,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
R30)
0,0,0,0,0,0,5,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,1,--0,0,2,
--
R31)
0,0,0,0,0,0,6,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,6,
5,--0,1,--
R32) 0,0,0,0,0,5,4,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--
R33)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,
0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,
,0,0,0,0,7,--0,0,0,0,0,0,0,8,--
R34)
0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,
0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--
R35)
0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,
0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--
R36)
0,0,0,0,0,0,3,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--
0,0,0,0,0,4,--0,0,0,0,0,5,--
R37)
0,0,0,0,0,0,4,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,1,--0,0,0,0,2,--0,0,
0,0,3,--0,0,0,0,4,--
R38)
0,0,0,0,0,0,5,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,1,--0,
0,0,2,--0,0,0,3,--
R39)

0,0,0,0,0,0,0,6,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,0,6,5,--0,0,1,--0,0,2,--

R40)

0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,0,6,5,--0,0,0,0,0,0,7,6,--0,1,--

R41) 0,0,0,0,0,0,0,6,5,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--

R42)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,0,9,--

R43)

0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--

R44)

0,0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--

R45)

0,0,0,0,0,0,0,0,3,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--

R46)

0,0,0,0,0,0,0,0,4,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--

R47)

0,0,0,0,0,0,0,0,5,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R48)

0,0,0,0,0,0,0,0,6,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,6,5,--0,0,0,1,--0,0,0,2,--0,0,0,3,--

R49)

0,0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,6,5,--0,0,0,0,0,0,7,6,--0,0,1,--0,0,2,--

R50)

0,0,0,0,0,0,0,0,8,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,6,5,--0,0,0,0,0,0,7,6,--0,0,0,0,0,0,8,7,--0,1,--

R51)

0,0,0,0,0,0,0,0,7,6,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,6,5,--

R52)

0,0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,0,9,--0,0,0,0,0,0,0,0,0,0,10,--

R53)

0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--

R54)

0,0,0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,7,--

,0,7,--0,0,0,0,0,0,0,8,--
R55)

0,0,0,0,0,0,0,0,3,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,
0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,
,7,--

R56)
0,0,0,0,0,0,0,0,4,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,1,--0,0,0,0,
0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--

R57)
0,0,0,0,0,0,0,0,5,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,
0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--0,0,0,0,5,--

R58)
0,0,0,0,0,0,0,0,6,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,
0,0,6,5,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R59)
0,0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,
0,0,6,5,--0,0,0,0,0,0,7,6,--0,0,0,1,--0,0,0,2,--0,0,0,3,--

R60)
0,0,0,0,0,0,0,0,8,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,
0,0,6,5,--0,0,0,0,0,0,7,6,--0,0,0,0,0,0,0,8,7,--0,0,1,--0,0,2,--

R61)
0,0,0,0,0,0,0,0,9,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,
0,0,6,5,--0,0,0,0,0,0,7,6,--0,0,0,0,0,0,0,8,7,--0,0,0,0,0,0,0,9,8,--0,1,--

R62)
0,0,0,0,0,0,0,0,8,7,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,
0,0,6,5,--0,0,0,0,0,0,7,6,--

List of different nodes in T[L]

- LEN=1) 0,:
- LEN=2) 0,0, : 0,1, :
- LEN=3) 0,0,0, : 0,0,1, : 0,0,2, :
- LEN=4) 0,0,0,0, : 0,0,0,1, : 0,0,0,2, : 0,0,0,3, : 0,0,2,1, :
- LEN=5) 0,0,0,0,0, : 0,0,0,0,1, : 0,0,0,0,2, : 0,0,0,0,3, : 0,0,0,0,4, : 0,0,0,3,2, :
- LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, : 0,0,0,0,0,2, : 0,0,0,0,0,3, : 0,0,0,0,0,4, :
0,0,0,0,0,5, : 0,0,0,0,4,3, :
- LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, : 0,0,0,0,0,0,2, : 0,0,0,0,0,0,3, :
0,0,0,0,0,0,4, : 0,0,0,0,0,0,5, : 0,0,0,0,0,0,6, : 0,0,0,0,0,5,4, :
- LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,2, : 0,0,0,0,0,0,0,3, :
0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,7, :
0,0,0,0,0,0,6,5, :
- LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,2, :
0,0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,0,6, :
0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,8, : 0,0,0,0,0,0,0,7,6, :
- LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,0,2, :
0,0,0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,0,5, :
0,0,0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,0,8, :
0,0,0,0,0,0,0,0,0,9, : 0,0,0,0,0,0,0,0,8,7, :
- LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,0,0,2, :
0,0,0,0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,0,0,5, :
0,0,0,0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,0,0,8, :
0,0,0,0,0,0,0,0,0,0,9, : 0,0,0,0,0,0,0,0,0,0,10, : 0,0,0,0,0,0,0,0,0,9,8, :

Number new nodes in level n is given by : 1,2,3,5,6,7,8,9,10,11,12,

-----Class

1496-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][100][101][102][120][210]]$

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Rules of $T[L]$:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,0,1,--0,0,2,--
- R3) 0,1,-->0,1,--
- R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
- R5) 0,0,1,-->0,0,1,--0,0,2,--
- R6) 0,0,2,-->0,0,2,1,--0,1,--
- R7) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
- R8) 0,0,0,1,-->0,0,0,1,--0,0,0,2,--0,0,0,3,--
- R9) 0,0,0,2,-->0,0,2,1,--0,0,1,--0,0,2,--
- R10) 0,0,0,3,-->0,0,0,3,1,--0,0,2,1,--0,1,--
- R11) 0,0,2,1,-->
- R12)
0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--
0,0,0,0,0,5,--
- R13) 0,0,0,0,1,-->0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
- R14) 0,0,0,0,2,-->0,0,2,1,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
- R15) 0,0,0,0,3,-->0,0,0,3,1,--0,0,2,1,--0,0,1,--0,0,2,--
- R16) 0,0,0,0,4,-->0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,1,--
- R17) 0,0,0,3,1,-->0,0,2,1,--
- R18)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,
0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--
- R19)
0,0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,
--
- R20) 0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
- R21) 0,0,0,0,0,3,-->0,0,0,3,1,--0,0,2,1,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
- R22) 0,0,0,0,0,4,-->0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,1,--0,0,2,--
- R23) 0,0,0,0,0,5,-->0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,1,--
- R24) 0,0,0,0,4,1,-->0,0,0,3,1,--0,0,2,1,--
- R25)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,
0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--
- R26)
0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,
0,0,0,0,0,5,--0,0,0,0,0,0,6,--
- R27)
0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--
0,0,0,0,0,5,--
- R28)
0,0,0,0,0,0,3,-->0,0,0,3,1,--0,0,2,1,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,
4,--

R29)

0,0,0,0,0,0,4,-->0,0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,1,--0,0,0,2,--0,0,0,3,--

R30)

0,0,0,0,0,0,5,-->0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,1,--0,0,2,

--

R31)

0,0,0,0,0,0,6,-->0,0,0,0,0,6,1,--0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,

1,--0,1,--

R32) 0,0,0,0,0,5,1,-->0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--

R33)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,

0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,

,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--

R34)

0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,

0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--

R35)

0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,

0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--

R36)

0,0,0,0,0,0,0,3,-->0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--

0,0,0,0,0,4,--0,0,0,0,0,5,--

R37)

0,0,0,0,0,0,0,4,-->0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,1,--0,0,0,0,2,--0,0,

0,0,3,--0,0,0,0,4,--

R38)

0,0,0,0,0,0,0,5,-->0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,1,--0,

0,0,2,--0,0,0,3,--

R39)

0,0,0,0,0,0,0,6,-->0,0,0,0,0,6,1,--0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,

2,1,--0,0,1,--0,0,2,--

R40)

0,0,0,0,0,0,0,7,-->0,0,0,0,0,0,7,1,--0,0,0,0,0,6,1,--0,0,0,0,0,5,1,--0,0,0,0,4,

1,--0,0,0,3,1,--0,0,2,1,--0,1,--

R41) 0,0,0,0,0,0,6,1,-->0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--

R42)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,

2,--0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,

,0,0,6,--0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--

R43)

0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,

0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,

,0,0,0,0,8,--

R44)

0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,

--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--

R45)

0,0,0,0,0,0,0,3,-->0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,

0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--

R46)

0,0,0,0,0,0,0,0,4,-->0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,1,--0,0,0,0,0,2,
--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--

R47)

0,0,0,0,0,0,0,0,5,-->0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,1,
--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R48)

0,0,0,0,0,0,0,0,6,-->0,0,0,0,0,0,6,1,--0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,
0,2,1,--0,0,0,1,--0,0,0,2,--0,0,0,3,--

R49)

0,0,0,0,0,0,0,0,7,-->0,0,0,0,0,0,0,7,1,--0,0,0,0,0,0,6,1,--0,0,0,0,0,5,1,--0,0,0,0,
4,1,--0,0,0,3,1,--0,0,2,1,--0,0,1,--0,0,2,--

R50)

0,0,0,0,0,0,0,0,8,-->0,0,0,0,0,0,0,8,1,--0,0,0,0,0,0,0,7,1,--0,0,0,0,0,0,6,1,--0,
0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,1,--

R51)

0,0,0,0,0,0,0,0,7,1,-->0,0,0,0,0,0,6,1,--0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,
0,2,1,--

R52)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,
0,0,0,0,2,--0,0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,0,5,--
-0,0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,
0,0,0,0,0,9,--0,0,0,0,0,0,0,0,0,0,10,--

R53)

0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,
0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,
0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--

R54)

0,0,0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,
0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,
0,7,--0,0,0,0,0,0,0,0,8,--

R55)

0,0,0,0,0,0,0,0,0,3,-->0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,
0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,
7,--

R56)

0,0,0,0,0,0,0,0,0,4,-->0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,1,--0,0,0,0,
0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--

R57)

0,0,0,0,0,0,0,0,0,5,-->0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,
0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--0,0,0,0,5,--

R58)

0,0,0,0,0,0,0,0,0,6,-->0,0,0,0,0,0,6,1,--0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--
0,0,2,1,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R59)

0,0,0,0,0,0,0,0,0,7,-->0,0,0,0,0,0,0,7,1,--0,0,0,0,0,0,6,1,--0,0,0,0,0,5,1,--0,0,0,
0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,1,--0,0,0,2,--0,0,0,3,--

R60)

0,0,0,0,0,0,0,0,0,8,-->0,0,0,0,0,0,0,8,1,--0,0,0,0,0,0,7,1,--0,0,0,0,0,0,6,1,--
0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,1,--0,0,2,--

R61)

0,0,0,0,0,0,0,0,0,9,-->0,0,0,0,0,0,0,0,0,9,1,--0,0,0,0,0,0,0,0,8,1,--0,0,0,0,0,0,0,0,7,1,--0,0,0,0,0,0,6,1,--0,0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,1,--R62)

0,0,0,0,0,0,0,0,8,1,-->0,0,0,0,0,0,0,7,1,--0,0,0,0,0,0,6,1,--0,0,0,0,0,5,1,--0,0,0,4,1,--0,0,3,1,--0,0,2,1,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,0,0,: 0,0,1,: 0,0,2,:

LEN=4) 0,0,0,0,: 0,0,0,1,: 0,0,0,2,: 0,0,0,3,: 0,0,2,1,:

LEN=5) 0,0,0,0,0,: 0,0,0,0,1,: 0,0,0,0,2,: 0,0,0,0,3,: 0,0,0,0,4,: 0,0,0,3,1,:

LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,1,: 0,0,0,0,0,2,: 0,0,0,0,0,3,: 0,0,0,0,0,4,: 0,0,0,0,5,:

0,0,0,0,4,1,:

LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,1,: 0,0,0,0,0,0,2,: 0,0,0,0,0,0,3,:

0,0,0,0,0,0,4,: 0,0,0,0,0,0,5,:

LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,2,: 0,0,0,0,0,0,0,3,:

0,0,0,0,0,0,0,4,: 0,0,0,0,0,0,0,5,:

0,0,0,0,0,0,6,1,:

LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,0,2,:

0,0,0,0,0,0,0,0,3,:

0,0,0,0,0,0,0,7,:

LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,0,2,:

0,0,0,0,0,0,0,0,0,3,:

0,0,0,0,0,0,0,0,0,6,:

0,0,0,0,0,0,0,0,9,:

LEN=11) 0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,0,0,0,2,:

0,0,0,0,0,0,0,0,0,0,3,:

0,0,0,0,0,0,0,0,0,0,6,:

0,0,0,0,0,0,0,0,0,0,9,:

Number new nodes in level n is given by : 1,2,3,5,6,7,8,9,10,11,12,

-----Class

1497-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][100][101][102][201][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,0,1,--0,0,2,--

R3) 0,1,-->0,1,--

R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,0,2,--0,0,0,3,--

R5) 0,0,1,-->0,0,1,--0,0,2,--

R6) 0,0,2,-->0,0,2,1,--0,0,2,--

R7) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R8) 0,0,0,1,-->0,0,0,1,--0,0,0,2,--0,0,0,3,--

R9) 0,0,0,2,-->0,0,2,1,--0,0,0,2,--0,0,0,3,--

R10) 0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,3,--

R11) 0,0,2,1,-->

R12)

0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--

0,0,0,0,0,5,--
R13) 0,0,0,0,1,-->0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
R14) 0,0,0,0,2,-->0,0,2,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
R15) 0,0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,0,3,--0,0,0,0,4,--
R16) 0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,4,--
R17)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,
0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--
R18)
0,0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,
--
R19)
0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--
R20) 0,0,0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--
R21) 0,0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,4,--0,0,0,0,0,5,--
R22) 0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,5,--
R23)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,
0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--
R24)
0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,
0,0,0,0,0,5,--0,0,0,0,0,0,6,--
R25)
0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,
0,0,5,--0,0,0,0,0,0,6,--
R26)
0,0,0,0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,
--0,0,0,0,0,0,6,--
R27)
0,0,0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,
0,0,0,0,6,--
R28)
0,0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,5,--0,0,0,0,0,
0,6,--
R29)
0,0,0,0,0,0,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,6,--
R30)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,
0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,
0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--
R31)
0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,
0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--
R32)
0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--
0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--
R33)
0,0,0,0,0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,
0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--
R34)

0,0,0,0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,
--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--

R35)

0,0,0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,5,--0,0,0,
0,0,0,0,6,--0,0,0,0,0,0,0,7,--

R36)

0,0,0,0,0,0,0,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,
6,--0,0,0,0,0,0,0,7,--

R37)

0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,
0,0,0,0,0,7,--

R38)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,
2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,
,0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--

R39)

0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,3,--0,
0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,
,0,0,0,0,8,--

R40)

0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,
0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,
,8,--

R41)

0,0,0,0,0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,
0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--

R42)

0,0,0,0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,
0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--

R43)

0,0,0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,5,--0,
0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--

R44)

0,0,0,0,0,0,0,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,
0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--

R45)

0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,
0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--

R46)

0,0,0,0,0,0,0,8,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,
0,2,1,--0,0,0,0,0,0,8,--

R47)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,
0,0,0,0,2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--
-0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,
0,0,0,0,0,9,--0,0,0,0,0,0,0,0,0,10,--

R48)

0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,
0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,
,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,9,--

R49)

0,0,0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--

R50)

0,0,0,0,0,0,0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--

R51)

0,0,0,0,0,0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--

R52)

0,0,0,0,0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--

R53)

0,0,0,0,0,0,0,0,0,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--

R54)

0,0,0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--

R55)

0,0,0,0,0,0,0,0,0,8,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--

R56)

0,0,0,0,0,0,0,0,0,9,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,0,9,--

List of different nodes in T[L]

- LEN=1) 0,:
- LEN=2) 0,0,: 0,1,:
- LEN=3) 0,0,0,: 0,0,1,: 0,0,2,:
- LEN=4) 0,0,0,0,: 0,0,0,1,: 0,0,0,2,: 0,0,0,3,: 0,0,2,1,:
- LEN=5) 0,0,0,0,0,: 0,0,0,0,1,: 0,0,0,0,2,: 0,0,0,0,3,: 0,0,0,0,4,:
- LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,1,: 0,0,0,0,0,2,: 0,0,0,0,0,3,: 0,0,0,0,0,4,:
- 0,0,0,0,0,5,:
- LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,1,: 0,0,0,0,0,0,2,: 0,0,0,0,0,0,3,:
- 0,0,0,0,0,0,4,:
- 0,0,0,0,0,0,5,:
- 0,0,0,0,0,0,6,:
- LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,2,: 0,0,0,0,0,0,0,3,:
- 0,0,0,0,0,0,0,4,:
- 0,0,0,0,0,0,0,5,:
- 0,0,0,0,0,0,0,6,:
- 0,0,0,0,0,0,0,7,:
- LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,0,2,:
- 0,0,0,0,0,0,0,0,3,:
- 0,0,0,0,0,0,0,0,4,:
- 0,0,0,0,0,0,0,0,5,:
- 0,0,0,0,0,0,0,0,6,:
- 0,0,0,0,0,0,0,0,7,:
- 0,0,0,0,0,0,0,0,8,:
- LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,1,:
- 0,0,0,0,0,0,0,0,0,2,:
- 0,0,0,0,0,0,0,0,0,3,:
- 0,0,0,0,0,0,0,0,0,4,:
- 0,0,0,0,0,0,0,0,0,5,:
- 0,0,0,0,0,0,0,0,0,6,:
- 0,0,0,0,0,0,0,0,0,7,:
- 0,0,0,0,0,0,0,0,0,8,:
- 0,0,0,0,0,0,0,0,0,9,:
- LEN=11) 0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,1,:
- 0,0,0,0,0,0,0,0,0,0,2,:
- 0,0,0,0,0,0,0,0,0,0,3,:
- 0,0,0,0,0,0,0,0,0,0,4,:
- 0,0,0,0,0,0,0,0,0,0,5,:
- 0,0,0,0,0,0,0,0,0,0,6,:
- 0,0,0,0,0,0,0,0,0,0,7,:
- 0,0,0,0,0,0,0,0,0,0,8,:

0,0,0,0,0,0,0,0,0,0,9, : 0,0,0,0,0,0,0,0,0,0,10, :
Number new nodes in level n is given by : 1,2,3,5,5,6,7,8,9,10,11,

-----Class

1498-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][100][101][110][120][201]]$

--
Rules of $T[L]$:

- R1) 0, -->0,0, --0,1, --
- R2) 0,0, -->0,0,0, --0,0,1, --0,0,2, --
- R3) 0,1, -->0,1, --
- R4) 0,0,0, -->0,0,0,0, --0,0,0,1, --0,0,0,2, --0,0,0,3, --
- R5) 0,0,1, -->0,0,1, --0,0,2, --
- R6) 0,0,2, -->0,0,1, --0,1, --
- R7) 0,0,0,0, -->0,0,0,0,0, --0,0,0,0,1, --0,0,0,0,2, --0,0,0,0,3, --0,0,0,0,4, --
- R8) 0,0,0,1, -->0,0,0,1, --0,0,0,2, --0,0,0,3, --
- R9) 0,0,0,2, -->0,0,0,1, --0,0,1, --0,0,2, --
- R10) 0,0,0,3, -->0,0,1, --0,0,0,2, --0,1, --
- R11)
0,0,0,0,0, -->0,0,0,0,0,0, --0,0,0,0,0,1, --0,0,0,0,0,2, --0,0,0,0,0,3, --0,0,0,0,0,4, --
0,0,0,0,0,5, --
- R12) 0,0,0,0,1, -->0,0,0,0,1, --0,0,0,0,2, --0,0,0,0,3, --0,0,0,0,4, --
- R13) 0,0,0,0,2, -->0,0,0,0,1, --0,0,0,1, --0,0,0,2, --0,0,0,3, --
- R14) 0,0,0,0,3, -->0,0,0,1, --0,0,0,0,2, --0,0,1, --0,0,2, --
- R15) 0,0,0,0,4, -->0,0,1, --0,0,0,2, --0,0,0,0,3, --0,1, --
- R16)
0,0,0,0,0,0, -->0,0,0,0,0,0,0, --0,0,0,0,0,0,1, --0,0,0,0,0,0,2, --0,0,0,0,0,0,3, --0,0,
0,0,0,0,0,4, --0,0,0,0,0,0,5, --0,0,0,0,0,0,6, --
- R17)
0,0,0,0,0,1, -->0,0,0,0,0,1, --0,0,0,0,0,2, --0,0,0,0,0,3, --0,0,0,0,0,4, --0,0,0,0,0,5,
--
- R18) 0,0,0,0,0,2, -->0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,0,2, --0,0,0,0,3, --0,0,0,0,4, --
- R19) 0,0,0,0,0,3, -->0,0,0,0,1, --0,0,0,0,0,2, --0,0,0,1, --0,0,0,2, --0,0,0,3, --
- R20) 0,0,0,0,0,4, -->0,0,0,1, --0,0,0,0,2, --0,0,0,0,0,3, --0,0,1, --0,0,2, --
- R21) 0,0,0,0,0,5, -->0,0,1, --0,0,0,2, --0,0,0,0,3, --0,0,0,0,0,4, --0,1, --
- R22)
0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,2, --0,0,0,0,0,0,0,
0,3, --0,0,0,0,0,0,0,4, --0,0,0,0,0,0,0,5, --0,0,0,0,0,0,0,6, --0,0,0,0,0,0,0,7, --
- R23)
0,0,0,0,0,0,1, -->0,0,0,0,0,0,1, --0,0,0,0,0,0,2, --0,0,0,0,0,0,3, --0,0,0,0,0,0,4, --0,
0,0,0,0,0,5, --0,0,0,0,0,0,6, --
- R24)
0,0,0,0,0,0,2, -->0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,0,2, --0,0,0,0,0,3, --0,0,0,0,
0,4, --0,0,0,0,0,5, --
- R25)
0,0,0,0,0,0,3, -->0,0,0,0,0,1, --0,0,0,0,0,0,2, --0,0,0,0,1, --0,0,0,0,2, --0,0,0,0,3, --
0,0,0,0,4, --
- R26)
0,0,0,0,0,0,4, -->0,0,0,0,1, --0,0,0,0,0,2, --0,0,0,0,0,0,3, --0,0,0,1, --0,0,0,2, --0,0,

0,3,--

R27)

0,0,0,0,0,0,5,-->0,0,0,1,--0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,1,--0,0,2,
--

R28)

0,0,0,0,0,0,6,-->0,0,1,--0,0,0,2,--0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,1,--

R29)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,
0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,
,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--

R30)

0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,
0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--

R31)

0,0,0,0,0,0,0,2,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,
--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--

R32)

0,0,0,0,0,0,0,3,-->0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,
0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--

R33)

0,0,0,0,0,0,0,4,-->0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,1,--0,0,
0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R34)

0,0,0,0,0,0,0,5,-->0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,
0,1,--0,0,0,2,--0,0,0,3,--

R35)

0,0,0,0,0,0,0,6,-->0,0,0,1,--0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,
0,5,--0,0,1,--0,0,2,--

R36)

0,0,0,0,0,0,0,7,-->0,0,1,--0,0,0,2,--0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,
0,0,0,0,0,6,--0,1,--

R37)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,
2,--0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,
,0,0,6,--0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--

R38)

0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,3,--0,
0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--0,0,0,
,0,0,0,0,0,8,--

R39)

0,0,0,0,0,0,0,0,2,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,
0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--

R40)

0,0,0,0,0,0,0,0,3,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,1,--0,0,0,0,
0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--

R41)

0,0,0,0,0,0,0,0,4,-->0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,3,--0,0,0,0,
0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--

R42)

0,0,0,0,0,0,0,0,5,-->0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R43)

0,0,0,0,0,0,0,0,6,-->0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,1,--0,0,0,2,--0,0,0,3,--

R44)

0,0,0,0,0,0,0,0,7,-->0,0,0,1,--0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,1,--0,0,2,--

R45)

0,0,0,0,0,0,0,0,8,-->0,0,1,--0,0,0,2,--0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,1,--

R46)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--0,0,0,0,0,0,0,0,0,10,--

R47)

0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--

R48)

0,0,0,0,0,0,0,0,0,2,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--

R49)

0,0,0,0,0,0,0,0,0,3,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--

R50)

0,0,0,0,0,0,0,0,0,4,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--

R51)

0,0,0,0,0,0,0,0,0,5,-->0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--0,0,0,0,5,--

R52)

0,0,0,0,0,0,0,0,0,6,-->0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R53)

0,0,0,0,0,0,0,0,0,7,-->0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,1,--0,0,2,--0,0,3,--

R54)

0,0,0,0,0,0,0,0,0,8,-->0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,1,--0,0,2,--

R55)

0,0,0,0,0,0,0,0,0,9,-->0,0,1,--0,0,0,2,--0,0,0,3,--0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,7,--0,0,0,0,0,8,--0,1,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0: 0,1,
 LEN=3) 0,0,0: 0,0,1: 0,0,2,
 LEN=4) 0,0,0,0: 0,0,0,1: 0,0,0,2: 0,0,0,3,
 LEN=5) 0,0,0,0,0: 0,0,0,0,1: 0,0,0,0,2: 0,0,0,0,3: 0,0,0,0,4,
 LEN=6) 0,0,0,0,0,0: 0,0,0,0,0,1: 0,0,0,0,0,2: 0,0,0,0,0,3: 0,0,0,0,0,4:
 0,0,0,0,0,5,
 LEN=7) 0,0,0,0,0,0,0: 0,0,0,0,0,0,1: 0,0,0,0,0,0,2: 0,0,0,0,0,0,3:
 0,0,0,0,0,0,4: 0,0,0,0,0,0,5: 0,0,0,0,0,0,6,
 LEN=8) 0,0,0,0,0,0,0,0: 0,0,0,0,0,0,0,1: 0,0,0,0,0,0,0,2: 0,0,0,0,0,0,0,3:
 0,0,0,0,0,0,0,4: 0,0,0,0,0,0,0,5: 0,0,0,0,0,0,0,6: 0,0,0,0,0,0,0,7:
 LEN=9) 0,0,0,0,0,0,0,0,0: 0,0,0,0,0,0,0,0,1: 0,0,0,0,0,0,0,0,2:
 0,0,0,0,0,0,0,0,3: 0,0,0,0,0,0,0,0,4: 0,0,0,0,0,0,0,0,5: 0,0,0,0,0,0,0,0,6:
 0,0,0,0,0,0,0,0,7: 0,0,0,0,0,0,0,0,8,
 LEN=10) 0,0,0,0,0,0,0,0,0,0: 0,0,0,0,0,0,0,0,0,1: 0,0,0,0,0,0,0,0,0,2:
 0,0,0,0,0,0,0,0,0,3: 0,0,0,0,0,0,0,0,0,4: 0,0,0,0,0,0,0,0,0,5:
 0,0,0,0,0,0,0,0,0,6: 0,0,0,0,0,0,0,0,0,7: 0,0,0,0,0,0,0,0,0,8:
 0,0,0,0,0,0,0,0,0,9,
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0: 0,0,0,0,0,0,0,0,0,0,1: 0,0,0,0,0,0,0,0,0,0,2:
 0,0,0,0,0,0,0,0,0,0,3: 0,0,0,0,0,0,0,0,0,0,4: 0,0,0,0,0,0,0,0,0,0,5:
 0,0,0,0,0,0,0,0,0,0,6: 0,0,0,0,0,0,0,0,0,0,7: 0,0,0,0,0,0,0,0,0,0,8:
 0,0,0,0,0,0,0,0,0,0,9: 0,0,0,0,0,0,0,0,0,0,10:
 Number new nodes in level n is given by : 1,2,3,4,5,6,7,8,9,10,11,

-----Class

1499-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][100][101][110][120][210]]$

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Rules of $T[L]$:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,0,1,--0,0,2,--
- R3) 0,1,-->0,1,--
- R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
- R5) 0,0,1,-->0,0,1,--0,0,2,--
- R6) 0,0,2,-->0,0,1,--0,1,--
- R7) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
- R8) 0,0,0,1,-->0,0,0,1,--0,0,0,2,--0,0,0,3,--
- R9) 0,0,0,2,-->0,0,0,1,--0,0,1,--0,0,2,--
- R10) 0,0,0,3,-->0,0,0,2,--0,0,1,--0,1,--
- R11) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--
- R12) 0,0,0,0,1,-->0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
- R13) 0,0,0,0,2,-->0,0,0,0,1,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
- R14) 0,0,0,0,3,-->0,0,0,0,2,--0,0,0,1,--0,0,1,--0,0,2,--
- R15) 0,0,0,0,4,-->0,0,0,0,3,--0,0,0,2,--0,0,1,--0,1,--
- R16) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--
- R17)

0,0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,
--
R18) 0,0,0,0,0,2,-->0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
R19) 0,0,0,0,0,3,-->0,0,0,0,0,2,--0,0,0,0,1,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
R20) 0,0,0,0,0,4,-->0,0,0,0,0,3,--0,0,0,0,2,--0,0,0,1,--0,0,1,--0,0,2,--
R21) 0,0,0,0,0,5,-->0,0,0,0,0,4,--0,0,0,0,3,--0,0,0,2,--0,0,1,--0,1,--
R22)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,
0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--
R23)
0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,
0,0,0,0,0,5,--0,0,0,0,0,6,--
R24)
0,0,0,0,0,0,2,-->0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,
0,4,--0,0,0,0,0,5,--
R25)
0,0,0,0,0,0,3,-->0,0,0,0,0,0,2,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--
0,0,0,0,4,--
R26)
0,0,0,0,0,0,4,-->0,0,0,0,0,0,3,--0,0,0,0,0,2,--0,0,0,0,1,--0,0,0,1,--0,0,0,2,--0,0,
0,3,--
R27)
0,0,0,0,0,0,5,-->0,0,0,0,0,0,4,--0,0,0,0,0,3,--0,0,0,0,2,--0,0,0,1,--0,0,1,--0,0,2,
--
R28)
0,0,0,0,0,0,6,-->0,0,0,0,0,0,5,--0,0,0,0,0,4,--0,0,0,0,3,--0,0,0,2,--0,0,1,--0,1,--
R29)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,
0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,
0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--
R30)
0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,
0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--
R31)
0,0,0,0,0,0,0,2,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,
--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--
R32)
0,0,0,0,0,0,0,3,-->0,0,0,0,0,0,0,2,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,
0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--
R33)
0,0,0,0,0,0,0,4,-->0,0,0,0,0,0,0,3,--0,0,0,0,0,0,2,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,
0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
R34)
0,0,0,0,0,0,0,5,-->0,0,0,0,0,0,0,4,--0,0,0,0,0,0,3,--0,0,0,0,0,2,--0,0,0,0,1,--0,0,
0,1,--0,0,0,2,--0,0,0,3,--
R35)
0,0,0,0,0,0,0,6,-->0,0,0,0,0,0,0,5,--0,0,0,0,0,0,4,--0,0,0,0,0,3,--0,0,0,0,2,--0,0,
0,1,--0,0,1,--0,0,2,--
R36)
0,0,0,0,0,0,0,7,-->0,0,0,0,0,0,0,6,--0,0,0,0,0,0,5,--0,0,0,0,0,4,--0,0,0,0,3,--0,0,

0,0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--

R51)

0,0,0,0,0,0,0,0,5,-->0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,2,--0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--

R52)

0,0,0,0,0,0,0,0,0,6,-->0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,2,--0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--

R53)

0,0,0,0,0,0,0,0,0,7,-->0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,3,--0,0,0,0,0,2,--0,0,0,0,1,--0,0,0,1,--0,0,0,2,--0,0,0,3,--

R54)

0,0,0,0,0,0,0,0,0,8,-->0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,4,--0,0,0,0,0,3,--0,0,0,0,2,--0,0,0,1,--0,0,1,--0,0,2,--

R55)

0,0,0,0,0,0,0,0,0,9,-->0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,5,--0,0,0,0,0,4,--0,0,0,0,3,--0,0,0,2,--0,0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,0,0,: 0,0,1,,: 0,0,2,:

LEN=4) 0,0,0,0,: 0,0,0,1,,: 0,0,0,2,,: 0,0,0,3,:

LEN=5) 0,0,0,0,0,: 0,0,0,0,1,,: 0,0,0,0,2,,: 0,0,0,0,3,,: 0,0,0,0,4,:

LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,1,,: 0,0,0,0,0,2,,: 0,0,0,0,0,3,,: 0,0,0,0,0,4,,: 0,0,0,0,0,5,:

LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,1,,: 0,0,0,0,0,0,2,,: 0,0,0,0,0,0,3,:

0,0,0,0,0,0,4,,: 0,0,0,0,0,0,5,,: 0,0,0,0,0,0,6,:

LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,1,,: 0,0,0,0,0,0,0,2,,: 0,0,0,0,0,0,0,3,:

0,0,0,0,0,0,0,4,,: 0,0,0,0,0,0,0,5,,: 0,0,0,0,0,0,0,6,,: 0,0,0,0,0,0,0,7,:

LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,1,,: 0,0,0,0,0,0,0,0,2,:

0,0,0,0,0,0,0,0,3,,: 0,0,0,0,0,0,0,0,4,,: 0,0,0,0,0,0,0,0,5,,: 0,0,0,0,0,0,0,0,6,:

0,0,0,0,0,0,0,0,7,,: 0,0,0,0,0,0,0,0,8,:

LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,1,,: 0,0,0,0,0,0,0,0,0,2,:

0,0,0,0,0,0,0,0,0,3,,: 0,0,0,0,0,0,0,0,0,4,,: 0,0,0,0,0,0,0,0,0,5,:

0,0,0,0,0,0,0,0,0,6,,: 0,0,0,0,0,0,0,0,0,7,,: 0,0,0,0,0,0,0,0,0,8,:

0,0,0,0,0,0,0,0,0,9,:

LEN=11) 0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,1,,: 0,0,0,0,0,0,0,0,0,0,2,:

0,0,0,0,0,0,0,0,0,0,3,,: 0,0,0,0,0,0,0,0,0,0,4,,: 0,0,0,0,0,0,0,0,0,0,5,:

0,0,0,0,0,0,0,0,0,0,6,,: 0,0,0,0,0,0,0,0,0,0,7,,: 0,0,0,0,0,0,0,0,0,0,8,:

0,0,0,0,0,0,0,0,0,0,9,,: 0,0,0,0,0,0,0,0,0,0,10,:

Number new nodes in level n is given by : 1,2,3,4,5,6,7,8,9,10,11,

-----Class

1500-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[010][011][100][101][110][201][210]]

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Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,0,1,--0,0,1,--
R3) 0,1,-->0,1,--
R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,0,1,--0,0,0,3,--
R5) 0,0,1,-->0,0,1,--0,0,1,--
R6) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,3,--0,0,0,0,4,--
R7) 0,0,0,1,-->0,0,0,1,--0,0,0,1,--0,0,0,3,--
R8) 0,0,0,3,-->0,0,1,--0,0,1,--0,0,0,3,--
R9)
0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,0,3,--0,0,0,0,0,4,--
0,0,0,0,0,5,--
R10) 0,0,0,0,1,-->0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,3,--0,0,0,0,4,--
R11) 0,0,0,0,3,-->0,0,0,1,--0,0,0,1,--0,0,0,0,3,--0,0,0,0,4,--
R12) 0,0,0,0,4,-->0,0,1,--0,0,1,--0,0,1,--0,0,0,0,4,--
R13)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,3,--0,0,
0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--
R14)
0,0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,
--
R15)
0,0,0,0,0,3,-->0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--
R16) 0,0,0,0,0,4,-->0,0,0,1,--0,0,0,1,--0,0,0,1,--0,0,0,0,0,4,--0,0,0,0,0,5,--
R17) 0,0,0,0,0,5,-->0,0,1,--0,0,1,--0,0,1,--0,0,1,--0,0,0,0,0,5,--
R18)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,
0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--
R19)
0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,
0,0,0,0,0,5,--0,0,0,0,0,0,6,--
R20)
0,0,0,0,0,0,3,-->0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,
0,0,0,5,--0,0,0,0,0,0,6,--
R21)
0,0,0,0,0,0,4,-->0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,
--0,0,0,0,0,0,6,--
R22)
0,0,0,0,0,0,5,-->0,0,0,1,--0,0,0,1,--0,0,0,1,--0,0,0,1,--0,0,0,0,0,0,5,--0,0,0,0,0,
0,6,--
R23) 0,0,0,0,0,0,6,-->0,0,1,--0,0,1,--0,0,1,--0,0,1,--0,0,1,--0,0,0,0,0,0,6,--
R24)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,
0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,
0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--
R25)
0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,3,--0,0,0,0,0,
0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--
R26)
0,0,0,0,0,0,0,3,-->0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,
4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--
R27)

0,0,0,0,0,0,0,4,-->0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--

R28)

0,0,0,0,0,0,0,5,-->0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--

R29)

0,0,0,0,0,0,0,6,-->0,0,0,1,--0,0,0,1,--0,0,0,1,--0,0,0,1,--0,0,0,1,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--

R30)

0,0,0,0,0,0,0,7,-->0,0,1,--0,0,1,--0,0,1,--0,0,1,--0,0,1,--0,0,1,--0,0,0,0,0,0,0,7,--

R31)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,0,9,--

R32)

0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--

R33)

0,0,0,0,0,0,0,0,3,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--

R34)

0,0,0,0,0,0,0,0,4,-->0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--

R35)

0,0,0,0,0,0,0,0,5,-->0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--

R36)

0,0,0,0,0,0,0,0,6,-->0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--

R37)

0,0,0,0,0,0,0,0,7,-->0,0,0,1,--0,0,0,1,--0,0,0,1,--0,0,0,1,--0,0,0,1,--0,0,0,1,--0,0,0,0,7,--0,0,0,0,0,0,8,--

R38)

0,0,0,0,0,0,0,0,8,-->0,0,1,--0,0,1,--0,0,1,--0,0,1,--0,0,1,--0,0,1,--0,0,1,--0,0,0,8,--

R39)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,0,9,--0,0,0,0,0,0,0,0,0,0,10,--

R40)

0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--

R41)

0,0,0,0,0,0,0,0,0,3,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,3,

--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--

R42)

0,0,0,0,0,0,0,0,0,4,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--

R43)

0,0,0,0,0,0,0,0,0,5,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--

R44)

0,0,0,0,0,0,0,0,0,6,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--

R45)

0,0,0,0,0,0,0,0,0,7,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--

R46)

0,0,0,0,0,0,0,0,0,8,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--

R47)

0,0,0,0,0,0,0,0,0,9,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,9,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, : 0,1, :

LEN=3) 0,0,0, : 0,0,1, :

LEN=4) 0,0,0,0, : 0,0,0,0,1, : 0,0,0,0,3, :

LEN=5) 0,0,0,0,0, : 0,0,0,0,0,1, : 0,0,0,0,0,3, : 0,0,0,0,0,4, :

LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,0,1, : 0,0,0,0,0,0,3, : 0,0,0,0,0,0,4, : 0,0,0,0,0,0,5, :

LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,4, :

0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,6, :

LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,0,4, :

0,0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,0,7, :

LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,0,3, :

0,0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,0,0,7, :

0,0,0,0,0,0,0,0,0,8, :

LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,0,0,3, :

0,0,0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,0,0,0,6, :

0,0,0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,0,0,8, : 0,0,0,0,0,0,0,0,0,0,9, :

LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,0,0,0,3, :

0,0,0,0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,0,0,0,0,6, :

0,0,0,0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,0,0,0,8, : 0,0,0,0,0,0,0,0,0,0,0,9, :

0,0,0,0,0,0,0,0,0,0,0,10, :

Number new nodes in level n is given by : 1,2,2,3,4,5,6,7,8,9,10,

-----Class

1501-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][100][101][120][201][210]]$

0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,
0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--

R31)

0,0,0,0,0,0,0,2,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,
--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--

R32)

0,0,0,0,0,0,0,3,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,
0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--

R33)

0,0,0,0,0,0,0,4,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,2,
--0,0,0,0,0,3,--0,0,0,0,0,4,--

R34)

0,0,0,0,0,0,0,5,-->0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,
2,--0,0,0,3,--

R35)

0,0,0,0,0,0,0,6,-->0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,2,
--

R36) 0,0,0,0,0,0,0,7,-->0,0,0,1,--0,0,0,1,--0,0,0,1,--0,0,0,1,--0,0,0,1,--0,0,0,1,--0,0,0,1,--0,1,--

R37)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,
2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,0,0,0,0,0,
,0,0,6,--0,0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,0,9,--

R38)

0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,0,0,3,--0,
0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,0,0,7,--0,0,0,
,0,0,0,0,0,8,--

R39)

0,0,0,0,0,0,0,0,2,-->0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,0,2,--0,0,0,
0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--
-

R40)

0,0,0,0,0,0,0,0,3,-->0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,
0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--

R41)

0,0,0,0,0,0,0,0,4,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--
0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--

R42)

0,0,0,0,0,0,0,0,5,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,
0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R43)

0,0,0,0,0,0,0,0,6,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,
0,0,1,--0,0,0,2,--0,0,0,3,--

R44)

0,0,0,0,0,0,0,0,7,-->0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,0,1,--0,
0,1,--0,0,2,--

R45)

0,0,0,0,0,0,0,0,8,-->0,0,0,1,--0,0,0,1,--0,0,0,1,--0,0,0,1,--0,0,0,1,--0,0,0,1,--0,0,0,1,--0,0,0,1,--0,0,0,1,--0,1,--

R46)

0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,
0,0,0,0,2,--0,0,0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,0,0,5,--

-0,0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,0,9,--0,0,0,0,0,0,0,0,0,0,10,--

R47)

0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--

R48)

0,0,0,0,0,0,0,0,0,2,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--

R49)

0,0,0,0,0,0,0,0,0,3,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,7,--

R50)

0,0,0,0,0,0,0,0,0,4,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,6,--

R51)

0,0,0,0,0,0,0,0,0,5,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--

R52)

0,0,0,0,0,0,0,0,0,6,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--

R53)

0,0,0,0,0,0,0,0,0,7,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,3,--

R54)

0,0,0,0,0,0,0,0,0,8,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,2,--

R55)

0,0,0,0,0,0,0,0,0,9,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,2,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,0,0,: 0,0,1,: 0,0,2,:

LEN=4) 0,0,0,0,: 0,0,0,1,: 0,0,0,2,: 0,0,0,3,:

LEN=5) 0,0,0,0,0,: 0,0,0,0,1,: 0,0,0,0,2,: 0,0,0,0,3,: 0,0,0,0,4,:

LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,1,: 0,0,0,0,0,2,: 0,0,0,0,0,3,: 0,0,0,0,0,4,:

0,0,0,0,0,5,:

LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,1,: 0,0,0,0,0,0,2,: 0,0,0,0,0,0,3,:

0,0,0,0,0,0,4,: 0,0,0,0,0,0,5,: 0,0,0,0,0,0,6,:

LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,2,: 0,0,0,0,0,0,0,3,:

0,0,0,0,0,0,0,4,: 0,0,0,0,0,0,0,5,: 0,0,0,0,0,0,0,6,: 0,0,0,0,0,0,0,7,:

LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,0,2,:

0,0,0,0,0,0,0,0,3,: 0,0,0,0,0,0,0,0,4,: 0,0,0,0,0,0,0,0,5,: 0,0,0,0,0,0,0,0,6,:

0,0,0,0,0,0,0,0,7,: 0,0,0,0,0,0,0,0,8,:

LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,0,0,2,:

0,0,0,0,0,0,0,0,0,3,: 0,0,0,0,0,0,0,0,0,4,: 0,0,0,0,0,0,0,0,0,5,:

0,0,0,0,0,0,0,0,0,6,: 0,0,0,0,0,0,0,0,0,7,: 0,0,0,0,0,0,0,0,0,8,:
 0,0,0,0,0,0,0,0,0,9,:
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,0,0,0,2,:
 0,0,0,0,0,0,0,0,0,0,3,: 0,0,0,0,0,0,0,0,0,0,4,: 0,0,0,0,0,0,0,0,0,0,5,:
 0,0,0,0,0,0,0,0,0,0,6,: 0,0,0,0,0,0,0,0,0,0,7,: 0,0,0,0,0,0,0,0,0,0,8,:
 0,0,0,0,0,0,0,0,0,0,9,: 0,0,0,0,0,0,0,0,0,0,10,:
 Number new nodes in level n is given by : 1,2,3,4,5,6,7,8,9,10,11,

-----Class

1502-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][100][102][110][120][201]]$

--

Rules of $T[L]$:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,0,1,--0,0,2,--

R3) 0,1,-->0,1,--

R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,0,2,--0,0,0,3,--

R5) 0,0,1,-->0,0,1,--0,0,2,--

R6) 0,0,2,-->0,0,2,1,--0,1,--

R7) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R8) 0,0,0,1,-->0,0,0,1,--0,0,0,2,--0,0,0,3,--

R9) 0,0,0,2,-->0,0,2,1,--0,0,1,--0,0,2,--

R10) 0,0,0,3,-->0,0,2,1,--0,0,0,3,2,--0,1,--

R11) 0,0,2,1,-->

R12)

0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--

R13) 0,0,0,0,1,-->0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R14) 0,0,0,0,2,-->0,0,2,1,--0,0,0,1,--0,0,0,2,--0,0,0,3,--

R15) 0,0,0,0,3,-->0,0,2,1,--0,0,0,3,2,--0,0,1,--0,0,2,--

R16) 0,0,0,0,4,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,1,--

R17) 0,0,0,3,2,-->0,0,2,1,--

R18)

0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--

R19)

0,0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--

--

R20) 0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R21) 0,0,0,0,0,3,-->0,0,2,1,--0,0,0,0,3,2,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--

R22) 0,0,0,0,0,4,-->0,0,2,1,--0,0,0,0,3,2,--0,0,0,0,4,3,--0,0,1,--0,0,2,--

R23) 0,0,0,0,0,5,-->0,0,2,1,--0,0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,1,--

R24) 0,0,0,0,4,3,-->0,0,2,1,--0,0,0,0,3,2,--

R25)

0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--

R26)

0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--

R27)

0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--
0,0,0,0,0,5,--

R28)

0,0,0,0,0,0,3,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,
4,--

R29)

0,0,0,0,0,0,4,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,1,--0,0,0,2,--0,0,0,3,--

R30)

0,0,0,0,0,0,5,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,1,--0,0,2,
--

R31)

0,0,0,0,0,0,6,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,0,6,
5,--0,1,--

R32) 0,0,0,0,0,5,4,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--

R33)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,
0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,
,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--

R34)

0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,
0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--

R35)

0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,
0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--

R36)

0,0,0,0,0,0,0,3,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--
0,0,0,0,0,4,--0,0,0,0,0,5,--

R37)

0,0,0,0,0,0,0,4,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,1,--0,0,0,0,2,--0,0,
0,0,3,--0,0,0,0,4,--

R38)

0,0,0,0,0,0,0,5,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,1,--0,
0,0,2,--0,0,0,3,--

R39)

0,0,0,0,0,0,0,6,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,0,
6,5,--0,0,1,--0,0,2,--

R40)

0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,0,
6,5,--0,0,0,0,0,0,7,6,--0,1,--

R41) 0,0,0,0,0,0,6,5,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--

R42)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,
2,--0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,
,0,0,6,--0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--

R43)

0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,3,--0,
0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--0,0,0,
,0,0,0,0,0,8,--

R44)

0,0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,
--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--

R45)

0,0,0,0,0,0,0,0,3,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,
0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--

R46)

0,0,0,0,0,0,0,0,4,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,1,--0,0,0,0,0,2,
--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--

R47)

0,0,0,0,0,0,0,0,5,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,1,
--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R48)

0,0,0,0,0,0,0,0,6,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,
0,6,5,--0,0,0,1,--0,0,0,2,--0,0,0,3,--

R49)

0,0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,
0,6,5,--0,0,0,0,0,0,7,6,--0,0,1,--0,0,2,--

R50)

0,0,0,0,0,0,0,0,8,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,
0,6,5,--0,0,0,0,0,0,7,6,--0,0,0,0,0,0,8,7,--0,1,--

R51)

0,0,0,0,0,0,0,0,7,6,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,
0,6,5,--

R52)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,
0,0,0,0,2,--0,0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,0,5,--
-0,0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,
0,0,0,0,9,--0,0,0,0,0,0,0,0,0,0,10,--

R53)

0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,
0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,
,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--

R54)

0,0,0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,
0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,
,0,7,--0,0,0,0,0,0,0,0,8,--

R55)

0,0,0,0,0,0,0,0,0,3,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,
0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,
,7,--

R56)

0,0,0,0,0,0,0,0,0,4,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,0,1,--0,0,0,0,
0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--

R57)

0,0,0,0,0,0,0,0,0,5,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,
0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--

R58)

0,0,0,0,0,0,0,0,0,6,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,
0,0,6,5,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R59)

0,0,0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,
0,0,6,5,--0,0,0,0,0,0,0,7,6,--0,0,0,1,--0,0,0,2,--0,0,0,3,--

R60)

0,0,0,0,0,0,0,0,0,8,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,
0,0,6,5,--0,0,0,0,0,0,0,7,6,--0,0,0,0,0,0,0,8,7,--0,0,1,--0,0,2,--

R61)

0,0,0,0,0,0,0,0,0,9,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,
0,0,6,5,--0,0,0,0,0,0,0,7,6,--0,0,0,0,0,0,0,8,7,--0,0,0,0,0,0,0,9,8,--0,1,--

R62)

0,0,0,0,0,0,0,0,8,7,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,
0,0,6,5,--0,0,0,0,0,0,0,7,6,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,0,0,: 0,0,1,: 0,0,2,:

LEN=4) 0,0,0,0,: 0,0,0,1,: 0,0,0,2,: 0,0,0,3,: 0,0,2,1,:

LEN=5) 0,0,0,0,0,: 0,0,0,0,1,: 0,0,0,0,2,: 0,0,0,0,3,: 0,0,0,0,4,: 0,0,0,3,2,:

LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,1,: 0,0,0,0,0,2,: 0,0,0,0,0,3,: 0,0,0,0,0,4,:

0,0,0,0,0,5,: 0,0,0,0,4,3,:

LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,1,: 0,0,0,0,0,0,2,: 0,0,0,0,0,0,3,:

0,0,0,0,0,0,4,: 0,0,0,0,0,0,5,: 0,0,0,0,0,0,6,: 0,0,0,0,0,5,4,:

LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,2,: 0,0,0,0,0,0,0,3,:

0,0,0,0,0,0,0,4,: 0,0,0,0,0,0,0,5,: 0,0,0,0,0,0,0,6,: 0,0,0,0,0,0,0,7,:

0,0,0,0,0,0,6,5,:

LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,0,2,:

0,0,0,0,0,0,0,0,3,: 0,0,0,0,0,0,0,0,4,: 0,0,0,0,0,0,0,0,5,: 0,0,0,0,0,0,0,0,6,:

0,0,0,0,0,0,0,0,7,: 0,0,0,0,0,0,0,0,8,: 0,0,0,0,0,0,0,7,6,:

LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,0,0,2,:

0,0,0,0,0,0,0,0,0,3,: 0,0,0,0,0,0,0,0,0,4,: 0,0,0,0,0,0,0,0,0,5,:

0,0,0,0,0,0,0,0,0,6,: 0,0,0,0,0,0,0,0,0,7,: 0,0,0,0,0,0,0,0,0,8,:

0,0,0,0,0,0,0,0,0,9,: 0,0,0,0,0,0,0,0,8,7,:

LEN=11) 0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,0,0,0,2,:

0,0,0,0,0,0,0,0,0,0,3,: 0,0,0,0,0,0,0,0,0,0,4,: 0,0,0,0,0,0,0,0,0,0,5,:

0,0,0,0,0,0,0,0,0,0,6,: 0,0,0,0,0,0,0,0,0,0,7,: 0,0,0,0,0,0,0,0,0,0,8,:

0,0,0,0,0,0,0,0,0,0,9,: 0,0,0,0,0,0,0,0,0,0,10,: 0,0,0,0,0,0,0,0,0,9,8,:

Number new nodes in level n is given by : 1,2,3,5,6,7,8,9,10,11,12,

-----Class

1503-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][100][102][110][120][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,0,1,--0,0,2,--

R3) 0,1,-->0,1,--

R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,0,2,--0,0,0,3,--

R5) 0,0,1,-->0,0,1,--0,0,2,--

R6) 0,0,2,-->0,0,2,1,--0,1,--

R7) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R8) 0,0,0,1,-->0,0,0,1,--0,0,0,2,--0,0,0,3,--
R9) 0,0,0,2,-->0,0,2,1,--0,0,1,--0,0,2,--
R10) 0,0,0,3,-->0,0,0,3,1,--0,0,2,1,--0,1,--
R11) 0,0,2,1,-->
R12)
0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--
0,0,0,0,0,5,--
R13) 0,0,0,0,1,-->0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
R14) 0,0,0,0,2,-->0,0,2,1,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
R15) 0,0,0,0,3,-->0,0,0,3,1,--0,0,2,1,--0,0,1,--0,0,2,--
R16) 0,0,0,0,4,-->0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,1,--
R17) 0,0,0,3,1,-->0,0,2,1,--
R18)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,
0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--
R19)
0,0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,
--
R20) 0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
R21) 0,0,0,0,0,3,-->0,0,0,3,1,--0,0,2,1,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
R22) 0,0,0,0,0,4,-->0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,1,--0,0,2,--
R23) 0,0,0,0,0,5,-->0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,1,--
R24) 0,0,0,0,4,1,-->0,0,0,3,1,--0,0,2,1,--
R25)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,
0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--
R26)
0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,
0,0,0,0,0,5,--0,0,0,0,0,0,6,--
R27)
0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--
0,0,0,0,0,5,--
R28)
0,0,0,0,0,0,3,-->0,0,0,3,1,--0,0,2,1,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,
4,--
R29)
0,0,0,0,0,0,4,-->0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
R30)
0,0,0,0,0,0,5,-->0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,1,--0,0,2,
--
R31)
0,0,0,0,0,0,6,-->0,0,0,0,0,0,6,1,--0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,
1,--0,1,--
R32) 0,0,0,0,0,5,1,-->0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--
R33)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,
0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,
,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--
R34)
0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,

0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--
R35)
0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,
0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--
R36)
0,0,0,0,0,0,0,3,-->0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--
0,0,0,0,0,4,--0,0,0,0,0,5,--
R37)
0,0,0,0,0,0,0,4,-->0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,1,--0,0,0,0,2,--0,0,
0,0,3,--0,0,0,0,4,--
R38)
0,0,0,0,0,0,0,5,-->0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,1,--0,
0,0,2,--0,0,0,3,--
R39)
0,0,0,0,0,0,0,6,-->0,0,0,0,0,0,6,1,--0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,
2,1,--0,0,1,--0,0,2,--
R40)
0,0,0,0,0,0,0,7,-->0,0,0,0,0,0,0,7,1,--0,0,0,0,0,0,6,1,--0,0,0,0,0,5,1,--0,0,0,0,4,
1,--0,0,0,3,1,--0,0,2,1,--0,1,--
R41) 0,0,0,0,0,0,6,1,-->0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--
R42)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,
2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,
0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--
R43)
0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,3,--0,
0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,
0,0,0,0,0,8,--
R44)
0,0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,
--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--
R45)
0,0,0,0,0,0,0,0,3,-->0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,
0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--
R46)
0,0,0,0,0,0,0,0,4,-->0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,1,--0,0,0,0,0,2,
--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--
R47)
0,0,0,0,0,0,0,0,5,-->0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,1,
--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
R48)
0,0,0,0,0,0,0,0,6,-->0,0,0,0,0,0,6,1,--0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,
0,2,1,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
R49)
0,0,0,0,0,0,0,0,7,-->0,0,0,0,0,0,0,7,1,--0,0,0,0,0,0,6,1,--0,0,0,0,0,5,1,--0,0,0,0,
4,1,--0,0,0,3,1,--0,0,2,1,--0,0,1,--0,0,2,--
R50)
0,0,0,0,0,0,0,0,8,-->0,0,0,0,0,0,0,8,1,--0,0,0,0,0,0,0,7,1,--0,0,0,0,0,0,6,1,--0,
0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,1,--
R51)

0,0,0,0,0,0,0,7,1,-->0,0,0,0,0,0,6,1,--0,0,0,0,0,0,5,1,--0,0,0,0,0,0,4,1,--0,0,0,0,3,1,--0,0,2,1,--

R52)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,0,9,--0,0,0,0,0,0,0,0,0,0,10,--

R53)

0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--

R54)

0,0,0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--

R55)

0,0,0,0,0,0,0,0,0,3,-->0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--

R56)

0,0,0,0,0,0,0,0,0,4,-->0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--

R57)

0,0,0,0,0,0,0,0,0,5,-->0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--

R58)

0,0,0,0,0,0,0,0,0,6,-->0,0,0,0,0,0,6,1,--0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R59)

0,0,0,0,0,0,0,0,0,7,-->0,0,0,0,0,0,0,7,1,--0,0,0,0,0,0,6,1,--0,0,0,0,0,5,1,--0,0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--

R60)

0,0,0,0,0,0,0,0,0,8,-->0,0,0,0,0,0,0,8,1,--0,0,0,0,0,0,7,1,--0,0,0,0,0,6,1,--0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,1,--0,0,2,--

R61)

0,0,0,0,0,0,0,0,0,9,-->0,0,0,0,0,0,0,9,1,--0,0,0,0,0,0,8,1,--0,0,0,0,0,7,1,--0,0,0,0,6,1,--0,0,0,5,1,--0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,1,--

R62)

0,0,0,0,0,0,0,0,8,1,-->0,0,0,0,0,0,7,1,--0,0,0,0,0,6,1,--0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,0,0,: 0,0,1,,: 0,0,2,:

LEN=4) 0,0,0,0,: 0,0,0,1,,: 0,0,0,2,,: 0,0,0,3,,: 0,0,2,1,:

LEN=5) 0,0,0,0,0,: 0,0,0,0,1,,: 0,0,0,0,2,,: 0,0,0,0,3,,: 0,0,0,0,4,,: 0,0,0,3,1,:

LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,1,,: 0,0,0,0,0,2,,: 0,0,0,0,0,3,,: 0,0,0,0,0,4,:

0,0,0,0,0,5, : 0,0,0,0,4,1,:

LEN=7) 0,0,0,0,0,0,0,,: 0,0,0,0,0,0,1,,: 0,0,0,0,0,0,2, : 0,0,0,0,0,0,3, :

0,0,0,0,0,0,4, : 0,0,0,0,0,0,5, : 0,0,0,0,0,0,6, : 0,0,0,0,0,5,1, :

LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,2, : 0,0,0,0,0,0,0,3, :
0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,7, :
0,0,0,0,0,0,0,6,1, :
LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,2, :
0,0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,0,6, :
0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,8, : 0,0,0,0,0,0,0,7,1, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,2, :
0,0,0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,0,5, :
0,0,0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,0,8, :
0,0,0,0,0,0,0,0,0,9, : 0,0,0,0,0,0,0,0,0,8,1, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,0,2, :
0,0,0,0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,0,5, :
0,0,0,0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,0,8, :
0,0,0,0,0,0,0,0,0,0,9, : 0,0,0,0,0,0,0,0,0,0,10, : 0,0,0,0,0,0,0,0,0,9,1, :
Number new nodes in level n is given by : 1,2,3,5,6,7,8,9,10,11,12,

-----Class

1504-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][100][102][110][201][210]]$

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Rules of $T[L]$:

- R1) 0, -->0,0, --0,1, --
- R2) 0,0, -->0,0,0, --0,0,1, --0,0,2, --
- R3) 0,1, -->0,1, --
- R4) 0,0,0, -->0,0,0,0, --0,0,0,1, --0,0,0,2, --0,0,0,3, --
- R5) 0,0,1, -->0,0,1, --0,0,2, --
- R6) 0,0,2, -->0,0,2,1, --0,0,2, --
- R7) 0,0,0,0, -->0,0,0,0,0, --0,0,0,0,1, --0,0,0,0,2, --0,0,0,0,3, --0,0,0,0,4, --
- R8) 0,0,0,1, -->0,0,0,1, --0,0,0,2, --0,0,0,3, --
- R9) 0,0,0,2, -->0,0,2,1, --0,0,0,2, --0,0,0,3, --
- R10) 0,0,0,3, -->0,0,2,1, --0,0,2,1, --0,0,0,3, --
- R11) 0,0,2,1, -->
- R12) 0,0,0,0,0, -->0,0,0,0,0,0, --0,0,0,0,0,1, --0,0,0,0,0,2, --0,0,0,0,0,3, --0,0,0,0,0,4, --
0,0,0,0,0,5, --
- R13) 0,0,0,0,1, -->0,0,0,0,1, --0,0,0,0,2, --0,0,0,0,3, --0,0,0,0,4, --
- R14) 0,0,0,0,2, -->0,0,2,1, --0,0,0,0,2, --0,0,0,0,3, --0,0,0,0,4, --
- R15) 0,0,0,0,3, -->0,0,2,1, --0,0,2,1, --0,0,0,0,3, --0,0,0,0,4, --
- R16) 0,0,0,0,4, -->0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,0,0,4, --
- R17) 0,0,0,0,0,0, -->0,0,0,0,0,0,0, --0,0,0,0,0,0,1, --0,0,0,0,0,0,2, --0,0,0,0,0,0,3, --0,0,
0,0,0,0,4, --0,0,0,0,0,0,5, --0,0,0,0,0,0,6, --
- R18) 0,0,0,0,0,1, -->0,0,0,0,0,1, --0,0,0,0,0,2, --0,0,0,0,0,3, --0,0,0,0,0,4, --0,0,0,0,0,5, --
- R19) 0,0,0,0,0,2, -->0,0,2,1, --0,0,0,0,0,2, --0,0,0,0,0,3, --0,0,0,0,0,4, --0,0,0,0,0,5, --
- R20) 0,0,0,0,0,3, -->0,0,2,1, --0,0,2,1, --0,0,0,0,0,3, --0,0,0,0,0,4, --0,0,0,0,0,5, --
- R21) 0,0,0,0,0,4, -->0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,0,0,0,4, --0,0,0,0,0,5, --

R22) 0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,5,--
R23)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,
0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--
R24)
0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,
0,0,0,0,0,5,--0,0,0,0,0,0,6,--
R25)
0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,
0,0,5,--0,0,0,0,0,0,6,--
R26)
0,0,0,0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,
--0,0,0,0,0,0,6,--
R27)
0,0,0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,
0,0,0,0,6,--
R28)
0,0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,5,--0,0,0,0,0,
0,6,--
R29)
0,0,0,0,0,0,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,6,--
R30)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,
0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,
0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--
R31)
0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,
0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--
R32)
0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--
0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--
R33)
0,0,0,0,0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,
0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--
R34)
0,0,0,0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,
--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--
R35)
0,0,0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,5,--0,0,0,
0,0,0,0,6,--0,0,0,0,0,0,0,7,--
R36)
0,0,0,0,0,0,0,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,
6,--0,0,0,0,0,0,0,7,--
R37)
0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,
0,0,0,0,0,7,--
R38)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,
2,--0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,
0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--

R39)

0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,3,--0,
0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--0,0,0,
0,0,0,0,0,8,--

R40)

0,0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,
0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,
8,--

R41)

0,0,0,0,0,0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,
0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--

R42)

0,0,0,0,0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,
0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--

R43)

0,0,0,0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,5,--0,
0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--

R44)

0,0,0,0,0,0,0,0,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,
0,0,6,--0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--

R45)

0,0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,
0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--

R46)

0,0,0,0,0,0,0,0,8,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,
0,2,1,--0,0,0,0,0,0,0,0,8,--

R47)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,
0,0,0,0,2,--0,0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,0,5,--
-0,0,0,0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,
0,0,0,0,0,9,--0,0,0,0,0,0,0,0,0,0,10,--

R48)

0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,
0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,
0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--

R49)

0,0,0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,
0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,
0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--

R50)

0,0,0,0,0,0,0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,
4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,
0,0,8,--0,0,0,0,0,0,0,0,0,9,--

R51)

0,0,0,0,0,0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,
0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,
0,0,0,0,0,0,9,--

R52)

0,0,0,0,0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,0,5,
--0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0


```

,0,9,--
R53)
0,0,0,0,0,0,0,0,0,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,
0,0,0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--
R54)
0,0,0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--
0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--
R55)
0,0,0,0,0,0,0,0,0,8,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--
0,0,2,1,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--
R56)
0,0,0,0,0,0,0,0,0,9,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--
0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,0,9,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,0,: 0,0,1,: 0,0,2,:
LEN=4) 0,0,0,0,: 0,0,0,1,: 0,0,0,2,: 0,0,0,3,: 0,0,2,1,:
LEN=5) 0,0,0,0,0,: 0,0,0,0,1,: 0,0,0,0,2,: 0,0,0,0,3,: 0,0,0,0,4,:
LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,1,: 0,0,0,0,0,2,: 0,0,0,0,0,3,: 0,0,0,0,0,4,:
0,0,0,0,0,5,:
LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,1,: 0,0,0,0,0,0,2,: 0,0,0,0,0,0,3,:
0,0,0,0,0,0,4,: 0,0,0,0,0,0,5,: 0,0,0,0,0,0,6,:
LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,2,: 0,0,0,0,0,0,0,3,:
0,0,0,0,0,0,0,4,: 0,0,0,0,0,0,0,5,: 0,0,0,0,0,0,0,6,: 0,0,0,0,0,0,0,7,:
LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,0,2,:
0,0,0,0,0,0,0,0,3,: 0,0,0,0,0,0,0,0,4,: 0,0,0,0,0,0,0,0,5,: 0,0,0,0,0,0,0,0,6,:
0,0,0,0,0,0,0,0,7,: 0,0,0,0,0,0,0,0,8,:
LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,0,0,2,:
0,0,0,0,0,0,0,0,0,3,: 0,0,0,0,0,0,0,0,0,4,: 0,0,0,0,0,0,0,0,0,5,:
0,0,0,0,0,0,0,0,0,6,: 0,0,0,0,0,0,0,0,0,7,: 0,0,0,0,0,0,0,0,0,8,:
0,0,0,0,0,0,0,0,0,9,:
LEN=11) 0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,0,0,0,2,:
0,0,0,0,0,0,0,0,0,0,3,: 0,0,0,0,0,0,0,0,0,0,4,: 0,0,0,0,0,0,0,0,0,0,5,:
0,0,0,0,0,0,0,0,0,0,6,: 0,0,0,0,0,0,0,0,0,0,7,: 0,0,0,0,0,0,0,0,0,0,8,:
0,0,0,0,0,0,0,0,0,0,9,: 0,0,0,0,0,0,0,0,0,0,10,:
Number new nodes in level n is given by : 1,2,3,5,5,6,7,8,9,10,11,

```

-----Class

1505-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][100][102][120][201][210]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,0,1,--0,0,2,--
- R3) 0,1,-->0,1,--
- R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
- R5) 0,0,1,-->0,0,1,--0,0,2,--
- R6) 0,0,2,-->0,0,2,1,--0,1,--

R7) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
R8) 0,0,0,1,-->0,0,0,1,--0,0,0,2,--0,0,0,3,--
R9) 0,0,0,2,-->0,0,2,1,--0,0,1,--0,0,2,--
R10) 0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,1,--
R11) 0,0,2,1,-->
R12)
0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--
0,0,0,0,0,5,--
R13) 0,0,0,0,1,-->0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
R14) 0,0,0,0,2,-->0,0,2,1,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
R15) 0,0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,1,--0,0,2,--
R16) 0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,1,--
R17)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,
0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--
R18)
0,0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,
--
R19) 0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
R20) 0,0,0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
R21) 0,0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,1,--0,0,2,--
R22) 0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,1,--
R23)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,
0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--
R24)
0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,
0,0,0,0,0,5,--0,0,0,0,0,0,6,--
R25)
0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--
0,0,0,0,0,5,--
R26)
0,0,0,0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,
--
R27) 0,0,0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
R28) 0,0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,1,--0,0,2,--
R29) 0,0,0,0,0,0,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,1,--
R30)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,
0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,
,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--
R31)
0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,
0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--
R32)
0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,
0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--
R33)
0,0,0,0,0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,
0,0,0,0,4,--0,0,0,0,0,0,5,--

R34)

0,0,0,0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,
--0,0,0,0,4,--

R35)

0,0,0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,1,--0,0,0,2,--0,0,
0,3,--

R36)

0,0,0,0,0,0,0,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,1,--0,0,2,
--

R37)

0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,1,
--

R38)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,
2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,
,0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--

R39)

0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,3,--0,
0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--0,0,0,
,0,0,0,0,0,8,--

R40)

0,0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,
--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--

R41)

0,0,0,0,0,0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,
0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--

R42)

0,0,0,0,0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,
0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--

R43)

0,0,0,0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,1,--0,0,0,0,2,
--0,0,0,0,3,--0,0,0,0,4,--

R44)

0,0,0,0,0,0,0,0,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,1,--0,
0,0,2,--0,0,0,3,--

R45)

0,0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,
0,1,--0,0,2,--

R46)

0,0,0,0,0,0,0,0,8,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,
0,2,1,--0,1,--

R47)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,
0,0,0,0,2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--
-0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,
0,0,0,0,0,9,--0,0,0,0,0,0,0,0,0,10,--

R48)

0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,
0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,
,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--

R49)

0,0,0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--

R50)

0,0,0,0,0,0,0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--

R51)

0,0,0,0,0,0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--

R52)

0,0,0,0,0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--

R53)

0,0,0,0,0,0,0,0,0,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--

R54)

0,0,0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--

R55)

0,0,0,0,0,0,0,0,0,8,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--

R56)

0,0,0,0,0,0,0,0,0,9,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, : 0,1, :

LEN=3) 0,0,0, : 0,0,1, : 0,0,2, :

LEN=4) 0,0,0,0, : 0,0,0,1, : 0,0,0,2, : 0,0,0,3, : 0,0,2,1, :

LEN=5) 0,0,0,0,0, : 0,0,0,0,1, : 0,0,0,0,2, : 0,0,0,0,3, : 0,0,0,0,4, :

LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, : 0,0,0,0,0,2, : 0,0,0,0,0,3, : 0,0,0,0,0,4, : 0,0,0,0,0,5, :

LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, : 0,0,0,0,0,0,2, : 0,0,0,0,0,0,3, : 0,0,0,0,0,0,4, : 0,0,0,0,0,0,5, : 0,0,0,0,0,0,6, :

LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,2, : 0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,7, :

LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,2, : 0,0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,8, :

LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,0,2, : 0,0,0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,0,8, : 0,0,0,0,0,0,0,0,0,9, :

LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,0,0,2, : 0,0,0,0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,0,0,8, : 0,0,0,0,0,0,0,0,0,0,9, : 0,0,0,0,0,0,0,0,0,0,10, :

Number new nodes in level n is given by : 1,2,3,5,5,6,7,8,9,10,11,

-----Class

1506-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][100][110][120][201][210]]$

--

Rules of $T[L]$:

- R1) $0, -->0,0, --0,1, --$
- R2) $0,0, -->0,0,0, --0,0,1, --0,0,2, --$
- R3) $0,1, -->0,1, --$
- R4) $0,0,0, -->0,0,0,0, --0,0,0,1, --0,0,0,2, --0,0,0,3, --$
- R5) $0,0,1, -->0,0,1, --0,0,2, --$
- R6) $0,0,2, -->0,0,1, --0,1, --$
- R7) $0,0,0,0, -->0,0,0,0,0, --0,0,0,0,1, --0,0,0,0,2, --0,0,0,0,3, --0,0,0,0,4, --$
- R8) $0,0,0,1, -->0,0,0,1, --0,0,0,2, --0,0,0,3, --$
- R9) $0,0,0,2, -->0,0,0,1, --0,0,1, --0,0,2, --$
- R10) $0,0,0,3, -->0,0,1, --0,0,1, --0,1, --$
- R11)
 $0,0,0,0,0, -->0,0,0,0,0,0, --0,0,0,0,0,1, --0,0,0,0,0,2, --0,0,0,0,0,3, --0,0,0,0,0,4, --$
 $0,0,0,0,0,5, --$
- R12) $0,0,0,0,1, -->0,0,0,0,1, --0,0,0,0,2, --0,0,0,0,3, --0,0,0,0,4, --$
- R13) $0,0,0,0,2, -->0,0,0,0,1, --0,0,0,1, --0,0,0,2, --0,0,0,3, --$
- R14) $0,0,0,0,3, -->0,0,0,1, --0,0,0,1, --0,0,1, --0,0,2, --$
- R15) $0,0,0,0,4, -->0,0,1, --0,0,1, --0,0,1, --0,1, --$
- R16)
 $0,0,0,0,0,0, -->0,0,0,0,0,0,0, --0,0,0,0,0,0,1, --0,0,0,0,0,0,2, --0,0,0,0,0,0,3, --0,0,$
 $0,0,0,0,0,4, --0,0,0,0,0,0,5, --0,0,0,0,0,0,6, --$
- R17)
 $0,0,0,0,0,1, -->0,0,0,0,0,1, --0,0,0,0,0,2, --0,0,0,0,0,3, --0,0,0,0,0,4, --0,0,0,0,0,5,$
 $--$
- R18) $0,0,0,0,0,2, -->0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,0,2, --0,0,0,0,3, --0,0,0,0,4, --$
- R19) $0,0,0,0,0,3, -->0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,0,2, --0,0,0,3, --$
- R20) $0,0,0,0,0,4, -->0,0,0,1, --0,0,0,1, --0,0,0,1, --0,0,1, --0,0,2, --$
- R21) $0,0,0,0,0,5, -->0,0,1, --0,0,1, --0,0,1, --0,0,1, --0,1, --$
- R22)
 $0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,2, --0,0,0,0,0,0,$
 $0,3, --0,0,0,0,0,0,0,4, --0,0,0,0,0,0,0,5, --0,0,0,0,0,0,0,6, --0,0,0,0,0,0,0,7, --$
- R23)
 $0,0,0,0,0,0,1, -->0,0,0,0,0,0,1, --0,0,0,0,0,0,2, --0,0,0,0,0,0,3, --0,0,0,0,0,0,4, --0,$
 $0,0,0,0,0,5, --0,0,0,0,0,0,6, --$
- R24)
 $0,0,0,0,0,0,2, -->0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,0,2, --0,0,0,0,0,3, --0,0,0,0,$
 $0,4, --0,0,0,0,0,5, --$
- R25)
 $0,0,0,0,0,0,3, -->0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,0,2, --0,0,0,0,3, --0,$
 $0,0,0,4, --$
- R26)
 $0,0,0,0,0,0,4, -->0,0,0,0,1, --0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,0,2, --0,0,0,3, --$
- R27) $0,0,0,0,0,0,5, -->0,0,0,1, --0,0,0,1, --0,0,0,1, --0,0,0,1, --0,0,1, --0,0,2, --$
- R28) $0,0,0,0,0,0,6, -->0,0,1, --0,0,1, --0,0,1, --0,0,1, --0,0,1, --0,1, --$

R29)
 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,
 0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,
 ,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--
 R30)
 0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,
 0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--
 R31)
 0,0,0,0,0,0,0,2,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,
 --0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--
 R32)
 0,0,0,0,0,0,0,3,-->0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,
 0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--
 R33)
 0,0,0,0,0,0,0,4,-->0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,2,
 --0,0,0,0,3,--0,0,0,0,4,--
 R34)
 0,0,0,0,0,0,0,5,-->0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,0,
 2,--0,0,0,3,--
 R35)
 0,0,0,0,0,0,0,6,-->0,0,0,1,--0,0,0,1,--0,0,0,1,--0,0,0,1,--0,0,0,1,--0,0,1,--0,0,2,
 --
 R36) 0,0,0,0,0,0,0,7,-->0,0,1,--0,0,1,--0,0,1,--0,0,1,--0,0,1,--0,0,1,--0,1,--
 R37)
 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,0,
 2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,
 ,0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--
 R38)
 0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,3,--0,
 0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--0,0,0,
 ,0,0,0,0,0,8,--
 R39)
 0,0,0,0,0,0,0,0,2,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,
 0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,-
 -
 R40)
 0,0,0,0,0,0,0,0,3,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,
 0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--
 R41)
 0,0,0,0,0,0,0,0,4,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--
 0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--
 R42)
 0,0,0,0,0,0,0,0,5,-->0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,
 0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
 R43)
 0,0,0,0,0,0,0,0,6,-->0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,0,1,--0,
 0,0,1,--0,0,0,2,--0,0,0,3,--
 R44)
 0,0,0,0,0,0,0,0,7,-->0,0,0,1,--0,0,0,1,--0,0,0,1,--0,0,0,1,--0,0,0,1,--0,0,0,1,--0,0,0,1,--0,
 0,1,--0,0,2,--

R45)
0,0,0,0,0,0,0,0,8,-->0,0,1,--0,0,1,--0,0,1,--0,0,1,--0,0,1,--0,0,1,--0,0,1,--0,0,1,--0,1,--

R46)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,0,9,--0,0,0,0,0,0,0,0,0,0,10,--

R47)
0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--

R48)
0,0,0,0,0,0,0,0,0,2,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--

R49)
0,0,0,0,0,0,0,0,0,3,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,7,--

R50)
0,0,0,0,0,0,0,0,0,4,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,6,--

R51)
0,0,0,0,0,0,0,0,0,5,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--

R52)
0,0,0,0,0,0,0,0,0,6,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--

R53)
0,0,0,0,0,0,0,0,0,7,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,3,--

R54)
0,0,0,0,0,0,0,0,0,8,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,2,--

R55)
0,0,0,0,0,0,0,0,0,9,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,2,--

List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, : 0,0,1, : 0,0,2, :
LEN=4) 0,0,0,0, : 0,0,0,1, : 0,0,0,2, : 0,0,0,3, :
LEN=5) 0,0,0,0,0, : 0,0,0,0,1, : 0,0,0,0,2, : 0,0,0,0,3, : 0,0,0,0,4, :
LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, : 0,0,0,0,0,2, : 0,0,0,0,0,3, : 0,0,0,0,0,4, : 0,0,0,0,0,5, :
LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,2, : 0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,6, :
LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,2, : 0,0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,0,7, :

LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,2, :
 0,0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,0,6, :
 0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,8, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,0,2, :
 0,0,0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,0,5, :
 0,0,0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,0,8, :
 0,0,0,0,0,0,0,0,0,9, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,0,0,2, :
 0,0,0,0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,0,0,5, :
 0,0,0,0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,0,0,8, :
 0,0,0,0,0,0,0,0,0,0,9, : 0,0,0,0,0,0,0,0,0,0,10, :
 Number new nodes in level n is given by : 1,2,3,4,5,6,7,8,9,10,11,

-----Class

1507-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][101][102][110][120][201]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,0,1,--0,0,2,--
- R3) 0,1,-->0,1,--
- R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
- R5) 0,0,1,-->0,0,1,--0,0,2,--
- R6) 0,0,2,-->0,0,2,1,--0,1,--
- R7) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
- R8) 0,0,0,1,-->0,0,0,1,--0,0,0,2,--0,0,0,3,--
- R9) 0,0,0,2,-->0,0,2,1,--0,0,1,--0,0,2,--
- R10) 0,0,0,3,-->0,0,2,1,--0,0,0,3,2,--0,1,--
- R11) 0,0,2,1,-->
- R12) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--
- R13) 0,0,0,0,1,-->0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
- R14) 0,0,0,0,2,-->0,0,2,1,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
- R15) 0,0,0,0,3,-->0,0,2,1,--0,0,0,3,2,--0,0,1,--0,0,2,--
- R16) 0,0,0,0,4,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,1,--
- R17) 0,0,0,3,2,-->0,0,2,1,--
- R18) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--
- R19) 0,0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--
- R20) 0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
- R21) 0,0,0,0,0,3,-->0,0,2,1,--0,0,0,0,3,2,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--
- R22) 0,0,0,0,0,4,-->0,0,2,1,--0,0,0,0,3,2,--0,0,0,0,4,3,--0,0,1,--0,0,2,--
- R23) 0,0,0,0,0,5,-->0,0,2,1,--0,0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,1,--
- R24) 0,0,0,0,4,3,-->0,0,2,1,--0,0,0,0,3,2,--
- R25)

0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--

R26)

0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--

R27)

0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--

R28)

0,0,0,0,0,0,3,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R29)

0,0,0,0,0,0,4,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,1,--0,0,0,2,--0,0,0,3,--

R30)

0,0,0,0,0,0,5,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,1,--0,0,2,--

R31)

0,0,0,0,0,0,6,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,0,6,5,--0,1,--

R32) 0,0,0,0,0,5,4,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--

R33)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--

R34)

0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--

R35)

0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--

R36)

0,0,0,0,0,0,0,3,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--

R37)

0,0,0,0,0,0,0,4,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R38)

0,0,0,0,0,0,0,5,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,1,--0,0,0,2,--0,0,0,3,--

R39)

0,0,0,0,0,0,0,6,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,0,6,5,--0,0,1,--0,0,2,--

R40)

0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,0,6,5,--0,0,0,0,0,0,0,7,6,--0,1,--

R41) 0,0,0,0,0,0,6,5,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--

R42)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--

R43)

0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,3,--0,
0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--0,0,0,
,0,0,0,0,0,8,--

R44)

0,0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,
--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--

R45)

0,0,0,0,0,0,0,0,3,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,
0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--

R46)

0,0,0,0,0,0,0,0,4,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,1,--0,0,0,0,0,2,
--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--

R47)

0,0,0,0,0,0,0,0,5,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,1,
--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R48)

0,0,0,0,0,0,0,0,6,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,
0,6,5,--0,0,0,1,--0,0,0,2,--0,0,0,3,--

R49)

0,0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,
0,6,5,--0,0,0,0,0,0,7,6,--0,0,1,--0,0,2,--

R50)

0,0,0,0,0,0,0,0,8,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,
0,6,5,--0,0,0,0,0,0,7,6,--0,0,0,0,0,0,8,7,--0,1,--

R51)

0,0,0,0,0,0,0,0,7,6,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,
0,6,5,--

R52)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,
0,0,0,0,2,--0,0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,0,5,--
-0,0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,
0,0,0,0,0,9,--0,0,0,0,0,0,0,0,0,0,10,--

R53)

0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,
0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,
,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--

R54)

0,0,0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,
0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,
,0,7,--0,0,0,0,0,0,0,0,8,--

R55)

0,0,0,0,0,0,0,0,0,3,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,
0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,
,7,--

R56)

0,0,0,0,0,0,0,0,0,4,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,0,1,--0,0,0,0,
0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--

R57)

0,0,0,0,0,0,0,0,0,5,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,

0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--
 R58)
 0,0,0,0,0,0,0,0,0,6,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,
 0,0,6,5,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
 R59)
 0,0,0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,
 0,0,6,5,--0,0,0,0,0,0,0,7,6,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
 R60)
 0,0,0,0,0,0,0,0,0,8,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,
 0,0,6,5,--0,0,0,0,0,0,0,7,6,--0,0,0,0,0,0,0,8,7,--0,0,1,--0,0,2,--
 R61)
 0,0,0,0,0,0,0,0,0,9,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,
 0,0,6,5,--0,0,0,0,0,0,0,7,6,--0,0,0,0,0,0,0,8,7,--0,0,0,0,0,0,0,9,8,--0,1,--
 R62)
 0,0,0,0,0,0,0,0,8,7,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,
 0,0,6,5,--0,0,0,0,0,0,0,7,6,--
 List of different nodes in T[L]
 LEN=1) 0, :
 LEN=2) 0,0, : 0,1, :
 LEN=3) 0,0,0, : 0,0,1, : 0,0,2, :
 LEN=4) 0,0,0,0, : 0,0,0,1, : 0,0,0,2, : 0,0,0,3, : 0,0,2,1, :
 LEN=5) 0,0,0,0,0, : 0,0,0,0,1, : 0,0,0,0,2, : 0,0,0,0,3, : 0,0,0,0,4, : 0,0,0,3,2, :
 LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, : 0,0,0,0,0,2, : 0,0,0,0,0,3, : 0,0,0,0,0,4, :
 0,0,0,0,0,5, : 0,0,0,0,4,3, :
 LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, : 0,0,0,0,0,0,2, : 0,0,0,0,0,0,3, :
 0,0,0,0,0,0,4, : 0,0,0,0,0,0,5, : 0,0,0,0,0,0,6, : 0,0,0,0,0,5,4, :
 LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,2, : 0,0,0,0,0,0,0,3, :
 0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,7, :
 0,0,0,0,0,0,6,5, :
 LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,2, :
 0,0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,0,6, :
 0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,8, : 0,0,0,0,0,0,0,7,6, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,0,2, :
 0,0,0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,0,5, :
 0,0,0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,0,8, :
 0,0,0,0,0,0,0,0,0,9, : 0,0,0,0,0,0,0,0,8,7, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,0,0,2, :
 0,0,0,0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,0,0,5, :
 0,0,0,0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,0,0,8, :
 0,0,0,0,0,0,0,0,0,0,9, : 0,0,0,0,0,0,0,0,0,0,10, : 0,0,0,0,0,0,0,0,0,9,8, :
 Number new nodes in level n is given by : 1,2,3,5,6,7,8,9,10,11,12,

-----Class

1508-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][101][102][110][120][210]]$

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Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,0,1,--0,0,2,--

R3) 0,1,-->0,1,--
R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
R5) 0,0,1,-->0,0,1,--0,0,2,--
R6) 0,0,2,-->0,0,2,1,--0,1,--
R7) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
R8) 0,0,0,1,-->0,0,0,1,--0,0,0,2,--0,0,0,3,--
R9) 0,0,0,2,-->0,0,2,1,--0,0,1,--0,0,2,--
R10) 0,0,0,3,-->0,0,0,3,1,--0,0,2,1,--0,1,--
R11) 0,0,2,1,-->
R12)
0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--
0,0,0,0,0,5,--
R13) 0,0,0,0,1,-->0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
R14) 0,0,0,0,2,-->0,0,2,1,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
R15) 0,0,0,0,3,-->0,0,0,3,1,--0,0,2,1,--0,0,1,--0,0,2,--
R16) 0,0,0,0,4,-->0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,1,--
R17) 0,0,0,3,1,-->0,0,2,1,--
R18)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,
0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--
R19)
0,0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,
--
R20) 0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
R21) 0,0,0,0,0,3,-->0,0,0,3,1,--0,0,2,1,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
R22) 0,0,0,0,0,4,-->0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,1,--0,0,2,--
R23) 0,0,0,0,0,5,-->0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,1,--
R24) 0,0,0,0,4,1,-->0,0,0,3,1,--0,0,2,1,--
R25)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,
0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--
R26)
0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,
0,0,0,0,0,5,--0,0,0,0,0,0,6,--
R27)
0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--
0,0,0,0,0,5,--
R28)
0,0,0,0,0,0,3,-->0,0,0,3,1,--0,0,2,1,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,
4,--
R29)
0,0,0,0,0,0,4,-->0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
R30)
0,0,0,0,0,0,5,-->0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,1,--0,0,2,
--
R31)
0,0,0,0,0,0,6,-->0,0,0,0,0,0,6,1,--0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,
1,--0,1,--
R32) 0,0,0,0,0,5,1,-->0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--
R33)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--

R34)

0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--

R35)

0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--

R36)

0,0,0,0,0,0,0,3,-->0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--

R37)

0,0,0,0,0,0,0,4,-->0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R38)

0,0,0,0,0,0,0,5,-->0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,1,--0,0,0,2,--0,0,0,3,--

R39)

0,0,0,0,0,0,0,6,-->0,0,0,0,0,0,6,1,--0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,1,--0,0,2,--

R40)

0,0,0,0,0,0,0,7,-->0,0,0,0,0,0,0,7,1,--0,0,0,0,0,0,6,1,--0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,1,--

R41) 0,0,0,0,0,0,0,6,1,-->0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--

R42)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--

R43)

0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--

R44)

0,0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--

R45)

0,0,0,0,0,0,0,0,3,-->0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--

R46)

0,0,0,0,0,0,0,0,4,-->0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--

R47)

0,0,0,0,0,0,0,0,5,-->0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R48)

0,0,0,0,0,0,0,0,6,-->0,0,0,0,0,0,6,1,--0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,1,--0,0,0,2,--0,0,0,3,--

R49)

0,0,0,0,0,0,0,0,7,-->0,0,0,0,0,0,0,7,1,--0,0,0,0,0,0,6,1,--0,0,0,0,0,5,1,--0,0,0,0,0,

4,1,--0,0,0,3,1,--0,0,2,1,--0,0,1,--0,0,2,--
 R50)
 0,0,0,0,0,0,0,0,8,-->0,0,0,0,0,0,0,0,8,1,--0,0,0,0,0,0,0,7,1,--0,0,0,0,0,0,6,1,--0,
 0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,1,--
 R51)
 0,0,0,0,0,0,0,7,1,-->0,0,0,0,0,0,6,1,--0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,
 0,2,1,--
 R52)
 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,
 0,0,0,0,2,--0,0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,0,5,-
 -0,0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,
 0,0,0,0,0,9,--0,0,0,0,0,0,0,0,0,10,--
 R53)
 0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,
 0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,
 ,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--
 R54)
 0,0,0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,
 0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,
 ,0,7,--0,0,0,0,0,0,0,8,--
 R55)
 0,0,0,0,0,0,0,0,3,-->0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,
 0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,
 ,7,--
 R56)
 0,0,0,0,0,0,0,0,4,-->0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,1,--0,0,0,0,
 0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--
 R57)
 0,0,0,0,0,0,0,0,5,-->0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,
 0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--
 R58)
 0,0,0,0,0,0,0,0,6,-->0,0,0,0,0,0,6,1,--0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--
 0,0,2,1,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
 R59)
 0,0,0,0,0,0,0,0,7,-->0,0,0,0,0,0,0,7,1,--0,0,0,0,0,0,6,1,--0,0,0,0,0,5,1,--0,0,0,
 0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
 R60)
 0,0,0,0,0,0,0,0,8,-->0,0,0,0,0,0,0,8,1,--0,0,0,0,0,0,0,7,1,--0,0,0,0,0,0,6,1,--
 0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,1,--0,0,2,--
 R61)
 0,0,0,0,0,0,0,0,9,-->0,0,0,0,0,0,0,9,1,--0,0,0,0,0,0,0,8,1,--0,0,0,0,0,0,0,
 7,1,--0,0,0,0,0,0,6,1,--0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,1,--
 R62)
 0,0,0,0,0,0,0,0,8,1,-->0,0,0,0,0,0,0,7,1,--0,0,0,0,0,0,6,1,--0,0,0,0,0,5,1,--0,0,0,
 0,4,1,--0,0,0,3,1,--0,0,2,1,--
 List of different nodes in T[L]
 LEN=1) 0, :
 LEN=2) 0,0, : 0,1, :
 LEN=3) 0,0,0, : 0,0,1, : 0,0,2, :
 LEN=4) 0,0,0,0, : 0,0,0,1, : 0,0,0,2, : 0,0,0,3, : 0,0,2,1, :

LEN=5) 0,0,0,0,0, : 0,0,0,0,1, : 0,0,0,0,2, : 0,0,0,0,3, : 0,0,0,0,4, : 0,0,0,3,1, :
 LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, : 0,0,0,0,0,2, : 0,0,0,0,0,3, : 0,0,0,0,0,4, :
 0,0,0,0,0,5, : 0,0,0,0,4,1, :
 LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, : 0,0,0,0,0,0,2, : 0,0,0,0,0,0,3, :
 0,0,0,0,0,0,4, : 0,0,0,0,0,0,5, : 0,0,0,0,0,0,6, : 0,0,0,0,0,5,1, :
 LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,2, : 0,0,0,0,0,0,0,3, :
 0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,7, :
 0,0,0,0,0,0,6,1, :
 LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,2, :
 0,0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,0,6, :
 0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,8, : 0,0,0,0,0,0,0,7,1, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,0,2, :
 0,0,0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,0,5, :
 0,0,0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,0,8, :
 0,0,0,0,0,0,0,0,0,9, : 0,0,0,0,0,0,0,0,8,1, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,0,0,2, :
 0,0,0,0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,0,0,5, :
 0,0,0,0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,0,0,8, :
 0,0,0,0,0,0,0,0,0,0,9, : 0,0,0,0,0,0,0,0,0,0,10, : 0,0,0,0,0,0,0,0,0,9,1, :
 Number new nodes in level n is given by : 1,2,3,5,6,7,8,9,10,11,12,

-----Class

1509-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][101][102][110][201][210]]$

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Rules of T[L]:

- R1) 0, -->0,0, --0,1, --
- R2) 0,0, -->0,0,0, --0,0,1, --0,0,2, --
- R3) 0,1, -->0,1, --
- R4) 0,0,0, -->0,0,0,0, --0,0,0,1, --0,0,0,2, --0,0,0,3, --
- R5) 0,0,1, -->0,0,1, --0,0,2, --
- R6) 0,0,2, -->0,0,2,1, --0,0,2, --
- R7) 0,0,0,0, -->0,0,0,0,0, --0,0,0,0,1, --0,0,0,0,2, --0,0,0,0,3, --0,0,0,0,4, --
- R8) 0,0,0,1, -->0,0,0,1, --0,0,0,2, --0,0,0,3, --
- R9) 0,0,0,2, -->0,0,2,1, --0,0,0,2, --0,0,0,3, --
- R10) 0,0,0,3, -->0,0,2,1, --0,0,2,1, --0,0,0,3, --
- R11) 0,0,2,1, -->
- R12) 0,0,0,0,0, -->0,0,0,0,0,0, --0,0,0,0,0,1, --0,0,0,0,0,2, --0,0,0,0,0,3, --0,0,0,0,0,4, --0,0,0,0,0,5, --
- R13) 0,0,0,0,1, -->0,0,0,0,1, --0,0,0,0,2, --0,0,0,0,3, --0,0,0,0,4, --
- R14) 0,0,0,0,2, -->0,0,2,1, --0,0,0,0,2, --0,0,0,0,3, --0,0,0,0,4, --
- R15) 0,0,0,0,3, -->0,0,2,1, --0,0,2,1, --0,0,0,0,3, --0,0,0,0,4, --
- R16) 0,0,0,0,4, -->0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,0,0,4, --
- R17) 0,0,0,0,0,0, -->0,0,0,0,0,0,0, --0,0,0,0,0,0,1, --0,0,0,0,0,0,2, --0,0,0,0,0,0,3, --0,0,0,0,0,0,4, --0,0,0,0,0,0,5, --0,0,0,0,0,0,6, --
- R18) 0,0,0,0,0,1, -->0,0,0,0,0,1, --0,0,0,0,0,2, --0,0,0,0,0,3, --0,0,0,0,0,4, --0,0,0,0,0,5,

--

R19)

0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--

R20) 0,0,0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--

R21) 0,0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,4,--0,0,0,0,0,5,--

R22) 0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,5,--

R23)

0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,

0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--

R24)

0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,

0,0,0,0,0,5,--0,0,0,0,0,6,--

R25)

0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,

0,0,5,--0,0,0,0,0,6,--

R26)

0,0,0,0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,

--0,0,0,0,0,6,--

R27)

0,0,0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,

0,0,0,0,6,--

R28)

0,0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,5,--0,0,0,0,0,

0,6,--

R29)

0,0,0,0,0,0,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,6,--

R30)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,

0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,

,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--

R31)

0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,

0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--

R32)

0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--

0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--

R33)

0,0,0,0,0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,

0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--

R34)

0,0,0,0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,

--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--

R35)

0,0,0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,5,--0,0,0,

0,0,0,0,6,--0,0,0,0,0,0,7,--

R36)

0,0,0,0,0,0,0,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,

6,--0,0,0,0,0,0,7,--

R37)

0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,

0,0,0,0,0,7, --

R38)

0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,0,0,0,0,
2, --0,0,0,0,0,0,0,0,0,0,3, --0,0,0,0,0,0,0,0,0,0,4, --0,0,0,0,0,0,0,0,0,0,5, --0,0,0,0,0,0,0,
,0,0,6, --0,0,0,0,0,0,0,0,0,0,7, --0,0,0,0,0,0,0,0,0,0,8, --0,0,0,0,0,0,0,0,0,0,9, --

R39)

0,0,0,0,0,0,0,0,1, -->0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,0,2, --0,0,0,0,0,0,0,0,3, --0,
0,0,0,0,0,0,0,4, --0,0,0,0,0,0,0,5, --0,0,0,0,0,0,0,6, --0,0,0,0,0,0,0,7, --0,0,0,
,0,0,0,0,0,8, --

R40)

0,0,0,0,0,0,0,0,2, -->0,0,2,1, --0,0,0,0,0,0,0,2, --0,0,0,0,0,0,0,3, --0,0,0,0,0,0,
0,0,4, --0,0,0,0,0,0,0,5, --0,0,0,0,0,0,0,6, --0,0,0,0,0,0,0,7, --0,0,0,0,0,0,0,
,8, --

R41)

0,0,0,0,0,0,0,0,3, -->0,0,2,1, --0,0,2,1, --0,0,0,0,0,0,0,3, --0,0,0,0,0,0,0,4, --0,
0,0,0,0,0,0,0,5, --0,0,0,0,0,0,0,6, --0,0,0,0,0,0,0,7, --0,0,0,0,0,0,0,8, --

R42)

0,0,0,0,0,0,0,0,4, -->0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,0,0,0,0,0,4, --0,0,0,0,0,0,
0,0,5, --0,0,0,0,0,0,0,6, --0,0,0,0,0,0,0,7, --0,0,0,0,0,0,0,8, --

R43)

0,0,0,0,0,0,0,0,5, -->0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,0,0,0,0,0,5, --0,
0,0,0,0,0,0,0,6, --0,0,0,0,0,0,0,7, --0,0,0,0,0,0,0,8, --

R44)

0,0,0,0,0,0,0,0,6, -->0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,0,0,0,0,
0,0,6, --0,0,0,0,0,0,0,7, --0,0,0,0,0,0,0,8, --

R45)

0,0,0,0,0,0,0,0,7, -->0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,2,1, --0,
0,0,0,0,0,0,0,7, --0,0,0,0,0,0,0,8, --

R46)

0,0,0,0,0,0,0,0,8, -->0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,2,1, --0,
0,2,1, --0,0,0,0,0,0,0,8, --

R47)

0,0,0,0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,
0,0,0,0,2, --0,0,0,0,0,0,0,0,0,3, --0,0,0,0,0,0,0,0,0,4, --0,0,0,0,0,0,0,0,0,5, --
-0,0,0,0,0,0,0,0,0,6, --0,0,0,0,0,0,0,0,0,7, --0,0,0,0,0,0,0,0,0,8, --0,0,0,0,0,
0,0,0,0,0,9, --0,0,0,0,0,0,0,0,0,10, --

R48)

0,0,0,0,0,0,0,0,0,1, -->0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,0,2, --0,0,0,0,0,0,0,0,
0,3, --0,0,0,0,0,0,0,0,4, --0,0,0,0,0,0,0,0,5, --0,0,0,0,0,0,0,0,6, --0,0,0,0,0,0,
,0,0,0,7, --0,0,0,0,0,0,0,0,8, --0,0,0,0,0,0,0,0,9, --

R49)

0,0,0,0,0,0,0,0,2, -->0,0,2,1, --0,0,0,0,0,0,0,2, --0,0,0,0,0,0,0,3, --0,0,0,
0,0,0,0,0,4, --0,0,0,0,0,0,0,5, --0,0,0,0,0,0,0,6, --0,0,0,0,0,0,0,7, --0,
,0,0,0,0,0,0,0,8, --0,0,0,0,0,0,0,9, --

R50)

0,0,0,0,0,0,0,0,0,3, -->0,0,2,1, --0,0,2,1, --0,0,0,0,0,0,0,3, --0,0,0,0,0,0,0,4,
4, --0,0,0,0,0,0,0,5, --0,0,0,0,0,0,0,6, --0,0,0,0,0,0,0,7, --0,0,0,0,0,0,0,
,0,0,8, --0,0,0,0,0,0,0,9, --

R51)

0,0,0,0,0,0,0,0,0,4, -->0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,0,0,0,0,0,4, --0,0,0,0,

0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--

R52)

0,0,0,0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--

R53)

0,0,0,0,0,0,0,0,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--

R54)

0,0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--

R55)

0,0,0,0,0,0,0,0,8,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--

R56)

0,0,0,0,0,0,0,0,9,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,9,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,0,0,: 0,0,1,,: 0,0,2,:

LEN=4) 0,0,0,0,: 0,0,0,1,,: 0,0,0,2,,: 0,0,0,3,,: 0,0,2,1,:

LEN=5) 0,0,0,0,0,: 0,0,0,0,1,,: 0,0,0,0,2,,: 0,0,0,0,3,,: 0,0,0,0,4,:

LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,1,,: 0,0,0,0,0,2,,: 0,0,0,0,0,3,,: 0,0,0,0,0,4,,: 0,0,0,0,0,5,:

LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,1,,: 0,0,0,0,0,0,2,,: 0,0,0,0,0,0,3,:

0,0,0,0,0,0,4,,: 0,0,0,0,0,0,5,,: 0,0,0,0,0,0,6,:

LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,1,,: 0,0,0,0,0,0,0,2,,: 0,0,0,0,0,0,0,3,:

0,0,0,0,0,0,0,4,,: 0,0,0,0,0,0,0,5,,: 0,0,0,0,0,0,0,6,,: 0,0,0,0,0,0,0,7,:

LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,1,,: 0,0,0,0,0,0,0,0,2,:

0,0,0,0,0,0,0,0,3,,: 0,0,0,0,0,0,0,0,4,,: 0,0,0,0,0,0,0,0,5,,: 0,0,0,0,0,0,0,0,6,:

0,0,0,0,0,0,0,0,7,,: 0,0,0,0,0,0,0,0,8,:

LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,1,,: 0,0,0,0,0,0,0,0,0,2,:

0,0,0,0,0,0,0,0,0,3,,: 0,0,0,0,0,0,0,0,0,4,,: 0,0,0,0,0,0,0,0,0,5,:

0,0,0,0,0,0,0,0,0,6,,: 0,0,0,0,0,0,0,0,0,7,,: 0,0,0,0,0,0,0,0,0,8,:

0,0,0,0,0,0,0,0,0,9,:

LEN=11) 0,0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,1,,: 0,0,0,0,0,0,0,0,0,0,2,:

0,0,0,0,0,0,0,0,0,0,0,3,,: 0,0,0,0,0,0,0,0,0,0,0,4,,: 0,0,0,0,0,0,0,0,0,0,0,5,:

0,0,0,0,0,0,0,0,0,0,0,6,,: 0,0,0,0,0,0,0,0,0,0,0,7,,: 0,0,0,0,0,0,0,0,0,0,0,8,:

0,0,0,0,0,0,0,0,0,0,0,9,,: 0,0,0,0,0,0,0,0,0,0,0,10,:

Number new nodes in level n is given by : 1,2,3,5,5,6,7,8,9,10,11,

-----Class

1510-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[010][011][101][102][120][201][210]]

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Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,0,1,--0,0,2,--
R3) 0,1,-->0,1,--
R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
R5) 0,0,1,-->0,0,1,--0,0,2,--
R6) 0,0,2,-->0,0,2,1,--0,1,--
R7) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
R8) 0,0,0,1,-->0,0,0,1,--0,0,0,2,--0,0,0,3,--
R9) 0,0,0,2,-->0,0,2,1,--0,0,1,--0,0,2,--
R10) 0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,1,--
R11) 0,0,2,1,-->
R12)
0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--
0,0,0,0,0,5,--
R13) 0,0,0,0,1,-->0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
R14) 0,0,0,0,2,-->0,0,2,1,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
R15) 0,0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,1,--0,0,2,--
R16) 0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,1,--
R17)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,
0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--
R18)
0,0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,
--
R19) 0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
R20) 0,0,0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
R21) 0,0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,1,--0,0,2,--
R22) 0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,1,--
R23)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,
0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--
R24)
0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,
0,0,0,0,0,5,--0,0,0,0,0,6,--
R25)
0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--
0,0,0,0,0,5,--
R26)
0,0,0,0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,
--
R27) 0,0,0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
R28) 0,0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,1,--0,0,2,--
R29) 0,0,0,0,0,0,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,1,--
R30)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,
0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,
0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--
R31)
0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,
0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--
R32)

0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,
0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--

R33)

0,0,0,0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,
0,0,0,0,4,--0,0,0,0,0,5,--

R34)

0,0,0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,
--0,0,0,0,4,--

R35)

0,0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,1,--0,0,0,2,--0,0,
0,3,--

R36)

0,0,0,0,0,0,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,1,--0,0,2,
--

R37)

0,0,0,0,0,0,7,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,1,
--

R38)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,0,
2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,
0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--

R39)

0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,3,--0,
0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--0,0,0,
0,0,0,0,0,8,--

R40)

0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,
--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--

R41)

0,0,0,0,0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,
0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--

R42)

0,0,0,0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,
0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--

R43)

0,0,0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,1,--0,0,0,0,2,
--0,0,0,0,3,--0,0,0,0,4,--

R44)

0,0,0,0,0,0,0,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,1,--0,
0,0,2,--0,0,0,3,--

R45)

0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,
0,1,--0,0,2,--

R46)

0,0,0,0,0,0,0,8,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,
0,2,1,--0,1,--

R47)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,
0,0,0,0,2,--0,0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--
-0,0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,

0,0,0,0,0,9,--0,0,0,0,0,0,0,0,0,10,--

R48)

0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--

R49)

0,0,0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--

R50)

0,0,0,0,0,0,0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,7,--

R51)

0,0,0,0,0,0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,6,--

R52)

0,0,0,0,0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--

R53)

0,0,0,0,0,0,0,0,0,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--

R54)

0,0,0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,3,--

R55)

0,0,0,0,0,0,0,0,0,8,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,2,--

R56)

0,0,0,0,0,0,0,0,0,9,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,2,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, : 0,1, :

LEN=3) 0,0,0, : 0,0,1, : 0,0,2, :

LEN=4) 0,0,0,0, : 0,0,0,1, : 0,0,0,2, : 0,0,0,3, : 0,0,2,1, :

LEN=5) 0,0,0,0,0, : 0,0,0,0,1, : 0,0,0,0,2, : 0,0,0,0,3, : 0,0,0,0,4, :

LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, : 0,0,0,0,0,2, : 0,0,0,0,0,3, : 0,0,0,0,0,4, :

0,0,0,0,0,5, :

LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, : 0,0,0,0,0,0,2, : 0,0,0,0,0,0,3, :

0,0,0,0,0,0,4, : 0,0,0,0,0,0,5, : 0,0,0,0,0,0,6, :

LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,2, : 0,0,0,0,0,0,0,3, :

0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,7, :

LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,2, :

0,0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,0,6, :

0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,8, :

LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,0,2, :

0,0,0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,0,5, :

0,0,0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,0,8, :

0,0,0,0,0,0,0,0,0,9, :

LEN=11) 0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,0,0,0,2,:
0,0,0,0,0,0,0,0,0,0,3,: 0,0,0,0,0,0,0,0,0,0,4,: 0,0,0,0,0,0,0,0,0,0,5,:
0,0,0,0,0,0,0,0,0,0,6,: 0,0,0,0,0,0,0,0,0,0,7,: 0,0,0,0,0,0,0,0,0,0,8,:
0,0,0,0,0,0,0,0,0,0,9,: 0,0,0,0,0,0,0,0,0,0,10,:

Number new nodes in level n is given by : 1,2,3,5,5,6,7,8,9,10,11,

-----Class

1511-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][101][110][120][201][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,0,1,--0,0,2,--

R3) 0,1,-->0,1,--

R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,0,2,--0,0,0,3,--

R5) 0,0,1,-->0,0,1,--0,0,2,--

R6) 0,0,2,-->0,0,1,--0,1,--

R7) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R8) 0,0,0,1,-->0,0,0,1,--0,0,0,2,--0,0,0,3,--

R9) 0,0,0,2,-->0,0,0,1,--0,0,1,--0,0,2,--

R10) 0,0,0,3,-->0,0,1,--0,0,1,--0,1,--

R11)

0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--
0,0,0,0,0,5,--

R12) 0,0,0,0,1,-->0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R13) 0,0,0,0,2,-->0,0,0,0,1,--0,0,0,1,--0,0,0,2,--0,0,0,3,--

R14) 0,0,0,0,3,-->0,0,0,1,--0,0,0,1,--0,0,1,--0,0,2,--

R15) 0,0,0,0,4,-->0,0,1,--0,0,1,--0,0,1,--0,1,--

R16)

0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,
0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--

R17)

0,0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,

--

R18) 0,0,0,0,0,2,-->0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R19) 0,0,0,0,0,3,-->0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,0,2,--0,0,0,3,--

R20) 0,0,0,0,0,4,-->0,0,0,1,--0,0,0,1,--0,0,0,1,--0,0,1,--0,0,2,--

R21) 0,0,0,0,0,5,-->0,0,1,--0,0,1,--0,0,1,--0,0,1,--0,1,--

R22)

0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,
0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--

R23)

0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,
0,0,0,0,0,5,--0,0,0,0,0,0,6,--

R24)

0,0,0,0,0,0,2,-->0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,
0,4,--0,0,0,0,0,5,--

R25)

0,0,0,0,0,0,3,-->0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,

0,0,0,4,--

R26)

0,0,0,0,0,0,4,-->0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,0,2,--0,0,0,3,--

R27) 0,0,0,0,0,0,5,-->0,0,0,1,--0,0,0,1,--0,0,0,1,--0,0,0,1,--0,0,1,--0,0,2,--

R28) 0,0,0,0,0,0,6,-->0,0,1,--0,0,1,--0,0,1,--0,0,1,--0,0,1,--0,1,--

R29)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--

R30)

0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--

R31)

0,0,0,0,0,0,0,2,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--

R32)

0,0,0,0,0,0,0,3,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--

R33)

0,0,0,0,0,0,0,4,-->0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R34)

0,0,0,0,0,0,0,5,-->0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,2,--0,0,0,3,--

R35)

0,0,0,0,0,0,0,6,-->0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,0,2,--

R36) 0,0,0,0,0,0,0,7,-->0,0,1,--0,0,1,--0,0,1,--0,0,1,--0,0,1,--0,0,1,--0,1,--

R37)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,0,9,--

R38)

0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--

R39)

0,0,0,0,0,0,0,0,2,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--

R40)

0,0,0,0,0,0,0,0,3,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--

R41)

0,0,0,0,0,0,0,0,4,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--

R42)

0,0,0,0,0,0,0,0,5,-->0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R43)

0,0,0,0,0,0,0,6,-->0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,
0,0,1,--0,0,0,2,--0,0,0,3,--

R44)

0,0,0,0,0,0,0,7,-->0,0,0,1,--0,0,0,1,--0,0,0,1,--0,0,0,1,--0,0,0,1,--0,0,0,1,--0,
0,1,--0,0,2,--

R45)

0,0,0,0,0,0,0,8,-->0,0,1,--0,0,1,--0,0,1,--0,0,1,--0,0,1,--0,0,1,--0,0,1,--0,1,--

R46)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,
0,0,0,0,2,--0,0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,0,5,-
-0,0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,
0,0,0,0,0,9,--0,0,0,0,0,0,0,0,10,--

R47)

0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,
0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,
,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--

R48)

0,0,0,0,0,0,0,0,0,2,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,
--0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,
,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--

R49)

0,0,0,0,0,0,0,0,0,3,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,
0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,
,6,--0,0,0,0,0,0,0,7,--

R50)

0,0,0,0,0,0,0,0,0,4,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,
0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,
,0,6,--

R51)

0,0,0,0,0,0,0,0,0,5,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,
1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--

R52)

0,0,0,0,0,0,0,0,0,6,-->0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,
0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R53)

0,0,0,0,0,0,0,0,0,7,-->0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,0,1,--
0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--

R54)

0,0,0,0,0,0,0,0,0,8,-->0,0,0,1,--0,0,0,1,--0,0,0,1,--0,0,0,1,--0,0,0,1,--0,0,0,1,--
0,0,0,1,--0,0,1,--0,0,2,--

R55)

0,0,0,0,0,0,0,0,0,9,-->0,0,1,--0,0,1,--0,0,1,--0,0,1,--0,0,1,--0,0,1,--0,0,1,--0,0,1,--0,0,
1,--0,1,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,0,0,: 0,0,1,: 0,0,2,:

LEN=4) 0,0,0,0,: 0,0,0,1,: 0,0,0,2,: 0,0,0,3,:

LEN=5) 0,0,0,0,0,: 0,0,0,0,1,: 0,0,0,0,2,: 0,0,0,0,3,: 0,0,0,0,4,:

LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,1,: 0,0,0,0,0,2,: 0,0,0,0,0,3,: 0,0,0,0,0,4,:

0,0,0,0,0,5, :
 LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, : 0,0,0,0,0,0,2, : 0,0,0,0,0,0,3, :
 0,0,0,0,0,0,4, : 0,0,0,0,0,0,5, : 0,0,0,0,0,0,6, :
 LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,2, : 0,0,0,0,0,0,0,3, :
 0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,7, :
 LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,2, :
 0,0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,0,6, :
 0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,8, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,0,2, :
 0,0,0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,0,5, :
 0,0,0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,0,8, :
 0,0,0,0,0,0,0,0,0,9, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,0,0,2, :
 0,0,0,0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,0,0,5, :
 0,0,0,0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,0,0,8, :
 0,0,0,0,0,0,0,0,0,0,9, : 0,0,0,0,0,0,0,0,0,0,10, :
 Number new nodes in level n is given by : 1,2,3,4,5,6,7,8,9,10,11,

-----Class

1512-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][011][102][110][120][201][210]]$

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Rules of $T[L]$:

R1) 0, -->0,0, --0,1, --
 R2) 0,0, -->0,0,0, --0,0,1, --0,0,2, --
 R3) 0,1, -->0,1, --
 R4) 0,0,0, -->0,0,0,0, --0,0,0,1, --0,0,0,2, --0,0,0,3, --
 R5) 0,0,1, -->0,0,1, --0,0,2, --
 R6) 0,0,2, -->0,0,2,1, --0,1, --
 R7) 0,0,0,0, -->0,0,0,0,0, --0,0,0,0,1, --0,0,0,0,2, --0,0,0,0,3, --0,0,0,0,4, --
 R8) 0,0,0,1, -->0,0,0,1, --0,0,0,2, --0,0,0,3, --
 R9) 0,0,0,2, -->0,0,2,1, --0,0,1, --0,0,2, --
 R10) 0,0,0,3, -->0,0,2,1, --0,0,2,1, --0,1, --
 R11) 0,0,2,1, -->
 R12)
 0,0,0,0,0, -->0,0,0,0,0,0, --0,0,0,0,0,1, --0,0,0,0,0,2, --0,0,0,0,0,3, --0,0,0,0,0,4, --
 0,0,0,0,0,5, --
 R13) 0,0,0,0,1, -->0,0,0,0,1, --0,0,0,0,2, --0,0,0,0,3, --0,0,0,0,4, --
 R14) 0,0,0,0,2, -->0,0,2,1, --0,0,0,1, --0,0,0,2, --0,0,0,3, --
 R15) 0,0,0,0,3, -->0,0,2,1, --0,0,2,1, --0,0,1, --0,0,2, --
 R16) 0,0,0,0,4, -->0,0,2,1, --0,0,2,1, --0,0,2,1, --0,1, --
 R17)
 0,0,0,0,0,0, -->0,0,0,0,0,0,0, --0,0,0,0,0,0,1, --0,0,0,0,0,0,2, --0,0,0,0,0,0,3, --0,0,
 0,0,0,0,4, --0,0,0,0,0,0,5, --0,0,0,0,0,0,6, --
 R18)
 0,0,0,0,0,1, -->0,0,0,0,0,1, --0,0,0,0,0,2, --0,0,0,0,0,3, --0,0,0,0,0,4, --0,0,0,0,0,5,
 --
 R19) 0,0,0,0,0,2, -->0,0,2,1, --0,0,0,0,1, --0,0,0,0,2, --0,0,0,0,3, --0,0,0,0,4, --
 R20) 0,0,0,0,0,3, -->0,0,2,1, --0,0,2,1, --0,0,0,1, --0,0,0,2, --0,0,0,3, --

R21) 0,0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,1,--0,0,2,--
R22) 0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,1,--
R23)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,
0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--
R24)
0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,
0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--
R25)
0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--
0,0,0,0,0,0,5,--
R26)
0,0,0,0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,
--
R27) 0,0,0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--
R28) 0,0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,1,--0,0,2,--
R29) 0,0,0,0,0,0,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,1,--
R30)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,2,--0,0,
0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,
,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--
R31)
0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,
0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--
R32)
0,0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,
0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--
R33)
0,0,0,0,0,0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,
0,0,0,0,4,--0,0,0,0,0,0,5,--
R34)
0,0,0,0,0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,
--0,0,0,0,4,--
R35)
0,0,0,0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,1,--0,0,0,2,--0,0,
0,3,--
R36)
0,0,0,0,0,0,0,0,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,1,--0,0,2,
--
R37)
0,0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,1,
--
R38)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,
2,--0,0,0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,
,0,0,6,--0,0,0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,0,0,9,--
R39)
0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,3,--0,
0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,
,0,0,0,0,0,8,--

R55)
0,0,0,0,0,0,0,0,0,8,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,1,--0,0,2,--

R56)
0,0,0,0,0,0,0,0,0,9,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,1,--

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, : 0,0,1, : 0,0,2, :
LEN=4) 0,0,0,0, : 0,0,0,1, : 0,0,0,2, : 0,0,0,3, : 0,0,2,1, :
LEN=5) 0,0,0,0,0, : 0,0,0,0,1, : 0,0,0,0,2, : 0,0,0,0,3, : 0,0,0,0,4, :
LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, : 0,0,0,0,0,2, : 0,0,0,0,0,3, : 0,0,0,0,0,4, :
0,0,0,0,0,5, :
LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, : 0,0,0,0,0,0,2, : 0,0,0,0,0,0,3, :
0,0,0,0,0,0,4, : 0,0,0,0,0,0,5, : 0,0,0,0,0,0,6, :
LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,2, : 0,0,0,0,0,0,0,3, :
0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,7, :
LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,2, :
0,0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,0,6, :
0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,8, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,0,2, :
0,0,0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,0,5, :
0,0,0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,0,8, :
0,0,0,0,0,0,0,0,0,9, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,0,0,2, :
0,0,0,0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,0,0,5, :
0,0,0,0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,0,0,8, :
0,0,0,0,0,0,0,0,0,0,9, : 0,0,0,0,0,0,0,0,0,0,10, :
Number new nodes in level n is given by : 1,2,3,5,5,6,7,8,9,10,11,

-----Class

1513-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][012][021][100][101][102][110]]$

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Rules of T[L]:

R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,1,--0,1,--
R3) 0,1,-->0,1,--
R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R9)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,
1,--
R10)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

```

--0,1,--0,1,--
R11)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
0,1,--0,1,--0,1,--0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,0,:
LEN=4) 0,0,0,0,:
LEN=5) 0,0,0,0,0,:
LEN=6) 0,0,0,0,0,0,:
LEN=7) 0,0,0,0,0,0,0,:
LEN=8) 0,0,0,0,0,0,0,0,:
LEN=9) 0,0,0,0,0,0,0,0,0,:
LEN=10) 0,0,0,0,0,0,0,0,0,0,:
LEN=11) 0,0,0,0,0,0,0,0,0,0,0,:
Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

```

-----Class

1514-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][012][021][100][101][102][120]]$

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,1,--0,1,--
R3) 0,1,-->0,1,--
R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R9)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,
1,--
R10)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,
--0,1,--0,1,--
R11)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
0,1,--0,1,--0,1,--0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,0,:
LEN=4) 0,0,0,0,:
LEN=5) 0,0,0,0,0,:
LEN=6) 0,0,0,0,0,0,:
LEN=7) 0,0,0,0,0,0,0,:
LEN=8) 0,0,0,0,0,0,0,0,:

```

LEN=9) 0,0,0,0,0,0,0,0,0,0,0,0,0,0,
LEN=10) 0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,
LEN=11) 0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,
Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,1,1,1,

-----Class

1515-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[010][012][021][100][101][102][201]]

--
Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,1,--
- R3) 0,1,-->0,1,--
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
- R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
- R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R9) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R10) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R11) 0,0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0,0,
LEN=2) 0,0,0,0,1,0,
LEN=3) 0,0,0,0,0,0,
LEN=4) 0,0,0,0,0,0,0,
LEN=5) 0,0,0,0,0,0,0,0,
LEN=6) 0,0,0,0,0,0,0,0,0,
LEN=7) 0,0,0,0,0,0,0,0,0,0,
LEN=8) 0,0,0,0,0,0,0,0,0,0,0,
LEN=9) 0,0,0,0,0,0,0,0,0,0,0,0,
LEN=10) 0,0,0,0,0,0,0,0,0,0,0,0,0,
LEN=11) 0,0,0,0,0,0,0,0,0,0,0,0,0,0,
Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,1,1,1,

-----Class

1516-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[010][012][021][100][101][102][210]]

--
Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,1,--

R3) 0,1,-->0,1,--
 R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
 R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
 R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
 R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 R9)
 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 1,--
 R10)
 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 --0,1,--0,1,--
 R11)
 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0, :
 LEN=2) 0,0, : 0,1, :
 LEN=3) 0,0,0, :
 LEN=4) 0,0,0,0, :
 LEN=5) 0,0,0,0,0, :
 LEN=6) 0,0,0,0,0,0, :
 LEN=7) 0,0,0,0,0,0,0, :
 LEN=8) 0,0,0,0,0,0,0,0, :
 LEN=9) 0,0,0,0,0,0,0,0,0, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :

Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

-----Class

1517-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[010][012][021][100][101][110][120]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--
 R2) 0,0,-->0,0,0,--0,1,--0,1,--
 R3) 0,1,-->0,1,--
 R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
 R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
 R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
 R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 R9)
 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 1,--
 R10)
 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 --0,1,--0,1,--
 R11)

LEN=11) 0,0,0,0,0,0,0,0,0,0,0,0,0,
 Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,1,

-----Class

1519-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][012][021][100][101][110][210]]$

--
 Rules of $T[L]$:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,1,--
- R3) 0,1,-->0,1,--
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
- R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
- R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R9) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R10) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R11) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in $T[L]$

- LEN=1) 0, :
- LEN=2) 0,0, : 0,1, :
- LEN=3) 0,0,0, :
- LEN=4) 0,0,0,0, :
- LEN=5) 0,0,0,0,0, :
- LEN=6) 0,0,0,0,0,0, :
- LEN=7) 0,0,0,0,0,0,0, :
- LEN=8) 0,0,0,0,0,0,0,0, :
- LEN=9) 0,0,0,0,0,0,0,0,0, :
- LEN=10) 0,0,0,0,0,0,0,0,0,0, :
- LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :
- Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,1,

-----Class

1520-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][012][021][100][101][120][201]]$

--
 Rules of $T[L]$:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,1,--
- R3) 0,1,-->0,1,--
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--

R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R9) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R10) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R11) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, :
LEN=4) 0,0,0,0, :
LEN=5) 0,0,0,0,0, :
LEN=6) 0,0,0,0,0,0, :
LEN=7) 0,0,0,0,0,0,0, :
LEN=8) 0,0,0,0,0,0,0,0, :
LEN=9) 0,0,0,0,0,0,0,0,0, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :
Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

-----Class

1521-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[010][012][021][100][101][120][210]]

Rules of T[L]:

R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,1,--0,1,--
R3) 0,1,-->0,1,--
R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R9) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R10) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R11) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, : 0,1, :
- LEN=3) 0,0,0, :
- LEN=4) 0,0,0,0, :
- LEN=5) 0,0,0,0,0, :
- LEN=6) 0,0,0,0,0,0, :
- LEN=7) 0,0,0,0,0,0,0, :
- LEN=8) 0,0,0,0,0,0,0,0, :
- LEN=9) 0,0,0,0,0,0,0,0,0, :
- LEN=10) 0,0,0,0,0,0,0,0,0,0, :
- LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :

Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

-----Class

1522-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[010][012][021][100][101][201][210]]

--

Rules of T[L]:

- R1) 0, -->0,0, --0,1, --
- R2) 0,0, -->0,0,0, --0,1, --0,1, --
- R3) 0,1, -->0,1, --
- R4) 0,0,0, -->0,0,0,0, --0,1, --0,1, --0,1, --
- R5) 0,0,0,0, -->0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --
- R6) 0,0,0,0,0, -->0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --
- R7) 0,0,0,0,0,0, -->0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --
- R8) 0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --
- R9) 0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --
- R10) 0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --
- R11) 0,0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, : 0,1, :
- LEN=3) 0,0,0, :
- LEN=4) 0,0,0,0, :
- LEN=5) 0,0,0,0,0, :
- LEN=6) 0,0,0,0,0,0, :
- LEN=7) 0,0,0,0,0,0,0, :
- LEN=8) 0,0,0,0,0,0,0,0, :
- LEN=9) 0,0,0,0,0,0,0,0,0, :
- LEN=10) 0,0,0,0,0,0,0,0,0,0, :
- LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :

Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R8) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R9) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R10) 0,0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R11) 0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, :
LEN=4) 0,0,0,0, :
LEN=5) 0,0,0,0,0, :
LEN=6) 0,0,0,0,0,0, :
LEN=7) 0,0,0,0,0,0,0, :
LEN=8) 0,0,0,0,0,0,0,0, :
LEN=9) 0,0,0,0,0,0,0,0,0, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0,0, :

Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,1,

-----Class

1525-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][012][021][100][102][110][210]]$

Rules of T[L]:

R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,1,--0,1,--
R3) 0,1,-->0,1,--
R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R9) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R10) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R11) 0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0,: 0,1,:
 LEN=3) 0,0,0,:
 LEN=4) 0,0,0,0,:
 LEN=5) 0,0,0,0,0,:
 LEN=6) 0,0,0,0,0,0,:
 LEN=7) 0,0,0,0,0,0,0,:
 LEN=8) 0,0,0,0,0,0,0,0,:
 LEN=9) 0,0,0,0,0,0,0,0,0,:
 LEN=10) 0,0,0,0,0,0,0,0,0,0,:
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,:
 Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

-----Class

1526-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][012][021][100][102][120][201]]$

--
Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,1,--
- R3) 0,1,-->0,1,--
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
- R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
- R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R9) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R10) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R11) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0,:
 LEN=2) 0,0,: 0,1,:
 LEN=3) 0,0,0,:
 LEN=4) 0,0,0,0,:
 LEN=5) 0,0,0,0,0,:
 LEN=6) 0,0,0,0,0,0,:
 LEN=7) 0,0,0,0,0,0,0,:
 LEN=8) 0,0,0,0,0,0,0,0,:
 LEN=9) 0,0,0,0,0,0,0,0,0,:
 LEN=10) 0,0,0,0,0,0,0,0,0,0,:
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,:
 Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

-----Class

R9)
 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 1,--
 R10)
 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,
 --0,1,--0,1,--
 R11)
 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 0,1,--0,1,--0,1,--0,1,--
 List of different nodes in T[L]
 LEN=1) 0, :
 LEN=2) 0,0, : 0,1, :
 LEN=3) 0,0,0, :
 LEN=4) 0,0,0,0, :
 LEN=5) 0,0,0,0,0, :
 LEN=6) 0,0,0,0,0,0, :
 LEN=7) 0,0,0,0,0,0,0, :
 LEN=8) 0,0,0,0,0,0,0,0, :
 LEN=9) 0,0,0,0,0,0,0,0,0, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :
 Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

-----Class

1529-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][012][021][100][110][120][201]]$

--
 Rules of T[L]:
 R1) 0,-->0,0,--0,1,--
 R2) 0,0,-->0,0,0,--0,1,--0,1,--
 R3) 0,1,-->0,1,--
 R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
 R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
 R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
 R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
 R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 R9)
 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 1,--
 R10)
 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,
 --0,1,--0,1,--
 R11)
 0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 0,1,--0,1,--0,1,--0,1,--
 List of different nodes in T[L]
 LEN=1) 0, :
 LEN=2) 0,0, : 0,1, :
 LEN=3) 0,0,0, :

LEN=4) 0,0,0,0,:
 LEN=5) 0,0,0,0,0,:
 LEN=6) 0,0,0,0,0,0,:
 LEN=7) 0,0,0,0,0,0,0,:
 LEN=8) 0,0,0,0,0,0,0,0,:
 LEN=9) 0,0,0,0,0,0,0,0,0,:
 LEN=10) 0,0,0,0,0,0,0,0,0,0,:
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,:
 Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

-----Class

1530-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][012][021][100][110][120][210]]$

--
 Rules of T[L]:
 R1) 0,-->0,0,--0,1,--
 R2) 0,0,-->0,0,0,--0,1,--0,1,--
 R3) 0,1,-->0,1,--
 R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
 R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
 R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
 R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
 R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 R9)
 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,
 1,--
 R10)
 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 --0,1,--0,1,--
 R11)
 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0,:
 LEN=2) 0,0,: 0,1,:
 LEN=3) 0,0,0,:
 LEN=4) 0,0,0,0,:
 LEN=5) 0,0,0,0,0,:
 LEN=6) 0,0,0,0,0,0,:
 LEN=7) 0,0,0,0,0,0,0,:
 LEN=8) 0,0,0,0,0,0,0,0,:
 LEN=9) 0,0,0,0,0,0,0,0,0,:
 LEN=10) 0,0,0,0,0,0,0,0,0,0,:
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,:
 Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

-----Class

1531-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][012][021][100][110][201][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,1,--0,1,--

R3) 0,1,-->0,1,--

R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--

R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--

R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--

R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

R9)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

R10)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

R11)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,0,0,:

LEN=4) 0,0,0,0,:

LEN=5) 0,0,0,0,0,:

LEN=6) 0,0,0,0,0,0,:

LEN=7) 0,0,0,0,0,0,0,:

LEN=8) 0,0,0,0,0,0,0,0,:

LEN=9) 0,0,0,0,0,0,0,0,0,:

LEN=10) 0,0,0,0,0,0,0,0,0,0,:

LEN=11) 0,0,0,0,0,0,0,0,0,0,0,:

Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,1,

-----Class

1532-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][012][021][100][120][201][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,1,--0,1,--

R3) 0,1,-->0,1,--

R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--

R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--

R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--

R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

R9)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

1,--
R10)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,
--0,1,--0,1,--
R11)
0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
0,1,--0,1,--0,1,--0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, :
LEN=4) 0,0,0,0, :
LEN=5) 0,0,0,0,0, :
LEN=6) 0,0,0,0,0,0, :
LEN=7) 0,0,0,0,0,0,0, :
LEN=8) 0,0,0,0,0,0,0,0, :
LEN=9) 0,0,0,0,0,0,0,0,0, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :
Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

-----Class
1533-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][012][021][101][102][110][120]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,1,--0,1,--
R3) 0,1,-->0,1,--
R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R9)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
1,--
R10)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
--0,1,--0,1,--
R11)
0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
0,1,--0,1,--0,1,--0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, :
LEN=4) 0,0,0,0, :
LEN=5) 0,0,0,0,0, :

LEN=6) 0,0,0,0,0,0,:
 LEN=7) 0,0,0,0,0,0,0,:
 LEN=8) 0,0,0,0,0,0,0,0,:
 LEN=9) 0,0,0,0,0,0,0,0,0,:
 LEN=10) 0,0,0,0,0,0,0,0,0,0,:
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,:
 Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

-----Class

1534-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][012][021][101][102][110][201]]$

--
 Rules of $T[L]$:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,1,--
- R3) 0,1,-->0,1,--
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
- R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
- R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R9) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R10) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R11) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in $T[L]$

LEN=1) 0,:
 LEN=2) 0,0,: 0,1,:
 LEN=3) 0,0,0,:
 LEN=4) 0,0,0,0,:
 LEN=5) 0,0,0,0,0,:
 LEN=6) 0,0,0,0,0,0,:
 LEN=7) 0,0,0,0,0,0,0,:
 LEN=8) 0,0,0,0,0,0,0,0,:
 LEN=9) 0,0,0,0,0,0,0,0,0,:
 LEN=10) 0,0,0,0,0,0,0,0,0,0,:
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,:
 Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

-----Class

1535-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][012][021][101][102][110][210]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,1,--
- R3) 0,1,-->0,1,--
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
- R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
- R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R9) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R10) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R11) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

- LEN=1) 0,:
- LEN=2) 0,0,:
- LEN=3) 0,0,0,:
- LEN=4) 0,0,0,0,:
- LEN=5) 0,0,0,0,0,:
- LEN=6) 0,0,0,0,0,0,:
- LEN=7) 0,0,0,0,0,0,0,:
- LEN=8) 0,0,0,0,0,0,0,0,:
- LEN=9) 0,0,0,0,0,0,0,0,0,:
- LEN=10) 0,0,0,0,0,0,0,0,0,0,:
- LEN=11) 0,0,0,0,0,0,0,0,0,0,0,:

Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,1,

-----Class

1536-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[010][012][021][101][102][120][201]]

--
Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,1,--
- R3) 0,1,-->0,1,--
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
- R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
- R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R9) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R10) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

LEN=8) 0,0,0,0,0,0,0,0,0,:
LEN=9) 0,0,0,0,0,0,0,0,0,0,:
LEN=10) 0,0,0,0,0,0,0,0,0,0,0,:
LEN=11) 0,0,0,0,0,0,0,0,0,0,0,0,:
Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

-----Class

1538-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][012][021][101][102][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,1,--0,1,--
R3) 0,1,-->0,1,--
R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R9) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R10) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R11) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
List of different nodes in T[L]

LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,0,:
LEN=4) 0,0,0,0,:
LEN=5) 0,0,0,0,0,:
LEN=6) 0,0,0,0,0,0,:
LEN=7) 0,0,0,0,0,0,0,:
LEN=8) 0,0,0,0,0,0,0,0,:
LEN=9) 0,0,0,0,0,0,0,0,0,:
LEN=10) 0,0,0,0,0,0,0,0,0,0,:
LEN=11) 0,0,0,0,0,0,0,0,0,0,0,:
Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

-----Class

1539-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][012][021][101][110][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,1,--0,1,--
 R3) 0,1,-->0,1,--
 R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
 R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
 R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
 R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
 R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 R9)
 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,
 1,--
 R10)
 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,
 --0,1,--0,1,--
 R11)
 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0, :
 LEN=2) 0,0, : 0,1, :
 LEN=3) 0,0,0, :
 LEN=4) 0,0,0,0, :
 LEN=5) 0,0,0,0,0, :
 LEN=6) 0,0,0,0,0,0, :
 LEN=7) 0,0,0,0,0,0,0, :
 LEN=8) 0,0,0,0,0,0,0,0, :
 LEN=9) 0,0,0,0,0,0,0,0,0, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :

Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,1,

-----Class

1540-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][012][021][101][110][120][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--
 R2) 0,0,-->0,0,0,--0,1,--0,1,--
 R3) 0,1,-->0,1,--
 R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
 R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
 R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
 R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
 R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 R9)
 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,
 1,--
 R10)
 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,
 --0,1,--0,1,--

LEN=10) 0,0,0,0,0,0,0,0,0,0,0,0,
LEN=11) 0,0,0,0,0,0,0,0,0,0,0,0,0,
Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,1,

-----Class

1542-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][012][021][101][120][201][210]]$

--

Rules of T[L]:

- R1) 0, -->0,0,--0,1,--
- R2) 0,0, -->0,0,0,--0,1,--0,1,--
- R3) 0,1, -->0,1,--
- R4) 0,0,0, -->0,0,0,0,--0,1,--0,1,--0,1,--
- R5) 0,0,0,0, -->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
- R6) 0,0,0,0,0, -->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R7) 0,0,0,0,0,0, -->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R8) 0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R9) 0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R10) 0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R11) 0,0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, : 0,1, :
- LEN=3) 0,0,0, :
- LEN=4) 0,0,0,0, :
- LEN=5) 0,0,0,0,0, :
- LEN=6) 0,0,0,0,0,0, :
- LEN=7) 0,0,0,0,0,0,0, :
- LEN=8) 0,0,0,0,0,0,0,0, :
- LEN=9) 0,0,0,0,0,0,0,0,0, :
- LEN=10) 0,0,0,0,0,0,0,0,0,0, :
- LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :
- Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,1,

-----Class

1543-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][012][021][102][110][120][201]]$

--

Rules of T[L]:

- R1) 0, -->0,0,--0,1,--
- R2) 0,0, -->0,0,0,--0,1,--0,1,--
- R3) 0,1, -->0,1,--

0,1,--0,1,--0,1,--0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, :
LEN=4) 0,0,0,0, :
LEN=5) 0,0,0,0,0, :
LEN=6) 0,0,0,0,0,0, :
LEN=7) 0,0,0,0,0,0,0, :
LEN=8) 0,0,0,0,0,0,0,0, :
LEN=9) 0,0,0,0,0,0,0,0,0, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :
Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

-----Class

1545-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[010][012][021][102][110][201][210]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,1,--0,1,--
R3) 0,1,-->0,1,--
R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R9) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R10) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R11) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, :
LEN=4) 0,0,0,0, :
LEN=5) 0,0,0,0,0, :
LEN=6) 0,0,0,0,0,0, :
LEN=7) 0,0,0,0,0,0,0, :
LEN=8) 0,0,0,0,0,0,0,0, :
LEN=9) 0,0,0,0,0,0,0,0,0, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :

Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

-----Class

1546-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][012][021][102][120][201][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,1,--0,1,--

R3) 0,1,-->0,1,--

R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--

R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--

R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--

R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

R9)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

R10)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

R11)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,0,0,:

LEN=4) 0,0,0,0,:

LEN=5) 0,0,0,0,0,:

LEN=6) 0,0,0,0,0,0,:

LEN=7) 0,0,0,0,0,0,0,:

LEN=8) 0,0,0,0,0,0,0,0,:

LEN=9) 0,0,0,0,0,0,0,0,0,:

LEN=10) 0,0,0,0,0,0,0,0,0,0,:

LEN=11) 0,0,0,0,0,0,0,0,0,0,0,:

Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

-----Class

1547-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][012][021][110][120][201][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,1,--0,1,--

R3) 0,1,-->0,1,--

R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--

R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--

R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R9) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R10) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R11) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, :
LEN=4) 0,0,0,0, :
LEN=5) 0,0,0,0,0, :
LEN=6) 0,0,0,0,0,0, :
LEN=7) 0,0,0,0,0,0,0, :
LEN=8) 0,0,0,0,0,0,0,0, :
LEN=9) 0,0,0,0,0,0,0,0,0, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :
Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

-----Class

1548-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][012][100][101][102][110][120]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
R3) 0,1,-->0,1,--
R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
R5) 0,0,2,-->0,0,2,1,--0,1,--
R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
R7) 0,0,0,3,-->0,0,2,1,--0,0,0,3,2,--0,1,--
R8) 0,0,2,1,-->
R9) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
R10) 0,0,0,0,4,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,1,--
R11) 0,0,0,3,2,-->0,0,2,1,--
R12) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--
R13) 0,0,0,0,0,5,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,1,--
R14) 0,0,0,0,4,3,-->0,0,2,1,--0,0,0,3,2,--
R15) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,

```

--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--
R16)
0,0,0,0,0,0,6,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,0,6,
5,--0,1,--
R17) 0,0,0,0,0,5,4,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--
R18)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,
0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--
R19)
0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,0,
6,5,--0,0,0,0,0,0,7,6,--0,1,--
R20) 0,0,0,0,0,0,6,5,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--
R21)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,
0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,9
,--
R22)
0,0,0,0,0,0,0,0,8,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,
0,6,5,--0,0,0,0,0,0,7,6,--0,0,0,0,0,0,0,8,7,--0,1,--
R23)
0,0,0,0,0,0,0,7,6,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,
0,6,5,--
R24)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,
0,9,--0,0,0,0,0,0,0,0,0,0,10,--
R25)
0,0,0,0,0,0,0,0,0,9,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,
0,0,6,5,--0,0,0,0,0,0,7,6,--0,0,0,0,0,0,0,8,7,--0,0,0,0,0,0,0,9,8,--0,1,--
R26)
0,0,0,0,0,0,0,0,8,7,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,
0,0,6,5,--0,0,0,0,0,0,7,6,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,0,: 0,0,2,:
LEN=4) 0,0,0,0,: 0,0,0,3,: 0,0,2,1,:
LEN=5) 0,0,0,0,0,: 0,0,0,0,4,: 0,0,0,3,2,:
LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,5,: 0,0,0,0,4,3,:
LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,6,: 0,0,0,0,0,5,4,:
LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,7,: 0,0,0,0,0,0,6,5,:
LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,8,: 0,0,0,0,0,0,0,7,6,:
LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,9,: 0,0,0,0,0,0,0,0,8,7,:
LEN=11) 0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,10,: 0,0,0,0,0,0,0,0,0,9,8,:
Number new nodes in level n is given by : 1,2,2,3,3,3,3,3,3,3,3,

```

-----Class

1549-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][012][100][101][102][110][201]]$

0,0,0,0,0,0,0,0,8,7,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,
0,0,6,5,--0,0,0,0,0,0,7,6,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,0,0,: 0,0,2,:

LEN=4) 0,0,0,0,: 0,0,0,3,: 0,0,2,1,:

LEN=5) 0,0,0,0,0,: 0,0,0,0,4,: 0,0,0,3,2,:

LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,5,: 0,0,0,0,4,3,:

LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,6,: 0,0,0,0,0,5,4,:

LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,7,: 0,0,0,0,0,0,6,5,:

LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,8,: 0,0,0,0,0,0,0,7,6,:

LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,9,: 0,0,0,0,0,0,0,0,8,7,:

LEN=11) 0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,10,: 0,0,0,0,0,0,0,0,0,9,8,:

Number new nodes in level n is given by : 1,2,2,3,3,3,3,3,3,3,3,

-----Class

1550-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][012][100][101][102][110][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,1,--0,0,2,--

R3) 0,1,-->0,1,--

R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--

R5) 0,0,2,-->0,0,2,1,--0,1,--

R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--

R7) 0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,1,--

R8) 0,0,2,1,-->

R9) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--

R10) 0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,1,--

R11)

0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,
0,0,0,0,0,6,--

R12) 0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,1,--

R13)

0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,
--0,0,0,0,0,6,--0,0,0,0,0,0,7,--

R14) 0,0,0,0,0,0,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,1,--

R15)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,
0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--

R16)

0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,1,--

--

R17)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,
0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--0,0,0,0,0,0,0,9

,--

R16) 0,0,0,0,0,0,6,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,0,6,5,--0,0,0,0,0,0,6,--

R17) 0,0,0,0,0,5,4,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--

R18) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--

R19) 0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,0,6,5,--0,0,0,0,0,0,0,7,6,--0,0,0,0,0,0,0,7,--

R20) 0,0,0,0,0,0,6,5,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--

R21) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--

R22) 0,0,0,0,0,0,0,0,8,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,0,6,5,--0,0,0,0,0,0,0,7,6,--0,0,0,0,0,0,0,0,8,7,--0,0,0,0,0,0,0,0,8,--

R23) 0,0,0,0,0,0,0,7,6,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,0,6,5,--

R24) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--0,0,0,0,0,0,0,0,0,10,--

R25) 0,0,0,0,0,0,0,0,9,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,0,6,5,--0,0,0,0,0,0,0,7,6,--0,0,0,0,0,0,0,0,8,7,--0,0,0,0,0,0,0,0,9,8,--0,0,0,0,0,0,0,0,9,--

R26) 0,0,0,0,0,0,0,0,8,7,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,0,6,5,--0,0,0,0,0,0,0,7,6,--

List of different nodes in T[L]

LEN=1) 0, :
 LEN=2) 0,0, : 0,1, :
 LEN=3) 0,0,0, : 0,0,2, :
 LEN=4) 0,0,0,0, : 0,0,0,3, : 0,0,2,1, :
 LEN=5) 0,0,0,0,0, : 0,0,0,0,4, : 0,0,0,3,2, :
 LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,5, : 0,0,0,0,4,3, :
 LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,6, : 0,0,0,0,0,5,4, :
 LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,6,5, :
 LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,8, : 0,0,0,0,0,0,0,7,6, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,9, : 0,0,0,0,0,0,0,0,8,7, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,10, : 0,0,0,0,0,0,0,0,0,9,8, :
 Number new nodes in level n is given by : 1,2,2,3,3,3,3,3,3,3,3,

-----Class

1552-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][012][100][101][102][120][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,1,--0,0,2,--

R3) 0,1,-->0,1,--

R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--

R5) 0,0,2,-->0,0,2,1,--0,0,2,--

R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--

R7) 0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,3,--

R8) 0,0,2,1,-->

R9) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--

R10) 0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,4,--

R11)

0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--

R12) 0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,5,--

R13)

0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--

R14)

0,0,0,0,0,0,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,6,--

R15)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--

R16)

0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,7,--

R17)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--

R18)

0,0,0,0,0,0,0,0,8,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,8,--

R19)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--0,0,0,0,0,0,0,0,0,10,--

R20)

0,0,0,0,0,0,0,0,0,9,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,9,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,0,0,: 0,0,2,:

LEN=4) 0,0,0,0,: 0,0,0,3,: 0,0,2,1,:

LEN=5) 0,0,0,0,0,: 0,0,0,0,4,:

LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,5,:

LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,6,:

LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,7,:

LEN=9) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,8, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,9, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,0,10, :
 Number new nodes in level n is given by : 1,2,2,3,2,2,2,2,2,2,2,2,

-----Class

1553-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][012][100][101][102][201][210]]$

--

Rules of T[L]:

- R1) 0, -->0,0, --0,1, --
- R2) 0,0, -->0,0,0, --0,1, --0,0,2, --
- R3) 0,1, -->0,1, --
- R4) 0,0,0, -->0,0,0,0, --0,1, --0,0,2, --0,0,0,3, --
- R5) 0,0,2, -->0,0,2,1, --0,0,2, --
- R6) 0,0,0,0, -->0,0,0,0,0, --0,1, --0,0,2, --0,0,0,3, --0,0,0,0,4, --
- R7) 0,0,0,3, -->0,0,2,1, --0,0,2,1, --0,0,0,3, --
- R8) 0,0,2,1, -->
- R9) 0,0,0,0,0, -->0,0,0,0,0,0, --0,1, --0,0,2, --0,0,0,3, --0,0,0,0,4, --0,0,0,0,0,5, --
- R10) 0,0,0,0,4, -->0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,0,0,4, --
- R11)
0,0,0,0,0,0, -->0,0,0,0,0,0,0,0, --0,1, --0,0,2, --0,0,0,3, --0,0,0,0,4, --0,0,0,0,0,5, --0,
0,0,0,0,0,6, --
- R12) 0,0,0,0,0,5, -->0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,0,0,0,5, --
- R13)
0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0, --0,1, --0,0,2, --0,0,0,3, --0,0,0,0,4, --0,0,0,0,0,5,
--0,0,0,0,0,6, --0,0,0,0,0,0,7, --
- R14)
0,0,0,0,0,0,6, -->0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,0,0,0,0,6, --
- R15)
0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0, --0,1, --0,0,2, --0,0,0,3, --0,0,0,0,4, --0,0,0,0,
0,5, --0,0,0,0,0,6, --0,0,0,0,0,0,7, --0,0,0,0,0,0,0,8, --
- R16)
0,0,0,0,0,0,7, -->0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,
0,0,0,0,7, --
- R17)
0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,0, --0,1, --0,0,2, --0,0,0,3, --0,0,0,0,4, --0,0,
0,0,0,5, --0,0,0,0,0,6, --0,0,0,0,0,0,7, --0,0,0,0,0,0,0,8, --0,0,0,0,0,0,0,9
, --
- R18)
0,0,0,0,0,0,0,8, -->0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,2,1, --0,
0,2,1, --0,0,0,0,0,0,0,8, --
- R19)
0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,0,0, --0,1, --0,0,2, --0,0,0,3, --0,0,0,0,4, --
0,0,0,0,5, --0,0,0,0,0,6, --0,0,0,0,0,0,7, --0,0,0,0,0,0,0,8, --0,0,0,0,0,0,0,
,0,9, --0,0,0,0,0,0,0,0,0,10, --
- R20)
0,0,0,0,0,0,0,0,9, -->0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,2,1, --
0,0,2,1, --0,0,2,1, --0,0,0,0,0,0,0,9, --

List of different nodes in T[L]

- LEN=1) 0,:
 - LEN=2) 0,0,: 0,1,:
 - LEN=3) 0,0,0,: 0,0,2,:
 - LEN=4) 0,0,0,0,: 0,0,0,3,: 0,0,2,1,:
 - LEN=5) 0,0,0,0,0,: 0,0,0,0,4,:
 - LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,5,:
 - LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,6,:
 - LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,7,:
 - LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,8,:
 - LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,9,:
 - LEN=11) 0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,10,:
- Number new nodes in level n is given by : 1,2,2,3,2,2,2,2,2,2,2,

-----Class

1554-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][012][100][101][110][120][201]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
- R3) 0,1,-->0,1,--
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
- R5) 0,0,2,-->0,0,2,1,--0,1,--
- R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
- R7) 0,0,0,3,-->0,0,2,1,--0,0,0,3,2,--0,1,--
- R8) 0,0,2,1,-->
- R9) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
- R10) 0,0,0,0,4,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,1,--
- R11) 0,0,0,3,2,-->0,0,2,1,--
- R12) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--
- R13) 0,0,0,0,0,5,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,1,--
- R14) 0,0,0,0,4,3,-->0,0,2,1,--0,0,0,3,2,--
- R15) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--
- R16) 0,0,0,0,0,0,6,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,6,5,--0,1,--
- R17) 0,0,0,0,0,5,4,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--
- R18) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--
- R19) 0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,6,5,--0,0,0,0,0,0,7,6,--0,1,--
- R20) 0,0,0,0,0,0,6,5,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--

R21)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,
0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--0,0,0,0,0,0,9
,--

R22)
0,0,0,0,0,0,0,8,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,
0,6,5,--0,0,0,0,0,0,7,6,--0,0,0,0,0,0,8,7,--0,1,--

R23)
0,0,0,0,0,0,0,7,6,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,
0,6,5,--

R24)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--0,0,0,0,0,0,0,
,0,9,--0,0,0,0,0,0,0,0,0,10,--

R25)
0,0,0,0,0,0,0,0,9,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,
0,0,6,5,--0,0,0,0,0,0,7,6,--0,0,0,0,0,0,8,7,--0,0,0,0,0,0,9,8,--0,1,--

R26)
0,0,0,0,0,0,0,8,7,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,
0,0,6,5,--0,0,0,0,0,0,7,6,--

List of different nodes in T[L]

- LEN=1) 0,:
 - LEN=2) 0,0,: 0,1,:
 - LEN=3) 0,0,0,: 0,0,2,:
 - LEN=4) 0,0,0,0,: 0,0,0,3,: 0,0,2,1,:
 - LEN=5) 0,0,0,0,0,: 0,0,0,0,4,: 0,0,0,3,2,:
 - LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,5,: 0,0,0,0,4,3,:
 - LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,6,: 0,0,0,0,0,5,4,:
 - LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,7,: 0,0,0,0,0,0,6,5,:
 - LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,8,: 0,0,0,0,0,0,0,7,6,:
 - LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,9,: 0,0,0,0,0,0,0,8,7,:
 - LEN=11) 0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,10,: 0,0,0,0,0,0,0,9,8,:
- Number new nodes in level n is given by : 1,2,2,3,3,3,3,3,3,3,3,

-----Class

1555-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][012][100][101][110][120][210]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
- R3) 0,1,-->0,1,--
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
- R5) 0,0,2,-->0,0,2,1,--0,1,--
- R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
- R7) 0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,1,--
- R8) 0,0,2,1,-->
- R9) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
- R10) 0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,1,--

R11)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,
0,0,0,0,0,6,--
R12) 0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,1,--
R13)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,
--0,0,0,0,0,6,--0,0,0,0,0,0,7,--
R14) 0,0,0,0,0,0,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,1,--
R15)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,
0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--
R16)
0,0,0,0,0,0,7,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,1,
--
R17)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,
0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--0,0,0,0,0,0,9,
,--
R18)
0,0,0,0,0,0,0,8,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,
0,2,1,--0,1,--
R19)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--0,0,0,0,0,0,9,
,0,9,--0,0,0,0,0,0,10,--
R20)
0,0,0,0,0,0,0,9,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--
0,0,2,1,--0,0,2,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, : 0,0,2, :
LEN=4) 0,0,0,0, : 0,0,0,3, : 0,0,2,1, :
LEN=5) 0,0,0,0,0, : 0,0,0,0,4, :
LEN=6) 0,0,0,0,0,0, : 0,0,0,0,5, :
LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,6, :
LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,7, :
LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,8, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,9, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,10, :
Number new nodes in level n is given by : 1,2,2,3,2,2,2,2,2,2,2,

-----Class

1556-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][012][100][101][110][201][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,1,--0,0,2,--

R3) 0,1,-->0,1,--
R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
R5) 0,0,2,-->0,0,2,1,--0,1,--
R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
R7) 0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,1,--
R8) 0,0,2,1,-->
R9) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
R10) 0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,1,--
R11)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,
0,0,0,0,0,6,--
R12) 0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,1,--
R13)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,
--0,0,0,0,0,6,--0,0,0,0,0,0,7,--
R14) 0,0,0,0,0,0,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,1,--
R15)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,
0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--
R16)
0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,1,
--
R17)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,
0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,9
,--
R18)
0,0,0,0,0,0,0,8,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,
0,2,1,--0,1,--
R19)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,
0,9,--0,0,0,0,0,0,0,0,0,10,--
R20)
0,0,0,0,0,0,0,0,9,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--
0,0,2,1,--0,0,2,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, : 0,0,2, :
LEN=4) 0,0,0,0, : 0,0,0,3, : 0,0,2,1, :
LEN=5) 0,0,0,0,0, : 0,0,0,0,4, :
LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,5, :
LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,6, :
LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,7, :
LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,8, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,9, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,10, :
Number new nodes in level n is given by : 1,2,2,3,2,2,2,2,2,2,2,

-----Class

1557-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][012][100][101][120][201][210]]$

--

Rules of $T[L]$:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,1,--0,0,2,--

R3) 0,1,-->0,1,--

R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--

R5) 0,0,2,-->0,0,2,1,--0,0,2,--

R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--

R7) 0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,3,--

R8) 0,0,2,1,-->

R9) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--

R10) 0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,4,--

R11)

0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--

R12) 0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,5,--

R13)

0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--

R14)

0,0,0,0,0,0,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,6,--

R15)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--

R16)

0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,7,--

R17)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--

R18)

0,0,0,0,0,0,0,0,8,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,8,--

R19)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--0,0,0,0,0,0,0,0,0,10,--

R20)

0,0,0,0,0,0,0,0,0,9,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,9,--

List of different nodes in $T[L]$

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,0,0,: 0,0,2,:

LEN=4) 0,0,0,0,: 0,0,0,3,: 0,0,2,1,:

LEN=5) 0,0,0,0,0,: 0,0,0,0,4,:
 LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,5,:
 LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,6,:
 LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,7,:
 LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,8,:
 LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,9,:
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,10,:
 Number new nodes in level n is given by : 1,2,2,3,2,2,2,2,2,2,2,

-----Class

1558-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][012][100][102][110][120][201]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
- R3) 0,1,-->0,1,--
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
- R5) 0,0,2,-->0,0,2,1,--0,1,--
- R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
- R7) 0,0,0,3,-->0,0,2,1,--0,0,0,3,2,--0,1,--
- R8) 0,0,2,1,-->
- R9) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
- R10) 0,0,0,0,4,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,1,--
- R11) 0,0,0,3,2,-->0,0,2,1,--
- R12)
- 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--
- R13) 0,0,0,0,0,5,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,1,--
- R14) 0,0,0,0,4,3,-->0,0,2,1,--0,0,0,3,2,--
- R15)
- 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--
- R16)
- 0,0,0,0,0,0,6,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,0,6,5,--0,1,--
- R17) 0,0,0,0,0,5,4,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--
- R18)
- 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--
- R19)
- 0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,0,6,5,--0,0,0,0,0,0,7,6,--0,1,--
- R20) 0,0,0,0,0,0,6,5,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--
- R21)
- 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--
- R22)

0,0,0,0,0,0,0,0,8,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,0,6,5,--0,0,0,0,0,0,0,7,6,--0,0,0,0,0,0,0,8,7,--0,1,--

R23)

0,0,0,0,0,0,0,7,6,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,0,6,5,--

R24)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,5,--0,0,0,0,6,--0,0,0,0,7,--0,0,0,0,8,--0,0,0,0,9,--0,0,0,0,10,--

R25)

0,0,0,0,0,0,0,9,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,5,4,--0,0,0,0,0,6,5,--0,0,0,0,7,6,--0,0,0,0,8,7,--0,0,0,0,9,8,--0,1,--

R26)

0,0,0,0,0,0,0,8,7,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,5,4,--0,0,0,0,0,6,5,--0,0,0,0,7,6,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, : 0,1, :

LEN=3) 0,0,0, : 0,0,2, :

LEN=4) 0,0,0,0, : 0,0,0,3, : 0,0,2,1, :

LEN=5) 0,0,0,0,0, : 0,0,0,0,4, : 0,0,0,3,2, :

LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,5, : 0,0,0,0,4,3, :

LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,6, : 0,0,0,0,0,5,4, :

LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,6,5, :

LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,8, : 0,0,0,0,0,0,7,6, :

LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,9, : 0,0,0,0,0,0,8,7, :

LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,10, : 0,0,0,0,0,0,9,8, :

Number new nodes in level n is given by : 1,2,2,3,3,3,3,3,3,3,3,

-----Class

1559-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[010][012][100][102][110][120][210]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,1,--0,0,2,--

R3) 0,1,-->0,1,--

R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--

R5) 0,0,2,-->0,0,2,1,--0,1,--

R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,4,--

R7) 0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,1,--

R8) 0,0,2,1,-->

R9) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,4,--0,0,0,5,--

R10) 0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,1,--

R11)

0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,4,--0,0,0,5,--0,0,0,6,--

R12) 0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,1,--

R13)

0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,
--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--

R14) 0,0,0,0,0,0,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,1,--
R15)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,
0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--

R16)
0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,1,
--

R17)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,
0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,9,
,--

R18)
0,0,0,0,0,0,0,8,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,
0,2,1,--0,1,--

R19)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,
,0,9,--0,0,0,0,0,0,0,0,0,10,--

R20)
0,0,0,0,0,0,0,0,0,9,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--
0,0,2,1,--0,0,2,1,--0,1,--

List of different nodes in T[L]

- LEN=1) 0,:
 - LEN=2) 0,0,: 0,1,:
 - LEN=3) 0,0,0,: 0,0,2,:
 - LEN=4) 0,0,0,0,: 0,0,0,3,: 0,0,2,1,:
 - LEN=5) 0,0,0,0,0,: 0,0,0,0,4,:
 - LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,5,:
 - LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,6,:
 - LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,7,:
 - LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,8,:
 - LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,9,:
 - LEN=11) 0,0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,10,:
- Number new nodes in level n is given by : 1,2,2,3,2,2,2,2,2,2,2,

-----Class

1560-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][012][100][102][110][201][210]]$

--
Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
- R3) 0,1,-->0,1,--
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
- R5) 0,0,2,-->0,0,2,1,--0,1,--
- R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
- R7) 0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,1,--

R8) 0,0,2,1,-->
R9) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
R10) 0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,1,--
R11)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,
0,0,0,0,0,6,--
R12) 0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,1,--
R13)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,
--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--
R14) 0,0,0,0,0,0,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,1,--
R15)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,
0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--
R16)
0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,1,
--
R17)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,
0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9
,--
R18)
0,0,0,0,0,0,0,0,8,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,
0,2,1,--0,1,--
R19)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,
,0,9,--0,0,0,0,0,0,0,0,0,0,10,--
R20)
0,0,0,0,0,0,0,0,0,9,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--
0,0,2,1,--0,0,2,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, : 0,0,2, :
LEN=4) 0,0,0,0, : 0,0,0,3, : 0,0,2,1, :
LEN=5) 0,0,0,0,0, : 0,0,0,0,4, :
LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,5, :
LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,6, :
LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,7, :
LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,8, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,9, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,10, :
Number new nodes in level n is given by : 1,2,2,3,2,2,2,2,2,2,2,

-----Class

1561-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[010][012][100][102][120][201][210]]

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
- R3) 0,1,-->0,1,--
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
- R5) 0,0,2,-->0,0,2,1,--0,0,2,--
- R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
- R7) 0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,3,--
- R8) 0,0,2,1,-->
- R9) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
- R10) 0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,4,--
- R11)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,
0,0,0,0,0,6,--
- R12) 0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,5,--
- R13)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,
--0,0,0,0,0,6,--0,0,0,0,0,0,7,--
- R14)
0,0,0,0,0,0,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,6,--
- R15)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,
0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--
- R16)
0,0,0,0,0,0,7,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,
0,0,0,0,7,--
- R17)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,
0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--0,0,0,0,0,0,9,
,--
- R18)
0,0,0,0,0,0,0,8,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,
0,2,1,--0,0,0,0,0,8,--
- R19)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--0,0,0,0,0,0,9,
,0,9,--0,0,0,0,0,0,0,10,--
- R20)
0,0,0,0,0,0,0,9,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--
0,0,2,1,--0,0,2,1,--0,0,0,0,0,9,--

List of different nodes in T[L]

- LEN=1) 0,:
- LEN=2) 0,0,: 0,1,:
- LEN=3) 0,0,0,: 0,0,2,:
- LEN=4) 0,0,0,0,: 0,0,0,3,: 0,0,2,1,:
- LEN=5) 0,0,0,0,0,: 0,0,0,0,4,:
- LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,5,:
- LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,6,:
- LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,7,:
- LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,8,:

LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,9,:
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,10,:
 Number new nodes in level n is given by : 1,2,2,3,2,2,2,2,2,2,2,

-----Class

1562-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[010][012][100][110][120][201][210]]

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
- R3) 0,1,-->0,1,--
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
- R5) 0,0,2,-->0,0,2,1,--0,1,--
- R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
- R7) 0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,1,--
- R8) 0,0,2,1,-->
- R9) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
- R10) 0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,1,--
- R11) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--
- R12) 0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,1,--
- R13) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,7,--
- R14) 0,0,0,0,0,0,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,1,--
- R15) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,7,--0,0,0,0,0,8,--
- R16) 0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,1,--
- R17) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,7,--0,0,0,0,0,8,--0,0,0,0,0,9,--
- R18) 0,0,0,0,0,0,0,8,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,2,1,--0,1,--
- R19) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,7,--0,0,0,0,0,8,--0,0,0,0,0,9,--0,0,0,0,0,10,--
- R20) 0,0,0,0,0,0,0,0,9,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:
 LEN=3) 0,0,0,: 0,0,2,:
 LEN=4) 0,0,0,0,: 0,0,0,3,: 0,0,2,1,:
 LEN=5) 0,0,0,0,0,: 0,0,0,0,4,:
 LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,5,:
 LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,6,:
 LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,7,:
 LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,8,:
 LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,9,:
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,10,:
 Number new nodes in level n is given by : 1,2,2,3,2,2,2,2,2,2,2,

-----Class

1563-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][012][101][102][110][120][201]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
- R3) 0,1,-->0,1,--
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
- R5) 0,0,2,-->0,1,--0,1,--
- R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
- R7) 0,0,0,3,-->0,1,--0,0,2,--0,1,--
- R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
- R9) 0,0,0,0,4,-->0,1,--0,0,2,--0,0,0,3,--0,1,--
- R10) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--
- R11) 0,0,0,0,0,0,5,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,1,--
- R12) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--
- R13) 0,0,0,0,0,0,0,6,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,1,--
- R14) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--
- R15) 0,0,0,0,0,0,0,0,7,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,1,--
- R16) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,9,--
- R17) 0,0,0,0,0,0,0,0,0,8,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,1,--
- R18) 0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--

0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,7,--0,0,0,0,0,8,--0,0,0,0,0,9,--0,0,0,0,0,10,--

R19)

0,0,0,0,0,0,0,9,-->0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,7,--0,0,0,0,0,8,--0,1,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,0,0,: 0,0,2,:

LEN=4) 0,0,0,0,: 0,0,0,3,:

LEN=5) 0,0,0,0,0,: 0,0,0,0,4,:

LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,5,:

LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,6,:

LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,7,:

LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,8,:

LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,9,:

LEN=11) 0,0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,10,:

Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1564-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][012][101][102][110][120][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,1,--0,0,2,--

R3) 0,1,-->0,1,--

R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--

R5) 0,0,2,-->0,1,--0,1,--

R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--

R7) 0,0,0,3,-->0,1,--0,1,--0,1,--

R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--

R9) 0,0,0,0,4,-->0,1,--0,1,--0,1,--0,1,--

R10)

0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--

R11) 0,0,0,0,0,5,-->0,1,--0,1,--0,1,--0,1,--0,1,--

R12)

0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,7,--

R13) 0,0,0,0,0,6,-->0,1,--0,1,--0,1,--0,1,--0,1,--

R14)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,7,--0,0,0,0,0,8,--

R15) 0,0,0,0,0,0,7,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

R16)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,7,--0,0,0,0,0,8,--0,0,0,0,0,9,--

,--

R17) 0,0,0,0,0,0,0,0,8,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R18)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--0,0,0,0,0,0,0,
,0,9,--0,0,0,0,0,0,0,0,10,--
R19) 0,0,0,0,0,0,0,0,9,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, : 0,0,2, :
LEN=4) 0,0,0,0, : 0,0,0,3, :
LEN=5) 0,0,0,0,0, : 0,0,0,0,4, :
LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,5, :
LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,6, :
LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,7, :
LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,8, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,9, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,10, :
Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1565-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][012][101][102][110][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
R3) 0,1,-->0,1,--
R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
R5) 0,0,2,-->0,1,--0,1,--
R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
R7) 0,0,0,3,-->0,1,--0,1,--0,1,--
R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
R9) 0,0,0,0,4,-->0,1,--0,1,--0,1,--0,1,--
R10)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,
0,0,0,0,0,6,--
R11) 0,0,0,0,0,5,-->0,1,--0,1,--0,1,--0,1,--0,1,--
R12)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,
--0,0,0,0,0,6,--0,0,0,0,0,0,7,--
R13) 0,0,0,0,0,0,6,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R14)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,
0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--
R15) 0,0,0,0,0,0,0,7,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R16)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,
0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9

--
 R17) 0,0,0,0,0,0,0,0,8,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 R18)
 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
 0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,7,--0,0,0,0,0,8,--0,0,0,0,0,0,0
 ,0,9,--0,0,0,0,0,0,0,0,10,--
 R19) 0,0,0,0,0,0,0,0,9,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 List of different nodes in T[L]
 LEN=1) 0, :
 LEN=2) 0,0, : 0,1, :
 LEN=3) 0,0,0, : 0,0,2, :
 LEN=4) 0,0,0,0, : 0,0,0,3, :
 LEN=5) 0,0,0,0,0, : 0,0,0,0,4, :
 LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,5, :
 LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,6, :
 LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,7, :
 LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,8, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,9, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,10, :
 Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,

-----Class

1566-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][012][101][102][120][201][210]]$

--
 Rules of T[L]:
 R1) 0,-->0,0,--0,1,--
 R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
 R3) 0,1,-->0,1,--
 R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
 R5) 0,0,2,-->0,1,--0,0,2,--
 R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
 R7) 0,0,0,3,-->0,1,--0,1,--0,0,0,3,--
 R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
 R9) 0,0,0,0,4,-->0,1,--0,1,--0,1,--0,0,0,0,4,--
 R10)
 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,
 0,0,0,0,0,6,--
 R11) 0,0,0,0,0,5,-->0,1,--0,1,--0,1,--0,1,--0,0,0,0,0,5,--
 R12)
 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,
 --0,0,0,0,0,6,--0,0,0,0,0,7,--
 R13) 0,0,0,0,0,0,6,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,0,0,0,0,6,--
 R14)
 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,
 0,5,--0,0,0,0,0,6,--0,0,0,0,0,7,--0,0,0,0,0,8,--
 R15) 0,0,0,0,0,0,0,7,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,0,0,0,0,0,7,--
 R16)
 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,

0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9
,--

R17)

0,0,0,0,0,0,0,0,8,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,0,0,0,0,0,0,0,8,--
R18)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,
,0,9,--0,0,0,0,0,0,0,0,0,0,10,--

R19)

0,0,0,0,0,0,0,0,0,9,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,0,0,0,0,0,
0,0,0,9,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,0,0,: 0,0,2,:

LEN=4) 0,0,0,0,: 0,0,0,3,:

LEN=5) 0,0,0,0,0,: 0,0,0,0,4,:

LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,5,:

LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,6,:

LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,7,:

LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,8,:

LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,9,:

LEN=11) 0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,10,:

Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1567-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][012][101][110][120][201][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,1,--0,0,2,--

R3) 0,1,-->0,1,--

R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--

R5) 0,0,2,-->0,1,--0,1,--

R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--

R7) 0,0,0,3,-->0,1,--0,1,--0,1,--

R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--

R9) 0,0,0,0,4,-->0,1,--0,1,--0,1,--0,1,--

R10)

0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,
0,0,0,0,0,6,--

R11) 0,0,0,0,0,5,-->0,1,--0,1,--0,1,--0,1,--0,1,--

R12)

0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,
--0,0,0,0,0,6,--0,0,0,0,0,0,7,--

R13) 0,0,0,0,0,0,6,-->0,1,--0,1,--0,1,--0,1,--0,1,--

R14)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,

0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--
R15) 0,0,0,0,0,0,0,7,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R16)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,
0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9
,--
R17) 0,0,0,0,0,0,0,0,8,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R18)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,
0,9,--0,0,0,0,0,0,0,0,0,10,--
R19) 0,0,0,0,0,0,0,0,0,9,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, : 0,0,2, :
LEN=4) 0,0,0,0, : 0,0,0,3, :
LEN=5) 0,0,0,0,0, : 0,0,0,0,4, :
LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,5, :
LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,6, :
LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,7, :
LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,8, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,9, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,10, :
Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1568-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][012][102][110][120][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
R3) 0,1,-->0,1,--
R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
R5) 0,0,2,-->0,1,--0,1,--
R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
R7) 0,0,0,3,-->0,1,--0,1,--0,1,--
R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
R9) 0,0,0,0,4,-->0,1,--0,1,--0,1,--0,1,--
R10)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,
0,0,0,0,0,6,--
R11) 0,0,0,0,0,5,-->0,1,--0,1,--0,1,--0,1,--0,1,--
R12)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,
--0,0,0,0,0,6,--0,0,0,0,0,0,7,--
R13) 0,0,0,0,0,0,6,-->0,1,--0,1,--0,1,--0,1,--0,1,--
R14)

LEN=5) 0,0,0,0,0, :
LEN=6) 0,0,0,0,0,0, :
LEN=7) 0,0,0,0,0,0,0, :
LEN=8) 0,0,0,0,0,0,0,0, :
LEN=9) 0,0,0,0,0,0,0,0,0, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :
Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,

-----Class

1571-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][021][100][101][102][110][210]]$

--
Rules of $T[L]$:

- R1) 0,-->0,0,--0,--
- R2) 0,0,-->0,0,0,--0,0,--0,--
- R3) 0,0,0,-->0,0,0,0,--0,0,0,--0,0,--0,--
- R4) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,--
- R5) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,--
- R6)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,--
-
- R7)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,--
- R8)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,--
- R9)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,--0,0,--0,--
- R10)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,--0,0,--0,--

List of different nodes in $T[L]$

LEN=1) 0, :
LEN=2) 0,0, :
LEN=3) 0,0,0, :
LEN=4) 0,0,0,0, :
LEN=5) 0,0,0,0,0, :
LEN=6) 0,0,0,0,0,0, :
LEN=7) 0,0,0,0,0,0,0, :
LEN=8) 0,0,0,0,0,0,0,0, :
LEN=9) 0,0,0,0,0,0,0,0,0, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :
Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,

-----Class

1572-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][021][100][101][102][120][201]]$

--

Rules of $T[L]$:

R1) $0, \rightarrow 0, 0, \rightarrow 0, \rightarrow$

R2) $0, 0, \rightarrow 0, 0, 0, \rightarrow 0, 0, \rightarrow 0, \rightarrow$

R3) $0, 0, 0, \rightarrow 0, 0, 0, 0, \rightarrow 0, 0, 0, \rightarrow 0, 0, \rightarrow 0, \rightarrow$

R4) $0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, \rightarrow 0, 0, 0, \rightarrow 0, \rightarrow$

R5) $0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, \rightarrow 0, 0, \rightarrow 0, \rightarrow$

R6)

$0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, \rightarrow 0, 0, \rightarrow 0, \rightarrow$

--

R7)

$0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, \rightarrow 0, 0, \rightarrow$

$0, \rightarrow 0, 0, 0, \rightarrow 0, \rightarrow$

R8)

$0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, \rightarrow 0, 0, \rightarrow$

$0, \rightarrow 0, 0, 0, 0, \rightarrow 0, \rightarrow 0, \rightarrow 0, \rightarrow 0, \rightarrow$

R9)

$0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, \rightarrow 0, 0, \rightarrow$

$0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, \rightarrow 0, 0, 0, \rightarrow 0, \rightarrow$

R10)

$0, 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, \rightarrow 0, 0, \rightarrow$

$0, 0, \rightarrow 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, \rightarrow 0, 0, \rightarrow$

$-0, 0, \rightarrow 0, \rightarrow$

List of different nodes in $T[L]$

LEN=1) $0, :$

LEN=2) $0, 0, :$

LEN=3) $0, 0, 0, :$

LEN=4) $0, 0, 0, 0, :$

LEN=5) $0, 0, 0, 0, 0, :$

LEN=6) $0, 0, 0, 0, 0, 0, :$

LEN=7) $0, 0, 0, 0, 0, 0, 0, :$

LEN=8) $0, 0, 0, 0, 0, 0, 0, 0, :$

LEN=9) $0, 0, 0, 0, 0, 0, 0, 0, 0, :$

LEN=10) $0, 0, 0, 0, 0, 0, 0, 0, 0, 0, :$

LEN=11) $0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, :$

Number new nodes in level n is given by : $1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,$

-----Class

1573-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][021][100][101][102][120][210]]$

--

Rules of $T[L]$:

R1) $0, \rightarrow 0, 0, \rightarrow 0, \rightarrow$

R2) $0, 0, \rightarrow 0, 0, 0, \rightarrow 0, 0, \rightarrow 0, \rightarrow$

R3) $0, 0, 0, \rightarrow 0, 0, 0, 0, \rightarrow 0, 0, 0, \rightarrow 0, 0, \rightarrow 0, \rightarrow$

R4) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,--
R5) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,--
R6)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,--
--
R7)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,
0,--0,0,0,--0,0,--0,--
R8)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,--0,0,0,0,0,
0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,--
R9)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,--0,
0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,--
R10)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,
0,0,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,--

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, :
LEN=3) 0,0,0, :
LEN=4) 0,0,0,0, :
LEN=5) 0,0,0,0,0, :
LEN=6) 0,0,0,0,0,0, :
LEN=7) 0,0,0,0,0,0,0, :
LEN=8) 0,0,0,0,0,0,0,0, :
LEN=9) 0,0,0,0,0,0,0,0,0, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :

Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,1,

-----Class

1574-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][021][100][101][102][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,0,--0,0,--0,--
R3) 0,0,0,-->0,0,0,0,--0,0,0,--0,0,--0,--
R4) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,--
R5) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,--
R6)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,--
--
R7)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,
0,--0,0,0,--0,0,--0,--
R8)

LEN=9) 0,0,0,0,0,0,0,0,0,0,:
LEN=10) 0,0,0,0,0,0,0,0,0,0,0,:
LEN=11) 0,0,0,0,0,0,0,0,0,0,0,0,:
Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,1,

-----Class
1577-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[010][021][100][101][110][201][210]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,0,--0,0,--0,--
R3) 0,0,0,-->0,0,0,0,--0,0,0,--0,0,--0,--
R4) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,--
R5) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,--
R6)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,--
--
R7)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,
0,--0,0,0,0,--0,0,0,--0,0,--
R8)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,--0,0,0,0,0,0,
0,--0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--
R9)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,--0,
0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--
R10)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,
0,0,--0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--
-0,0,--0,0,--

List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
LEN=3) 0,0,0,:
LEN=4) 0,0,0,0,:
LEN=5) 0,0,0,0,0,:
LEN=6) 0,0,0,0,0,0,:
LEN=7) 0,0,0,0,0,0,0,:
LEN=8) 0,0,0,0,0,0,0,0,:
LEN=9) 0,0,0,0,0,0,0,0,0,:
LEN=10) 0,0,0,0,0,0,0,0,0,0,:
LEN=11) 0,0,0,0,0,0,0,0,0,0,0,:
Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,1,

-----Class
1578-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[010][021][100][101][120][201][210]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,--

R2) 0,0,-->0,0,0,--0,0,--0,--

R3) 0,0,0,-->0,0,0,0,--0,0,0,--0,0,--0,--

R4) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,--

R5) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,--

R6)

0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,--

--

R7)

0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,0,--0,0,--0,--

R8)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,0,--0,--

R9)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,0,--0,--

R10)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,0,--0,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, :

LEN=3) 0,0,0, :

LEN=4) 0,0,0,0, :

LEN=5) 0,0,0,0,0, :

LEN=6) 0,0,0,0,0,0, :

LEN=7) 0,0,0,0,0,0,0, :

LEN=8) 0,0,0,0,0,0,0,0, :

LEN=9) 0,0,0,0,0,0,0,0,0, :

LEN=10) 0,0,0,0,0,0,0,0,0,0, :

LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :

Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,1,

-----Class

1579-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][021][100][102][110][120][201]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,--

R2) 0,0,-->0,0,0,--0,0,--0,--

R3) 0,0,0,-->0,0,0,0,--0,0,0,--0,0,--0,--

R4) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,--

R5) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,--

R6)

0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,0,--0,0,--0,--

```

--
R7)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,0,
0,--0,0,0,--0,0,--0,--
R8)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,--0,0,0,0,0,0,
0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,--
R9)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,--0,
0,0,0,0,0,0,0,--0,0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,--
R10)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,
0,0,--0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,0,0,--
-0,0,--0,--

```

List of different nodes in T[L]

```

LEN=1) 0, :
LEN=2) 0,0, :
LEN=3) 0,0,0, :
LEN=4) 0,0,0,0, :
LEN=5) 0,0,0,0,0, :
LEN=6) 0,0,0,0,0,0, :
LEN=7) 0,0,0,0,0,0,0, :
LEN=8) 0,0,0,0,0,0,0,0, :
LEN=9) 0,0,0,0,0,0,0,0,0, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :
Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,1,1,

```

-----Class

1580-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][021][100][102][110][120][210]]$

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,0,--0,0,--0,--
R3) 0,0,0,-->0,0,0,0,--0,0,0,--0,0,--0,--
R4) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,--
R5) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,--
R6)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,--
--
R7)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,
0,--0,0,0,0,--0,0,--0,--
R8)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,--0,0,0,0,0,0,
0,--0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,--0,--
R9)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,--0,

```


0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,--
R10)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,
0,0,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,0,--0,0,-
-0,0,--0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
LEN=3) 0,0,0,:
LEN=4) 0,0,0,0,:
LEN=5) 0,0,0,0,0,:
LEN=6) 0,0,0,0,0,0,:
LEN=7) 0,0,0,0,0,0,0,:
LEN=8) 0,0,0,0,0,0,0,0,:
LEN=9) 0,0,0,0,0,0,0,0,0,:
LEN=10) 0,0,0,0,0,0,0,0,0,0,:
LEN=11) 0,0,0,0,0,0,0,0,0,0,0,:
Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,1,

-----Class

1581-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][021][100][102][110][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,0,--0,0,--0,--
R3) 0,0,0,-->0,0,0,0,--0,0,0,--0,0,--0,--
R4) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,--
R5) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,--
R6)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,--
--
R7)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,
0,--0,0,0,0,--0,0,0,--
R8)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,--0,0,0,0,0,
0,--0,0,0,0,0,--0,0,0,0,0,--0,0,0,--0,0,--0,--
R9)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,--0,0,
0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,--
R10)
0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,
0,0,--0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,-
-0,0,--0,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,:
LEN=3) 0,0,0,0,0,0,

LEN=4) 0,0,0,0, :
 LEN=5) 0,0,0,0,0, :
 LEN=6) 0,0,0,0,0,0, :
 LEN=7) 0,0,0,0,0,0,0, :
 LEN=8) 0,0,0,0,0,0,0,0, :
 LEN=9) 0,0,0,0,0,0,0,0,0, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :
 Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,

-----Class

1582-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][021][100][102][120][201][210]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,--
- R2) 0,0,-->0,0,0,--0,0,--0,--
- R3) 0,0,0,-->0,0,0,0,--0,0,0,--0,0,--0,--
- R4) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,--
- R5) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,--
- R6) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,--
- R7) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,0,--0,0,--0,--
- R8) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,0,--0,0,--0,--
- R9) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,0,--0,0,--0,--
- R10) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,0,--0,0,--0,--

List of different nodes in T[L]

LEN=1) 0, :
 LEN=2) 0,0, :
 LEN=3) 0,0,0, :
 LEN=4) 0,0,0,0, :
 LEN=5) 0,0,0,0,0, :
 LEN=6) 0,0,0,0,0,0, :
 LEN=7) 0,0,0,0,0,0,0, :
 LEN=8) 0,0,0,0,0,0,0,0, :
 LEN=9) 0,0,0,0,0,0,0,0,0, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :
 Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,

-----Class

1583-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][021][100][110][120][201][210]]$

--

Rules of $T[L]$:

R1) $0, \rightarrow 0, 0, \rightarrow 0, \rightarrow$

R2) $0, 0, \rightarrow 0, 0, 0, \rightarrow 0, 0, \rightarrow 0, \rightarrow$

R3) $0, 0, 0, \rightarrow 0, 0, 0, 0, \rightarrow 0, 0, 0, \rightarrow 0, \rightarrow$

R4) $0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, \rightarrow 0, 0, \rightarrow 0, \rightarrow$

R5) $0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, \rightarrow 0, \rightarrow$

R6)

$0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, \rightarrow 0, \rightarrow$

--

R7)

$0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, \rightarrow 0, \rightarrow$
 $0, \rightarrow 0, 0, \rightarrow 0, \rightarrow$

R8)

$0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, \rightarrow 0, \rightarrow$
 $0, \rightarrow 0, 0, 0, 0, \rightarrow 0, 0, \rightarrow 0, \rightarrow$

R9)

$0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, \rightarrow 0, \rightarrow$
 $0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, \rightarrow 0, 0, 0, \rightarrow 0, \rightarrow$

R10)

$0, 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, \rightarrow 0, \rightarrow$
 $0, 0, \rightarrow 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, \rightarrow 0, 0, 0, \rightarrow 0, \rightarrow$
 $\rightarrow 0, 0, \rightarrow 0, \rightarrow$

List of different nodes in $T[L]$

LEN=1) $0, :$

LEN=2) $0, 0, :$

LEN=3) $0, 0, 0, :$

LEN=4) $0, 0, 0, 0, :$

LEN=5) $0, 0, 0, 0, 0, :$

LEN=6) $0, 0, 0, 0, 0, 0, :$

LEN=7) $0, 0, 0, 0, 0, 0, 0, :$

LEN=8) $0, 0, 0, 0, 0, 0, 0, 0, :$

LEN=9) $0, 0, 0, 0, 0, 0, 0, 0, 0, :$

LEN=10) $0, 0, 0, 0, 0, 0, 0, 0, 0, 0, :$

LEN=11) $0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, :$

Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,1,

-----Class

1584-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][021][101][102][110][120][201]]$

--

Rules of $T[L]$:

R1) $0, \rightarrow 0, 0, \rightarrow 0, \rightarrow$

R2) $0, 0, \rightarrow 0, 0, 0, \rightarrow 0, 0, \rightarrow 0, \rightarrow$

R3) 0,0,0,-->0,0,0,0,--0,0,0,--0,0,--0,--
R4) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,--
R5) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,--
R6)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,--
--
R7)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,
0,--0,0,0,--0,0,--0,--
R8)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,--0,0,0,0,0,0,
0,--0,0,0,0,0,--0,0,0,0,--0,0,0,0,--0,0,0,--0,--
R9)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,--0,
0,0,0,0,0,0,0,--0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,--0,0,--0,--
R10)
0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,
0,0,--0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,0,--
-0,0,--0,--

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, :
LEN=3) 0,0,0, :
LEN=4) 0,0,0,0, :
LEN=5) 0,0,0,0,0, :
LEN=6) 0,0,0,0,0,0, :
LEN=7) 0,0,0,0,0,0,0, :
LEN=8) 0,0,0,0,0,0,0,0, :
LEN=9) 0,0,0,0,0,0,0,0,0, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :
Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,1,1,

-----Class

1585-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][021][101][102][110][120][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,--
R2) 0,0,-->0,0,0,--0,0,--0,--
R3) 0,0,0,-->0,0,0,0,--0,0,0,--0,0,--0,--
R4) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,--
R5) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,--
R6)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,--
--
R7)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,
0,--0,0,0,0,--0,0,--0,--

R8)
 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,--0,0,0,0,0,
 0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,--0,--

R9)
 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,--0,
 0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,--0,--

R10)
 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,--
 0,0,--0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,0,--
 -0,0,--0,--

List of different nodes in T[L]

LEN=1) 0, :
 LEN=2) 0,0, :
 LEN=3) 0,0,0, :
 LEN=4) 0,0,0,0, :
 LEN=5) 0,0,0,0,0, :
 LEN=6) 0,0,0,0,0,0, :
 LEN=7) 0,0,0,0,0,0,0, :
 LEN=8) 0,0,0,0,0,0,0,0, :
 LEN=9) 0,0,0,0,0,0,0,0,0, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :
 Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,1,

-----Class
 1586-----
 Inversion Sequences (I_n=(n+1)!) avoiding L=[[010][021][101][102][110][201][210]]

--
 Rules of T[L]:
 R1) 0,-->0,0,--0,--
 R2) 0,0,-->0,0,0,--0,0,--0,--
 R3) 0,0,0,-->0,0,0,0,--0,0,0,--0,0,--0,--
 R4) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,--
 R5) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,--
 R6)
 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,--
 --
 R7)
 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,
 0,--0,0,0,0,--0,0,0,--0,--
 R8)
 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,
 0,--0,0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,--0,--
 R9)
 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,--0,
 0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,--
 R10)
 0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,
 0,0,0,--0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,0,--

-0,0,--0,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,:

LEN=3) 0,0,0,:

LEN=4) 0,0,0,0,:

LEN=5) 0,0,0,0,0,:

LEN=6) 0,0,0,0,0,0,:

LEN=7) 0,0,0,0,0,0,0,:

LEN=8) 0,0,0,0,0,0,0,0,:

LEN=9) 0,0,0,0,0,0,0,0,0,:

LEN=10) 0,0,0,0,0,0,0,0,0,0,:

LEN=11) 0,0,0,0,0,0,0,0,0,0,0,:

Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,

-----Class

1587-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[010][021][101][102][120][201][210]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,--

R2) 0,0,-->0,0,0,--0,0,--0,--

R3) 0,0,0,-->0,0,0,0,--0,0,0,--0,0,--0,--

R4) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,--

R5) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,--

R6)

0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,0,--0,0,0,--0,0,--0,--

--

R7)

0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,0,--0,0,0,--0,0,--0,--

R8)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,--0,0,--0,--

R9)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,--0,0,--0,--

R10)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,--0,0,--0,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,:

LEN=3) 0,0,0,:

LEN=4) 0,0,0,0,:

LEN=5) 0,0,0,0,0,:

LEN=6) 0,0,0,0,0,0,:

LEN=7) 0,0,0,0,0,0,0,:

LEN=8) 0,0,0,0,0,0,0,0,0, :
 LEN=9) 0,0,0,0,0,0,0,0,0,0, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0,0, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,0, :
 Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,1,

-----Class

1588-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][021][101][110][120][201][210]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,--
- R2) 0,0,-->0,0,0,--0,0,--0,--
- R3) 0,0,0,-->0,0,0,0,--0,0,0,--0,0,--0,--
- R4) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,--0,0,0,--0,--
- R5) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,--0,--
- R6) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,--0,--
-
- R7) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,--0,--
- R8) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,--0,--0,--
- R9) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,--0,--0,--
- R10) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,--0,--0,--

List of different nodes in T[L]

LEN=1) 0, :
 LEN=2) 0,0, :
 LEN=3) 0,0,0, :
 LEN=4) 0,0,0,0, :
 LEN=5) 0,0,0,0,0, :
 LEN=6) 0,0,0,0,0,0, :
 LEN=7) 0,0,0,0,0,0,0, :
 LEN=8) 0,0,0,0,0,0,0,0, :
 LEN=9) 0,0,0,0,0,0,0,0,0, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :
 Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,1,

-----Class

1589-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][021][102][110][120][201][210]]$

R7) 0,0,0,3,-->0,0,2,1,--0,0,0,3,2,--0,0,--0,--
R8) 0,0,2,1,-->
R9)
0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,
0,0,0,0,5,--
R10) 0,0,0,0,2,-->0,0,2,1,--0,0,0,0,--0,0,0,--0,0,0,2,--0,0,0,3,--
R11) 0,0,0,0,3,-->0,0,2,1,--0,0,0,3,2,--0,0,0,--0,0,--0,0,2,--
R12) 0,0,0,0,4,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,--0,--
R13) 0,0,0,3,2,-->0,0,2,1,--
R14)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,
0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--
R15)
0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,--0,0,0,0,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
R16) 0,0,0,0,0,3,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,--0,0,0,--0,0,0,2,--0,0,0,3,--
R17) 0,0,0,0,0,4,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,--0,0,--0,0,2,--
R18) 0,0,0,0,0,5,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,5,4,--0,0,--0,--
R19) 0,0,0,0,4,3,-->0,0,2,1,--0,0,0,3,2,--
R20)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,
3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--
R21)
0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,
0,0,0,0,4,--0,0,0,0,0,5,--
R22)
0,0,0,0,0,0,3,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,0,0,--0,0,0,0,--0,0,0,0,2,--0,0,0,0,3,
--0,0,0,0,4,--
R23)
0,0,0,0,0,0,4,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,--0,0,0,--0,0,0,2,--0,
0,0,3,--
R24)
0,0,0,0,0,0,5,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,--0,0,--
0,0,2,--
R25)
0,0,0,0,0,0,6,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,6,
5,--0,0,--0,--
R26) 0,0,0,0,0,5,4,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--
R27)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,2,--0,0,0,
0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,
,0,0,0,7,--0,0,0,0,0,0,0,8,--
R28)
0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,--0,0,0,0,0,0,2,--0,0,0,0,
0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--
R29)
0,0,0,0,0,0,0,3,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,0,2,--0,
0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--
R30)
0,0,0,0,0,0,0,4,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,--0,0,0,0,--0,0,0,
0,2,--0,0,0,0,3,--0,0,0,0,4,--

R31)

0,0,0,0,0,0,0,5,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,--0,0,0,--0,0,0,2,--0,0,0,3,--

R32)

0,0,0,0,0,0,0,6,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,0,6,5,--0,0,0,--0,0,--0,0,2,--

R33)

0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,0,6,5,--0,0,0,0,0,0,0,7,6,--0,0,--0,--

R34) 0,0,0,0,0,0,0,6,5,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--

R35)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,0,9,--

R36)

0,0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--

R37)

0,0,0,0,0,0,0,0,3,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--

R38)

0,0,0,0,0,0,0,0,4,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--

R39)

0,0,0,0,0,0,0,0,5,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,--0,0,0,0,--0,0,0,2,--0,0,0,3,--0,0,0,4,--

R40)

0,0,0,0,0,0,0,0,6,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,0,6,5,--0,0,0,0,--0,0,0,2,--0,0,0,3,--

R41)

0,0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,0,6,5,--0,0,0,0,0,0,0,7,6,--0,0,0,--0,0,--0,0,2,--

R42)

0,0,0,0,0,0,0,0,8,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,0,6,5,--0,0,0,0,0,0,0,7,6,--0,0,0,0,0,0,0,8,7,--0,0,--0,--

R43)

0,0,0,0,0,0,0,0,7,6,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,0,6,5,--

R44)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,0,9,--0,0,0,0,0,0,0,0,0,0,10,--

R45)

0,0,0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--

R46)

0,0,0,0,0,0,0,0,0,3,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,--0,0,

0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6
,--0,0,0,0,0,0,7,--

R47)

0,0,0,0,0,0,0,0,4,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,0,0,--0,0,0,0,
0,0,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6
,--

R48)

0,0,0,0,0,0,0,0,5,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,
0,0,--0,0,0,0,0,0,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--

R49)

0,0,0,0,0,0,0,0,6,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,
0,0,6,5,--0,0,0,0,0,0,--0,0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R50)

0,0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,
0,0,6,5,--0,0,0,0,0,0,7,6,--0,0,0,0,0,0,--0,0,0,0,2,--0,0,0,3,--

R51)

0,0,0,0,0,0,0,0,8,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,
0,0,6,5,--0,0,0,0,0,0,7,6,--0,0,0,0,0,0,8,7,--0,0,0,0,--0,0,--0,0,2,--

R52)

0,0,0,0,0,0,0,0,9,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,
0,0,6,5,--0,0,0,0,0,0,7,6,--0,0,0,0,0,0,8,7,--0,0,0,0,0,0,9,8,--0,0,--0
,--

R53)

0,0,0,0,0,0,0,0,8,7,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,
0,0,6,5,--0,0,0,0,0,0,7,6,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, :

LEN=3) 0,0,0, : 0,0,2, :

LEN=4) 0,0,0,0, : 0,0,0,2, : 0,0,0,3, : 0,0,2,1, :

LEN=5) 0,0,0,0,0, : 0,0,0,0,2, : 0,0,0,0,3, : 0,0,0,0,4, : 0,0,0,3,2, :

LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,2, : 0,0,0,0,0,3, : 0,0,0,0,0,4, : 0,0,0,0,0,5, :
0,0,0,0,4,3, :

LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,2, : 0,0,0,0,0,0,3, : 0,0,0,0,0,0,4, :
0,0,0,0,0,0,5, : 0,0,0,0,0,0,6, : 0,0,0,0,0,5,4, :

LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,2, : 0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,4, :
0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,6,5, :

LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,2, : 0,0,0,0,0,0,0,0,3, :
0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,0,7, :
0,0,0,0,0,0,0,0,8, : 0,0,0,0,0,0,0,7,6, :

LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,2, : 0,0,0,0,0,0,0,0,3, :
0,0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,0,6, :
0,0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,8, : 0,0,0,0,0,0,0,0,9, :
0,0,0,0,0,0,0,0,8,7, :

LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,2, : 0,0,0,0,0,0,0,0,0,3, :
0,0,0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,0,6, :
0,0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,8, : 0,0,0,0,0,0,0,0,9, :
0,0,0,0,0,0,0,0,0,10, : 0,0,0,0,0,0,0,0,9,8, :

Number new nodes in level n is given by : 1,1,2,4,5,6,7,8,9,10,11,

-----Class

1591-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][100][101][102][110][120][210]]$

--

Rules of $T[L]$:

R1) $0, -->0,0, --0, --$

R2) $0,0, -->0,0,0, --0,0, --0,0,2, --$

R3) $0,0,0, -->0,0,0,0, --0,0,0, --0,0,0,2, --0,0,0,3, --$

R4) $0,0,2, -->0,0,2,1, --0,0, --0, --$

R5) $0,0,0,0, -->0,0,0,0,0, --0,0,0,0, --0,0,0,0,2, --0,0,0,0,3, --0,0,0,0,4, --$

R6) $0,0,0,2, -->0,0,2,1, --0,0,0, --0,0, --0,0,2, --$

R7) $0,0,0,3, -->0,0,0,3,1, --0,0,2,1, --0,0, --0, --$

R8) $0,0,2,1, -->$

R9)

$0,0,0,0,0, -->0,0,0,0,0,0, --0,0,0,0,0, --0,0,0,0,0,2, --0,0,0,0,0,3, --0,0,0,0,0,4, --0,0,0,0,0,5, --$

R10) $0,0,0,0,2, -->0,0,2,1, --0,0,0,0, --0,0,0, --0,0,0,2, --0,0,0,3, --$

R11) $0,0,0,0,3, -->0,0,0,3,1, --0,0,2,1, --0,0,0, --0,0, --0,0,2, --$

R12) $0,0,0,0,4, -->0,0,0,0,4,1, --0,0,0,3,1, --0,0,2,1, --0,0, --0, --$

R13) $0,0,0,3,1, -->0,0,2,1, --$

R14)

$0,0,0,0,0,0, -->0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0, --0,0,0,0,0,0,2, --0,0,0,0,0,0,3, --0,0,0,0,0,0,4, --0,0,0,0,0,0,5, --0,0,0,0,0,0,6, --$

R15)

$0,0,0,0,0,2, -->0,0,2,1, --0,0,0,0,0,0, --0,0,0,0,0, --0,0,0,0,2, --0,0,0,0,3, --0,0,0,0,4, --$

R16) $0,0,0,0,0,3, -->0,0,0,3,1, --0,0,2,1, --0,0,0,0, --0,0,0, --0,0,0,2, --0,0,0,3, --$

R17) $0,0,0,0,0,4, -->0,0,0,0,4,1, --0,0,0,3,1, --0,0,2,1, --0,0,0,0, --0,0,0, --0,0,2, --$

R18) $0,0,0,0,0,5, -->0,0,0,0,0,5,1, --0,0,0,0,4,1, --0,0,0,3,1, --0,0,2,1, --0,0, --0, --$

R19) $0,0,0,0,4,1, -->0,0,0,3,1, --0,0,2,1, --$

R20)

$0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,2, --0,0,0,0,0,0,0,3, --0,0,0,0,0,0,0,4, --0,0,0,0,0,0,0,5, --0,0,0,0,0,0,0,6, --0,0,0,0,0,0,0,7, --$

R21)

$0,0,0,0,0,0,2, -->0,0,2,1, --0,0,0,0,0,0,0, --0,0,0,0,0, --0,0,0,0,0,2, --0,0,0,0,0,3, --0,0,0,0,0,4, --0,0,0,0,0,5, --$

R22)

$0,0,0,0,0,0,3, -->0,0,0,3,1, --0,0,2,1, --0,0,0,0,0,0, --0,0,0,0,0, --0,0,0,0,2, --0,0,0,0,3, --0,0,0,0,4, --$

R23)

$0,0,0,0,0,0,4, -->0,0,0,0,4,1, --0,0,0,3,1, --0,0,2,1, --0,0,0,0,0, --0,0,0,0, --0,0,0,2, --0,0,0,3, --$

R24)

$0,0,0,0,0,0,5, -->0,0,0,0,0,5,1, --0,0,0,0,4,1, --0,0,0,3,1, --0,0,2,1, --0,0,0,0, --0,0,0,2, --$

R25)

$0,0,0,0,0,0,6, -->0,0,0,0,0,6,1, --0,0,0,0,0,5,1, --0,0,0,0,4,1, --0,0,0,3,1, --0,0,0,2,1, --0,0,0, --0, --$

R26) $0,0,0,0,0,5,1, -->0,0,0,0,4,1, --0,0,0,3,1, --0,0,2,1, --$

R27)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--

R28)

0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--

R29)

0,0,0,0,0,0,0,3,-->0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--

R30)

0,0,0,0,0,0,0,4,-->0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,--0,0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R31)

0,0,0,0,0,0,0,5,-->0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,--0,0,0,0,2,--0,0,0,3,--

R32)

0,0,0,0,0,0,0,6,-->0,0,0,0,0,0,6,1,--0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,--0,0,2,--

R33)

0,0,0,0,0,0,0,7,-->0,0,0,0,0,0,7,1,--0,0,0,0,0,0,6,1,--0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,--

R34) 0,0,0,0,0,0,0,6,1,-->0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--

R35)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,9,--

R36)

0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,7,--

R37)

0,0,0,0,0,0,0,3,-->0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,0,0,--0,0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--0,0,0,0,5,--0,0,0,0,6,--

R38)

0,0,0,0,0,0,0,4,-->0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--0,0,0,0,5,--

R39)

0,0,0,0,0,0,0,5,-->0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R40)

0,0,0,0,0,0,0,6,-->0,0,0,0,0,0,6,1,--0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,--0,0,2,--0,0,3,--

R41)

0,0,0,0,0,0,0,7,-->0,0,0,0,0,0,7,1,--0,0,0,0,0,0,6,1,--0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,--0,0,2,--

R42)

0,0,0,0,0,0,0,8,-->0,0,0,0,0,0,0,8,1,--0,0,0,0,0,0,7,1,--0,0,0,0,0,0,6,1,--0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,--

R43)

0,0,0,0,0,0,0,7,1,-->0,0,0,0,0,0,6,1,--0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,

0,0,0,0,0,0,0,0,4,: 0,0,0,0,0,0,0,0,5,: 0,0,0,0,0,0,0,0,6,: 0,0,0,0,0,0,0,0,7,:
 0,0,0,0,0,0,0,0,8,: 0,0,0,0,0,0,0,0,7,1,:
 LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,2,: 0,0,0,0,0,0,0,0,0,3,:
 0,0,0,0,0,0,0,0,0,4,: 0,0,0,0,0,0,0,0,0,5,: 0,0,0,0,0,0,0,0,0,6,:
 0,0,0,0,0,0,0,0,0,7,: 0,0,0,0,0,0,0,0,0,8,: 0,0,0,0,0,0,0,0,0,9,:
 0,0,0,0,0,0,0,0,0,8,1,:
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,2,: 0,0,0,0,0,0,0,0,0,0,3,:
 0,0,0,0,0,0,0,0,0,0,0,4,: 0,0,0,0,0,0,0,0,0,0,0,5,: 0,0,0,0,0,0,0,0,0,0,6,:
 0,0,0,0,0,0,0,0,0,0,0,7,: 0,0,0,0,0,0,0,0,0,0,0,8,: 0,0,0,0,0,0,0,0,0,0,9,:
 0,0,0,0,0,0,0,0,0,0,0,10,: 0,0,0,0,0,0,0,0,0,0,0,9,1,:
 Number new nodes in level n is given by : 1,1,2,4,5,6,7,8,9,10,11,

-----Class

1592-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][100][101][102][110][201][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,--

R2) 0,0,-->0,0,0,--0,0,--0,0,2,--

R3) 0,0,0,-->0,0,0,0,--0,0,0,--0,0,0,2,--0,0,0,3,--

R4) 0,0,2,-->0,0,2,1,--0,0,--0,0,2,--

R5) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R6) 0,0,0,2,-->0,0,2,1,--0,0,0,--0,0,0,2,--0,0,0,3,--

R7) 0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,--0,0,0,3,--

R8) 0,0,2,1,-->

R9)

0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--

R10) 0,0,0,0,2,-->0,0,2,1,--0,0,0,0,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R11) 0,0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,--0,0,0,0,3,--0,0,0,0,4,--

R12) 0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,--0,0,0,0,4,--

R13)

0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--

R14)

0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--

R15)

0,0,0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,0,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--

R16)

0,0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--

R17) 0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,--0,0,0,0,0,0,5,--

R18)

0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--

R19)

0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--

R20)

0,0,0,0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,0,0,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--

R21)

0,0,0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--

R22)

0,0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--

R23)

0,0,0,0,0,0,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,--0,0,0,0,0,0,6,--

R24)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--

R25)

0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--

R26)

0,0,0,0,0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,--0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--

R27)

0,0,0,0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--

R28)

0,0,0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--

R29)

0,0,0,0,0,0,0,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--

R30)

0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,--0,0,0,0,0,0,7,--

R31)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,0,9,--

R32)

0,0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--

R33)

0,0,0,0,0,0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--

R34)

0,0,0,0,0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--

R35)

0,0,0,0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,--0,0,0,0,0,
0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--

R36)

0,0,0,0,0,0,0,0,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,--0,
0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--

R37)

0,0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,
0,0,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--

R38)

0,0,0,0,0,0,0,0,8,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,
0,2,1,--0,0,--0,0,0,0,0,0,8,--

R39)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,
0,0,0,2,--0,0,0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,0,0,5,--0,
,0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,
0,0,0,0,9,--0,0,0,0,0,0,0,0,0,10,--

R40)

0,0,0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,
0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,
,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--

R41)

0,0,0,0,0,0,0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,0,0,0,0,0,3,--
0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,
,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--

R42)

0,0,0,0,0,0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,0,0,0,0,0,0,
0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--0,0,0,0,0,
,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--

R43)

0,0,0,0,0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,--0,0,0,
0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,
,0,0,0,0,0,0,9,--

R44)

0,0,0,0,0,0,0,0,0,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,
--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,
,0,9,--

R45)

0,0,0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--
0,0,0,0,--0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--

R46)

0,0,0,0,0,0,0,0,0,8,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--
0,0,2,1,--0,0,0,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--

R47)

0,0,0,0,0,0,0,0,0,9,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--
0,0,2,1,--0,0,2,1,--0,0,--0,0,0,0,0,0,0,9,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, :

LEN=3) 0,0,0, : 0,0,2, :

LEN=4) 0,0,0,0, : 0,0,0,2, : 0,0,0,3, : 0,0,2,1, :

LEN=5) 0,0,0,0,0, : 0,0,0,0,2, : 0,0,0,0,3, : 0,0,0,0,4, :
 LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,2, : 0,0,0,0,0,3, : 0,0,0,0,0,4, : 0,0,0,0,0,5, :
 LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,2, : 0,0,0,0,0,0,3, : 0,0,0,0,0,0,4, :
 0,0,0,0,0,0,5, : 0,0,0,0,0,0,6, :
 LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,2, : 0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,4, :
 0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,7, :
 LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,2, : 0,0,0,0,0,0,0,0,3, :
 0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,0,7, :
 0,0,0,0,0,0,0,0,8, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,2, : 0,0,0,0,0,0,0,0,0,3, :
 0,0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,0,0,6, :
 0,0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,0,8, : 0,0,0,0,0,0,0,0,0,9, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,2, : 0,0,0,0,0,0,0,0,0,0,3, :
 0,0,0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,0,0,0,6, :
 0,0,0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,0,0,8, : 0,0,0,0,0,0,0,0,0,0,9, :
 0,0,0,0,0,0,0,0,0,0,10, :

Number new nodes in level n is given by : 1,1,2,4,4,5,6,7,8,9,10,

-----Class

1593-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][100][101][102][120][201][210]]$

--

Rules of $T[L]$:

R1) 0, -->0,0, --0, --

R2) 0,0, -->0,0,0, --0,0, --0,0,2, --

R3) 0,0,0, -->0,0,0,0, --0,0,0, --0,0,0,2, --0,0,0,3, --

R4) 0,0,2, -->0,0,2,1, --0,0,0,2, --0, --

R5) 0,0,0,0, -->0,0,0,0,0, --0,0,0,0, --0,0,0,0,2, --0,0,0,0,3, --0,0,0,0,4, --

R6) 0,0,0,2, -->0,0,2,1, --0,0,0,0,2, --0,0, --0,0,2, --

R7) 0,0,0,3, -->0,0,2,1, --0,0,2,1, --0,0,0,0,3, --0, --

R8) 0,0,2,1, -->

R9)

0,0,0,0,0, -->0,0,0,0,0,0, --0,0,0,0,0, --0,0,0,0,0,2, --0,0,0,0,0,3, --0,0,0,0,0,4, --0,
 0,0,0,0,5, --

R10) 0,0,0,0,2, -->0,0,2,1, --0,0,0,0,0,2, --0,0,0, --0,0,0,2, --0,0,0,3, --

R11) 0,0,0,0,3, -->0,0,2,1, --0,0,2,1, --0,0,0,0,0,3, --0,0, --0,0,2, --

R12) 0,0,0,0,4, -->0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,0,0,0,4, --0, --

R13)

0,0,0,0,0,0, -->0,0,0,0,0,0,0, --0,0,0,0,0,0, --0,0,0,0,0,0,2, --0,0,0,0,0,0,3, --0,0,0,
 0,0,0,4, --0,0,0,0,0,0,5, --0,0,0,0,0,0,6, --

R14)

0,0,0,0,0,2, -->0,0,2,1, --0,0,0,0,0,0,2, --0,0,0,0, --0,0,0,0,2, --0,0,0,0,3, --0,0,0,0,
 4, --

R15)

0,0,0,0,0,3, -->0,0,2,1, --0,0,2,1, --0,0,0,0,0,0,3, --0,0,0, --0,0,0,2, --0,0,0,3, --

R16) 0,0,0,0,0,4, -->0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,0,0,0,0,4, --0,0, --0,0,2, --

R17) 0,0,0,0,0,5, -->0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,0,0,0,0,5, --0, --

R18)

0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0, --0,0,0,0,0,0,0,2, --0,0,0,0,0,0,0,0,

3, --0,0,0,0,0,0,0,4, --0,0,0,0,0,0,0,5, --0,0,0,0,0,0,0,6, --0,0,0,0,0,0,0,7, --
R19)
0,0,0,0,0,0,2, -->0,0,2,1, --0,0,0,0,0,0,0,2, --0,0,0,0,0, --0,0,0,0,0,2, --0,0,0,0,0,3,
--0,0,0,0,0,4, --0,0,0,0,0,5, --
R20)
0,0,0,0,0,0,3, -->0,0,2,1, --0,0,2,1, --0,0,0,0,0,0,0,3, --0,0,0,0, --0,0,0,0,2, --0,0,0,
0,3, --0,0,0,0,4, --
R21)
0,0,0,0,0,0,4, -->0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,0,0,0,0,0,4, --0,0,0, --0,0,0,2, --
0,0,0,3, --
R22)
0,0,0,0,0,0,5, -->0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,0,0,0,0,0,5, --0,0, --0,
0,2, --
R23)
0,0,0,0,0,0,6, -->0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,0,0,0,0,0,6,
--0, --
R24)
0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,0,2, --0,0,0,
0,0,0,0,0,3, --0,0,0,0,0,0,0,0,4, --0,0,0,0,0,0,0,0,5, --0,0,0,0,0,0,0,0,6, --0,0,0,0,0,
,0,0,0,7, --0,0,0,0,0,0,0,0,8, --
R25)
0,0,0,0,0,0,0,2, -->0,0,2,1, --0,0,0,0,0,0,0,0,2, --0,0,0,0,0,0, --0,0,0,0,0,0,2, --0,0,
0,0,0,0,3, --0,0,0,0,0,0,4, --0,0,0,0,0,0,5, --0,0,0,0,0,0,6, --
R26)
0,0,0,0,0,0,0,3, -->0,0,2,1, --0,0,2,1, --0,0,0,0,0,0,0,0,3, --0,0,0,0,0, --0,0,0,0,0,2,
--0,0,0,0,0,3, --0,0,0,0,0,4, --0,0,0,0,0,5, --
R27)
0,0,0,0,0,0,0,4, -->0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,0,0,0,0,0,0,4, --0,0,0,0, --0,0,
0,0,2, --0,0,0,0,3, --0,0,0,0,4, --
R28)
0,0,0,0,0,0,0,5, -->0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,0,0,0,0,0,0,5, --0,0,
0, --0,0,0,2, --0,0,0,3, --
R29)
0,0,0,0,0,0,0,6, -->0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,0,0,0,0,0,
0,6, --0,0, --0,0,2, --
R30)
0,0,0,0,0,0,0,7, -->0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,
0,0,0,0,0,7, --0, --
R31)
0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,0,2,
--0,0,0,0,0,0,0,0,0,3, --0,0,0,0,0,0,0,0,4, --0,0,0,0,0,0,0,0,5, --0,0,0,0,0,0,0,0,
,0,6, --0,0,0,0,0,0,0,0,7, --0,0,0,0,0,0,0,0,8, --0,0,0,0,0,0,0,0,9, --
R32)
0,0,0,0,0,0,0,0,2, -->0,0,2,1, --0,0,0,0,0,0,0,0,2, --0,0,0,0,0,0,0, --0,0,0,0,0,0,0,
2, --0,0,0,0,0,0,0,3, --0,0,0,0,0,0,0,4, --0,0,0,0,0,0,0,5, --0,0,0,0,0,0,0,6, --0,0,0,0,
,0,0,0,7, --
R33)
0,0,0,0,0,0,0,0,3, -->0,0,2,1, --0,0,2,1, --0,0,0,0,0,0,0,0,3, --0,0,0,0,0,0, --0,0,0,
0,0,0,2, --0,0,0,0,0,0,3, --0,0,0,0,0,0,4, --0,0,0,0,0,0,5, --0,0,0,0,0,0,6, --
R34)

0,0,0,0,0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,
--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--

R35)

0,0,0,0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,0,0,5,--
0,0,0,0,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R36)

0,0,0,0,0,0,0,0,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,
0,0,0,6,--0,0,0,--0,0,0,2,--0,0,0,3,--

R37)

0,0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,
0,0,0,0,0,0,0,7,--0,0,--0,0,2,--

R38)

0,0,0,0,0,0,0,0,8,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,
0,2,1,--0,0,0,0,0,0,0,0,8,--0,--

R39)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,0,0,0,0,
0,0,0,2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,
,0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,
0,0,0,0,9,--0,0,0,0,0,0,0,0,0,10,--

R40)

0,0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,--0,0,0,0,
0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,
,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--

R41)

0,0,0,0,0,0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,--
0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,
,0,6,--0,0,0,0,0,0,7,--

R42)

0,0,0,0,0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,0,4,--0,0,0,
0,0,0,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,
,6,--

R43)

0,0,0,0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,0,0,
5,--0,0,0,0,0,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--0,0,0,0,5,--

R44)

0,0,0,0,0,0,0,0,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,
0,0,0,0,6,--0,0,0,0,--0,0,0,2,--0,0,0,3,--0,0,0,4,--

R45)

0,0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--
0,0,0,0,0,0,0,7,--0,0,0,--0,0,2,--0,0,3,--

R46)

0,0,0,0,0,0,0,0,8,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--
0,0,2,1,--0,0,0,0,0,0,0,8,--0,0,--0,0,2,--

R47)

0,0,0,0,0,0,0,0,9,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--
0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,9,--0,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, :

LEN=3) 0,0,0, : 0,0,2, :

LEN=4) 0,0,0,0, : 0,0,0,2, : 0,0,0,3, : 0,0,2,1, :
 LEN=5) 0,0,0,0,0, : 0,0,0,0,2, : 0,0,0,0,3, : 0,0,0,0,4, :
 LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,2, : 0,0,0,0,0,3, : 0,0,0,0,0,4, : 0,0,0,0,0,5, :
 LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,2, : 0,0,0,0,0,0,3, : 0,0,0,0,0,0,4, :
 0,0,0,0,0,0,5, : 0,0,0,0,0,0,6, :
 LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,2, : 0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,4, :
 0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,7, :
 LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,2, : 0,0,0,0,0,0,0,0,3, :
 0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,0,7, :
 0,0,0,0,0,0,0,0,8, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,2, : 0,0,0,0,0,0,0,0,0,3, :
 0,0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,0,0,6, :
 0,0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,0,8, : 0,0,0,0,0,0,0,0,0,9, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,2, : 0,0,0,0,0,0,0,0,0,0,3, :
 0,0,0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,0,0,0,6, :
 0,0,0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,0,0,8, : 0,0,0,0,0,0,0,0,0,0,9, :
 0,0,0,0,0,0,0,0,0,0,10, :
 Number new nodes in level n is given by : 1,1,2,4,4,5,6,7,8,9,10,

-----Class

1594-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][100][101][110][120][201][210]]$

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Rules of T[L]:

R1) 0, -->0,0, --0, --
 R2) 0,0, -->0,0,0, --0,0, --0,0,2, --
 R3) 0,0,0, -->0,0,0,0, --0,0,0, --0,0,0,2, --0,0,0,3, --
 R4) 0,0,2, -->0,0,2,1, --0,0, --0, --
 R5) 0,0,0,0, -->0,0,0,0,0, --0,0,0,0, --0,0,0,0,2, --0,0,0,0,3, --0,0,0,0,4, --
 R6) 0,0,0,2, -->0,0,0,2,1, --0,0,0, --0,0, --0,0,2, --
 R7) 0,0,0,3, -->0,0,2,1, --0,0,2,1, --0,0, --0, --
 R8) 0,0,2,1, -->0,0, --0,0,2, --
 R9)
 0,0,0,0,0, -->0,0,0,0,0,0, --0,0,0,0,0, --0,0,0,0,0,2, --0,0,0,0,0,3, --0,0,0,0,0,4, --0,
 0,0,0,0,5, --
 R10) 0,0,0,0,2, -->0,0,0,0,2,1, --0,0,0,0, --0,0,0, --0,0,0,2, --0,0,0,3, --
 R11) 0,0,0,0,3, -->0,0,0,2,1, --0,0,0,2,1, --0,0,0, --0,0, --0,0,2, --
 R12) 0,0,0,0,4, -->0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0, --0, --
 R13) 0,0,0,2,1, -->0,0,0, --0,0,0,2, --0,0,0,3, --
 R14)
 0,0,0,0,0,0, -->0,0,0,0,0,0,0,0, --0,0,0,0,0,0, --0,0,0,0,0,0,2, --0,0,0,0,0,0,3, --0,0,0,
 0,0,0,4, --0,0,0,0,0,0,5, --0,0,0,0,0,0,6, --
 R15)
 0,0,0,0,0,2, -->0,0,0,0,0,2,1, --0,0,0,0,0, --0,0,0,0, --0,0,0,0,2, --0,0,0,0,3, --0,0,0,
 0,4, --
 R16)
 0,0,0,0,0,3, -->0,0,0,0,2,1, --0,0,0,0,2,1, --0,0,0,0, --0,0,0, --0,0,0,2, --0,0,0,3, --
 R17) 0,0,0,0,0,4, -->0,0,0,2,1, --0,0,0,2,1, --0,0,0,2,1, --0,0,0, --0,0, --0,0,2, --
 R18) 0,0,0,0,0,5, -->0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0, --0, --

R19) 0,0,0,0,2,1,-->0,0,0,0,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
R20)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,
3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--
R21)
0,0,0,0,0,0,2,-->0,0,0,0,0,0,2,1,--0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,2,--0,0,0,0,
0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--
R22)
0,0,0,0,0,0,3,-->0,0,0,0,0,2,1,--0,0,0,0,0,2,1,--0,0,0,0,0,--0,0,0,0,--0,0,0,0,2,--
0,0,0,0,3,--0,0,0,0,4,--
R23)
0,0,0,0,0,0,4,-->0,0,0,0,2,1,--0,0,0,0,2,1,--0,0,0,0,2,1,--0,0,0,0,--0,0,0,--0,0,0,
2,--0,0,0,3,--
R24)
0,0,0,0,0,0,5,-->0,0,0,2,1,--0,0,0,2,1,--0,0,0,2,1,--0,0,0,2,1,--0,0,0,--0,0,--0,0,
2,--
R25) 0,0,0,0,0,0,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,--0,--
R26)
0,0,0,0,0,2,1,-->0,0,0,0,0,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,
--
R27)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,2,--0,0,0,
0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,
0,0,0,7,--0,0,0,0,0,0,0,0,8,--
R28)
0,0,0,0,0,0,0,2,-->0,0,0,0,0,0,0,2,1,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,--0,0,0,0,0,0,2,
--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--
R29)
0,0,0,0,0,0,0,3,-->0,0,0,0,0,0,2,1,--0,0,0,0,0,0,2,1,--0,0,0,0,0,0,--0,0,0,0,0,--0,
0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--
R30)
0,0,0,0,0,0,0,4,-->0,0,0,0,0,2,1,--0,0,0,0,0,2,1,--0,0,0,0,0,2,1,--0,0,0,0,0,--0,0,
0,0,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
R31)
0,0,0,0,0,0,0,5,-->0,0,0,0,2,1,--0,0,0,0,2,1,--0,0,0,0,2,1,--0,0,0,0,2,1,--0,0,0,0,
--0,0,0,--0,0,0,2,--0,0,0,3,--
R32)
0,0,0,0,0,0,0,6,-->0,0,0,2,1,--0,0,0,2,1,--0,0,0,2,1,--0,0,0,2,1,--0,0,0,2,1,--0,0,
0,--0,0,--0,0,2,--
R33)
0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,
--0,--
R34)
0,0,0,0,0,0,2,1,-->0,0,0,0,0,0,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,
0,0,0,0,0,5,--0,0,0,0,0,6,--
R35)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,2,
--0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,
0,6,--0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--
R36)

0,0,0,0,0,0,0,0,7,-->0,0,0,0,2,1,--0,0,0,0,2,1,--0,0,0,0,2,1,--0,0,0,0,2,1,--0,0,
0,0,2,1,--0,0,0,0,2,1,--0,0,0,0,--0,0,0,0,--0,0,0,2,--0,0,0,3,--

R51)

0,0,0,0,0,0,0,0,8,-->0,0,0,2,1,--0,0,0,2,1,--0,0,0,2,1,--0,0,0,2,1,--0,0,0,2,1,--
0,0,0,2,1,--0,0,0,2,1,--0,0,0,0,--0,0,0,0,--0,0,2,--

R52)

0,0,0,0,0,0,0,0,9,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--
0,0,2,1,--0,0,2,1,--0,0,0,0,--0,0,0,0,--

R53)

0,0,0,0,0,0,0,0,2,1,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,3,--0,
0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--0,0,0,
0,0,0,0,0,8,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,:

LEN=3) 0,0,0,: 0,0,2,:

LEN=4) 0,0,0,0,: 0,0,0,2,: 0,0,0,3,: 0,0,2,1,:

LEN=5) 0,0,0,0,0,: 0,0,0,0,2,: 0,0,0,0,3,: 0,0,0,0,4,: 0,0,0,2,1,:

LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,2,: 0,0,0,0,0,3,: 0,0,0,0,0,4,: 0,0,0,0,0,5,:

0,0,0,0,2,1,:

LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,2,: 0,0,0,0,0,0,3,: 0,0,0,0,0,0,4,:

0,0,0,0,0,0,5,: 0,0,0,0,0,0,6,: 0,0,0,0,0,2,1,:

LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,2,: 0,0,0,0,0,0,0,3,: 0,0,0,0,0,0,0,4,:

0,0,0,0,0,0,0,5,: 0,0,0,0,0,0,0,6,: 0,0,0,0,0,0,0,7,: 0,0,0,0,0,0,2,1,:

LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,2,: 0,0,0,0,0,0,0,0,3,:

0,0,0,0,0,0,0,0,4,: 0,0,0,0,0,0,0,0,5,: 0,0,0,0,0,0,0,0,6,: 0,0,0,0,0,0,0,0,7,:

0,0,0,0,0,0,0,0,8,: 0,0,0,0,0,0,2,1,:

LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,2,: 0,0,0,0,0,0,0,0,0,3,:

0,0,0,0,0,0,0,0,0,4,: 0,0,0,0,0,0,0,0,0,5,: 0,0,0,0,0,0,0,0,0,6,:

0,0,0,0,0,0,0,0,0,7,: 0,0,0,0,0,0,0,0,0,8,: 0,0,0,0,0,0,0,0,0,9,:

0,0,0,0,0,0,0,0,2,1,:

LEN=11) 0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,2,: 0,0,0,0,0,0,0,0,0,0,3,:

0,0,0,0,0,0,0,0,0,0,4,: 0,0,0,0,0,0,0,0,0,0,5,: 0,0,0,0,0,0,0,0,0,0,6,:

0,0,0,0,0,0,0,0,0,0,7,: 0,0,0,0,0,0,0,0,0,0,8,: 0,0,0,0,0,0,0,0,0,0,9,:

0,0,0,0,0,0,0,0,0,0,10,: 0,0,0,0,0,0,0,0,0,0,2,1,:

Number new nodes in level n is given by : 1,1,2,4,5,6,7,8,9,10,11,

-----Class

1595-----

Inversion Sequences ($I_n=(n+1)!$) avoiding L=[[010][100][102][110][120][201][210]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,--

R2) 0,0,-->0,0,0,--0,0,--0,0,2,--

R3) 0,0,0,-->0,0,0,0,--0,0,0,--0,0,0,2,--0,0,0,3,--

R4) 0,0,2,-->0,0,2,1,--0,0,--0,--

R5) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R6) 0,0,0,2,-->0,0,2,1,--0,0,0,--0,0,--0,0,2,--

R7) 0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,--0,--

R8) 0,0,2,1,-->0,0,2,1,--
R9)
0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,
0,0,0,0,5,--
R10) 0,0,0,0,2,-->0,0,2,1,--0,0,0,0,--0,0,0,0,--0,0,0,2,--0,0,0,3,--
R11) 0,0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,0,--0,0,0,0,--0,0,2,--
R12) 0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,--0,0,--
R13)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,
0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--
R14)
0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,--0,0,0,0,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
R15) 0,0,0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,0,--0,0,0,0,--0,0,0,2,--0,0,0,3,--
R16) 0,0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,--0,0,0,0,--0,0,2,--
R17) 0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,--0,0,--
R18)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,
3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--
R19)
0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,
0,0,0,0,4,--0,0,0,0,0,5,--
R20)
0,0,0,0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,0,0,--0,0,0,0,--0,0,0,0,2,--0,0,0,0,3,--
0,0,0,0,4,--
R21)
0,0,0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,--0,0,0,0,--0,0,0,2,--0,0,0,3,
--
R22)
0,0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,--0,0,0,0,--0,0,2,--
R23) 0,0,0,0,0,0,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,--
R24)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,2,--0,0,0,
0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,
,0,0,0,7,--0,0,0,0,0,0,0,8,--
R25)
0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,--0,0,0,0,0,0,2,--0,0,0,0,
0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--
R26)
0,0,0,0,0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,2,--0,0,
0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--
R27)
0,0,0,0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,--0,0,0,0,--0,0,0,0,2,--
0,0,0,0,3,--0,0,0,0,4,--
R28)
0,0,0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,--0,0,0,0,--0,0,0,
2,--0,0,0,3,--
R29)
0,0,0,0,0,0,0,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,--0,0,0,--
0,0,2,--
R30)

0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,
--0,--

R31)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,2,
--0,0,0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,
0,6,--0,0,0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,0,9,--

R32)

0,0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,2,--
0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,
0,7,--

R33)

0,0,0,0,0,0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,
2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--

R34)

0,0,0,0,0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,
0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--

R35)

0,0,0,0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,
0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,4,--

R36)

0,0,0,0,0,0,0,0,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,
0,0,--0,0,0,2,--0,0,0,3,--

R37)

0,0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,
0,0,--0,0,--0,0,2,--

R38)

0,0,0,0,0,0,0,0,8,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,
0,2,1,--0,0,--0,--

R39)

0,0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,
0,0,0,2,--0,0,0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,0,0,5,--0,
0,0,0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,
0,0,0,0,9,--0,0,0,0,0,0,0,0,0,0,10,--

R40)

0,0,0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,
0,0,2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,
6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--

R41)

0,0,0,0,0,0,0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,
0,0,0,0,2,--0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--
-0,0,0,0,0,0,0,7,--

R42)

0,0,0,0,0,0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,
0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--

R43)

0,0,0,0,0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,
0,0,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--

R44)

0,0,0,0,0,0,0,0,0,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,
--0,0,0,0,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R45)
0,0,0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--
0,0,0,0,--0,0,0,--0,0,0,2,--0,0,0,3,--

R46)
0,0,0,0,0,0,0,0,0,8,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--
0,0,2,1,--0,0,0,--0,0,--0,0,2,--

R47)
0,0,0,0,0,0,0,0,0,9,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--
0,0,2,1,--0,0,2,1,--0,0,--0,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,:

LEN=3) 0,0,0,: 0,0,2,:

LEN=4) 0,0,0,0,: 0,0,0,2,: 0,0,0,3,: 0,0,2,1,:

LEN=5) 0,0,0,0,0,: 0,0,0,0,2,: 0,0,0,0,3,: 0,0,0,0,4,:

LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,2,: 0,0,0,0,0,3,: 0,0,0,0,0,4,: 0,0,0,0,0,5,:

LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,2,: 0,0,0,0,0,0,3,: 0,0,0,0,0,0,4,:

0,0,0,0,0,0,5, : 0,0,0,0,0,0,6, :

LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,2,: 0,0,0,0,0,0,0,3,: 0,0,0,0,0,0,0,4,:

0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,7, :

LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,2,: 0,0,0,0,0,0,0,0,3,:

0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,0,7, :

0,0,0,0,0,0,0,0,8, :

LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,2,: 0,0,0,0,0,0,0,0,0,3,:

0,0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,0,0,6, :

0,0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,0,8, : 0,0,0,0,0,0,0,0,0,9, :

LEN=11) 0,0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,2,: 0,0,0,0,0,0,0,0,0,0,3,:

0,0,0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,0,0,0,6, :

0,0,0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,0,0,8, : 0,0,0,0,0,0,0,0,0,0,9, :

0,0,0,0,0,0,0,0,0,0,10, :

Number new nodes in level n is given by : 1,1,2,4,4,5,6,7,8,9,10,

-----Class

1596-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[010][101][102][110][120][201][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,--

R2) 0,0,-->0,0,0,--0,0,--0,0,2,--

R3) 0,0,0,-->0,0,0,0,--0,0,0,--0,0,0,2,--0,0,0,3,--

R4) 0,0,2,-->0,0,2,1,--0,0,--0,--

R5) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R6) 0,0,0,2,-->0,0,2,1,--0,0,0,--0,0,--0,0,2,--

R7) 0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,--0,--

R8) 0,0,2,1,-->0,0,2,1,--

R9)

0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,

0,0,0,0,5,--

R10) 0,0,0,0,2,-->0,0,2,1,--0,0,0,0,--0,0,0,--0,0,0,2,--0,0,0,3,--

R11) 0,0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,--0,0,--0,0,2,--
R12) 0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,--0,--
R13)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,
0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--
R14)
0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,--0,0,0,0,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
R15) 0,0,0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,0,--0,0,0,--0,0,0,2,--0,0,0,3,--
R16) 0,0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,--0,0,--0,0,2,--
R17) 0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,--0,--
R18)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,
3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--
R19)
0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,
0,0,0,0,4,--0,0,0,0,0,5,--
R20)
0,0,0,0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,0,0,--0,0,0,0,--0,0,0,0,2,--0,0,0,0,3,--
0,0,0,0,4,--
R21)
0,0,0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,--0,0,0,--0,0,0,2,--0,0,0,3,
--
R22)
0,0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,--0,0,--0,0,2,--
R23) 0,0,0,0,0,0,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,--0,--
R24)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,2,--0,0,0,
0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,
,0,0,0,7,--0,0,0,0,0,0,0,0,8,--
R25)
0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,--0,0,0,0,0,0,2,--0,0,0,0,
0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--
R26)
0,0,0,0,0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,0,2,--0,0,
0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--
R27)
0,0,0,0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,--0,0,0,0,--0,0,0,0,2,--
0,0,0,0,3,--0,0,0,0,4,--
R28)
0,0,0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,--0,0,0,--0,0,0,
2,--0,0,0,3,--
R29)
0,0,0,0,0,0,0,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,--0,0,--
0,0,2,--
R30)
0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,
--0,--
R31)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,2,
--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0

,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--
R32)
0,0,0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,2,--
0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,
,0,7,--
R33)
0,0,0,0,0,0,0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,--0,0,0,0,0,0,0,
2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--
R34)
0,0,0,0,0,0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,
0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--
R35)
0,0,0,0,0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,--0,0,0,0,0,--
0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--
R36)
0,0,0,0,0,0,0,0,0,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,--0,
0,0,--0,0,0,0,2,--0,0,0,0,3,--
R37)
0,0,0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,
0,0,--0,0,--0,0,2,--
R38)
0,0,0,0,0,0,0,0,0,8,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,
0,2,1,--0,0,--0,0,--
R39)
0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,
0,0,0,2,--0,0,0,0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,0,0,5,--0,
,0,0,0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,
0,0,0,0,9,--0,0,0,0,0,0,0,0,0,0,0,10,--
R40)
0,0,0,0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,
0,0,2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,
,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--
R41)
0,0,0,0,0,0,0,0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,--0,0,0,
0,0,0,0,2,--0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--
-0,0,0,0,0,0,0,0,7,--
R42)
0,0,0,0,0,0,0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,--
0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--
R43)
0,0,0,0,0,0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,--0,0,0,
0,0,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--
R44)
0,0,0,0,0,0,0,0,0,0,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,
--0,0,0,0,0,--0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--
R45)
0,0,0,0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--
0,0,0,0,0,--0,0,0,0,--0,0,0,2,--0,0,0,3,--
R46)
0,0,0,0,0,0,0,0,0,0,8,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--

0,0,2,1,--0,0,0,--0,0,--0,0,2,--
R47)

0,0,0,0,0,0,0,0,0,9,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--
0,0,2,1,--0,0,2,1,--0,0,--0,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,:

LEN=3) 0,0,0,: 0,0,2,:

LEN=4) 0,0,0,0,: 0,0,0,2,: 0,0,0,3,: 0,0,2,1,:

LEN=5) 0,0,0,0,0,: 0,0,0,0,2,: 0,0,0,0,3,: 0,0,0,0,4,:

LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,2,: 0,0,0,0,0,3,: 0,0,0,0,0,4,: 0,0,0,0,0,5,:

LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,2,: 0,0,0,0,0,0,3,: 0,0,0,0,0,0,4,:

0,0,0,0,0,0,5,: 0,0,0,0,0,0,6,:

LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,2,: 0,0,0,0,0,0,0,3,: 0,0,0,0,0,0,0,4,:

0,0,0,0,0,0,0,5,: 0,0,0,0,0,0,0,6,: 0,0,0,0,0,0,0,7,:

LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,2,: 0,0,0,0,0,0,0,0,3,:

0,0,0,0,0,0,0,0,4,: 0,0,0,0,0,0,0,0,5,: 0,0,0,0,0,0,0,0,6,: 0,0,0,0,0,0,0,0,7,:

0,0,0,0,0,0,0,0,8,:

LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,2,: 0,0,0,0,0,0,0,0,0,3,:

0,0,0,0,0,0,0,0,0,4,: 0,0,0,0,0,0,0,0,0,5,: 0,0,0,0,0,0,0,0,0,6,:

0,0,0,0,0,0,0,0,0,7,: 0,0,0,0,0,0,0,0,0,8,: 0,0,0,0,0,0,0,0,0,9,:

LEN=11) 0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,2,: 0,0,0,0,0,0,0,0,0,0,3,:

0,0,0,0,0,0,0,0,0,0,4,: 0,0,0,0,0,0,0,0,0,0,5,: 0,0,0,0,0,0,0,0,0,0,6,:

0,0,0,0,0,0,0,0,0,0,7,: 0,0,0,0,0,0,0,0,0,0,8,: 0,0,0,0,0,0,0,0,0,0,9,:

0,0,0,0,0,0,0,0,0,0,10,:

Number new nodes in level n is given by : 1,1,2,4,4,5,6,7,8,9,10,

-----Class

1597-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][012][021][100][101][102][110]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,1,--0,1,--

R3) 0,1,-->0,1,0,--

R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--

R5) 0,1,0,-->

R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--

R7) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--

R8) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

R9) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

R10)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

R11)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

R12)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, : 0,1, :
- LEN=3) 0,0,0, : 0,1,0, :
- LEN=4) 0,0,0,0, :
- LEN=5) 0,0,0,0,0, :
- LEN=6) 0,0,0,0,0,0, :
- LEN=7) 0,0,0,0,0,0,0, :
- LEN=8) 0,0,0,0,0,0,0,0, :
- LEN=9) 0,0,0,0,0,0,0,0,0, :
- LEN=10) 0,0,0,0,0,0,0,0,0,0, :
- LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :

Number new nodes in level n is given by : 1,2,2,1,1,1,1,1,1,1,1,

-----Class

1598-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[011][012][021][100][101][102][120]]

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,1,--
- R3) 0,1,-->0,1,0,--
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
- R5) 0,1,0,-->
- R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
- R7) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R8) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R9) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R10) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R11) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R12) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, : 0,1, :
- LEN=3) 0,0,0, : 0,1,0, :
- LEN=4) 0,0,0,0, :
- LEN=5) 0,0,0,0,0, :
- LEN=6) 0,0,0,0,0,0, :
- LEN=7) 0,0,0,0,0,0,0, :
- LEN=8) 0,0,0,0,0,0,0,0, :
- LEN=9) 0,0,0,0,0,0,0,0,0, :
- LEN=10) 0,0,0,0,0,0,0,0,0,0, :

LEN=11) 0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,
Number new nodes in level n is given by : 1,2,2,1,1,1,1,1,1,1,1,1,1,1,

-----Class

1599-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[011][012][021][100][101][102][201]]

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,1,--
- R3) 0,1,-->0,1,0,--
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
- R5) 0,1,0,-->
- R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
- R7) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R8) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R9) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R10) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R11) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R12) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

- LEN=1) 0,:
 - LEN=2) 0,0,: 0,1,:
 - LEN=3) 0,0,0,: 0,1,0,:
 - LEN=4) 0,0,0,0,:
 - LEN=5) 0,0,0,0,0,:
 - LEN=6) 0,0,0,0,0,0,:
 - LEN=7) 0,0,0,0,0,0,0,:
 - LEN=8) 0,0,0,0,0,0,0,0,:
 - LEN=9) 0,0,0,0,0,0,0,0,0,:
 - LEN=10) 0,0,0,0,0,0,0,0,0,0,:
 - LEN=11) 0,0,0,0,0,0,0,0,0,0,0,0,:
- Number new nodes in level n is given by : 1,2,2,1,1,1,1,1,1,1,1,1,1,

-----Class

1600-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[011][012][021][100][101][102][210]]

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,1,--
- R3) 0,1,-->0,1,0,--

R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
R5) 0,1,0,-->
R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
R7) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
R8) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
R9) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R10)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
1,--
R11)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
--0,1,--0,1,--
R12)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, : 0,1,0, :
LEN=4) 0,0,0,0, :
LEN=5) 0,0,0,0,0, :
LEN=6) 0,0,0,0,0,0, :
LEN=7) 0,0,0,0,0,0,0, :
LEN=8) 0,0,0,0,0,0,0,0, :
LEN=9) 0,0,0,0,0,0,0,0,0, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :

Number new nodes in level n is given by : 1,2,2,1,1,1,1,1,1,1,1,

-----Class

1601-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[011][012][021][100][101][110][120]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,1,--0,1,--
R3) 0,1,-->0,1,0,--
R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
R5) 0,1,0,-->
R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
R7) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
R8) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R9) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R10)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
1,--
R11)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
--0,1,--0,1,--

R12)

0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, : 0,1, :
- LEN=3) 0,0,0, : 0,1,0, :
- LEN=4) 0,0,0,0, :
- LEN=5) 0,0,0,0,0, :
- LEN=6) 0,0,0,0,0,0, :
- LEN=7) 0,0,0,0,0,0,0, :
- LEN=8) 0,0,0,0,0,0,0,0, :
- LEN=9) 0,0,0,0,0,0,0,0,0, :
- LEN=10) 0,0,0,0,0,0,0,0,0,0, :
- LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :

Number new nodes in level n is given by : 1,2,2,1,1,1,1,1,1,1,1,1,

-----Class

1602-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][012][021][100][101][110][201]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,1,--
- R3) 0,1,-->0,1,0,--
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
- R5) 0,1,0,-->
- R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
- R7) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R8) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R9) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R10) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R11) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R12) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, : 0,1, :
- LEN=3) 0,0,0, : 0,1,0, :
- LEN=4) 0,0,0,0, :
- LEN=5) 0,0,0,0,0, :
- LEN=6) 0,0,0,0,0,0, :
- LEN=7) 0,0,0,0,0,0,0, :
- LEN=8) 0,0,0,0,0,0,0,0, :

```

LEN=9) 0,0,0,0,0,0,0,0,0,0,:
LEN=10) 0,0,0,0,0,0,0,0,0,0,0,:
LEN=11) 0,0,0,0,0,0,0,0,0,0,0,0,:
    Number new nodes in level n is given by : 1,2,2,1,1,1,1,1,1,1,1,1,

```

-----Class
1603-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][012][021][100][101][110][210]]$

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,1,--0,1,--
R3) 0,1,-->0,1,0,--
R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
R5) 0,1,0,-->
R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
R7) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
R8) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R9) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R10)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,
1,--
R11)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
--0,1,--0,1,--
R12)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
0,1,--0,1,--0,1,--0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,0,: 0,1,0,:
LEN=4) 0,0,0,0,:
LEN=5) 0,0,0,0,0,:
LEN=6) 0,0,0,0,0,0,:
LEN=7) 0,0,0,0,0,0,0,:
LEN=8) 0,0,0,0,0,0,0,0,:
LEN=9) 0,0,0,0,0,0,0,0,0,:
LEN=10) 0,0,0,0,0,0,0,0,0,0,:
LEN=11) 0,0,0,0,0,0,0,0,0,0,0,:
    Number new nodes in level n is given by : 1,2,2,1,1,1,1,1,1,1,1,1,

```

-----Class
1604-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][012][021][100][101][120][201]]$

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--

```

- R2) 0,0,-->0,0,0,--0,1,--0,1,--
- R3) 0,1,-->0,1,0,--
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
- R5) 0,1,0,-->
- R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
- R7) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R8) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R9) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R10) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R11) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R12) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, : 0,1, :
- LEN=3) 0,0,0, : 0,1,0, :
- LEN=4) 0,0,0,0, :
- LEN=5) 0,0,0,0,0, :
- LEN=6) 0,0,0,0,0,0, :
- LEN=7) 0,0,0,0,0,0,0, :
- LEN=8) 0,0,0,0,0,0,0,0, :
- LEN=9) 0,0,0,0,0,0,0,0,0, :
- LEN=10) 0,0,0,0,0,0,0,0,0,0, :
- LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :

Number new nodes in level n is given by : 1,2,2,1,1,1,1,1,1,1,1,1,

-----Class

1605-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[011][012][021][100][101][120][210]]

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,1,--
- R3) 0,1,-->0,1,0,--
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
- R5) 0,1,0,-->
- R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
- R7) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R8) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R9) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R10) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R11) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

R12)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,0,0,: 0,1,0,:

LEN=4) 0,0,0,0,:

LEN=5) 0,0,0,0,0,:

LEN=6) 0,0,0,0,0,0,:

LEN=7) 0,0,0,0,0,0,0,:

LEN=8) 0,0,0,0,0,0,0,0,:

LEN=9) 0,0,0,0,0,0,0,0,0,:

LEN=10) 0,0,0,0,0,0,0,0,0,0,:

LEN=11) 0,0,0,0,0,0,0,0,0,0,0,:

Number new nodes in level n is given by : 1,2,2,1,1,1,1,1,1,1,1,1,

-----Class

1606-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][012][021][100][101][201][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,1,--0,1,--

R3) 0,1,-->0,1,0,--

R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--

R5) 0,1,0,-->

R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--

R7) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--

R8) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

R9) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

R10)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

R11)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

R12)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,0,0,: 0,1,0,:

LEN=4) 0,0,0,0,:

LEN=5) 0,0,0,0,0,:

LEN=6) 0,0,0,0,0,0,:

LEN=7) 0,0,0,0,0,0,0,:
 LEN=8) 0,0,0,0,0,0,0,0,:
 LEN=9) 0,0,0,0,0,0,0,0,0,:
 LEN=10) 0,0,0,0,0,0,0,0,0,0,:
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,:
 Number new nodes in level n is given by : 1,2,2,1,1,1,1,1,1,1,1,

-----Class

1607-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][012][021][100][102][110][120]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,1,--
- R3) 0,1,-->0,1,0,--
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
- R5) 0,1,0,-->
- R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
- R7) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R8) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R9) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R10) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R11) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R12) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

- LEN=1) 0,:
 - LEN=2) 0,0,: 0,1,:
 - LEN=3) 0,0,0,: 0,1,0,:
 - LEN=4) 0,0,0,0,:
 - LEN=5) 0,0,0,0,0,:
 - LEN=6) 0,0,0,0,0,0,:
 - LEN=7) 0,0,0,0,0,0,0,:
 - LEN=8) 0,0,0,0,0,0,0,0,:
 - LEN=9) 0,0,0,0,0,0,0,0,0,:
 - LEN=10) 0,0,0,0,0,0,0,0,0,0,:
 - LEN=11) 0,0,0,0,0,0,0,0,0,0,0,:
- Number new nodes in level n is given by : 1,2,2,1,1,1,1,1,1,1,1,

-----Class

1608-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][012][021][100][102][110][201]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,1,--
- R3) 0,1,-->0,1,0,--
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
- R5) 0,1,0,-->
- R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
- R7) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R8) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R9) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R10) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R11) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R12) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

- LEN=1) 0,:
- LEN=2) 0,0,: 0,1,:
- LEN=3) 0,0,0,: 0,1,0,:
- LEN=4) 0,0,0,0,:
- LEN=5) 0,0,0,0,0,:
- LEN=6) 0,0,0,0,0,0,:
- LEN=7) 0,0,0,0,0,0,0,:
- LEN=8) 0,0,0,0,0,0,0,0,:
- LEN=9) 0,0,0,0,0,0,0,0,0,:
- LEN=10) 0,0,0,0,0,0,0,0,0,0,:
- LEN=11) 0,0,0,0,0,0,0,0,0,0,0,:

Number new nodes in level n is given by : 1,2,2,1,1,1,1,1,1,1,1,1,

-----Class

1609-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][012][021][100][102][110][210]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,1,--
- R3) 0,1,-->0,1,0,--
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
- R5) 0,1,0,-->
- R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
- R7) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R8) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R9) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R10) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

1,--
R11)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
--0,1,--0,1,--
R12)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
0,1,--0,1,--0,1,--0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, : 0,1,0, :
LEN=4) 0,0,0,0, :
LEN=5) 0,0,0,0,0, :
LEN=6) 0,0,0,0,0,0, :
LEN=7) 0,0,0,0,0,0,0, :
LEN=8) 0,0,0,0,0,0,0,0, :
LEN=9) 0,0,0,0,0,0,0,0,0, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :
Number new nodes in level n is given by : 1,2,2,1,1,1,1,1,1,1,1,

-----Class
1610-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][012][021][100][102][120][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,1,--0,1,--
R3) 0,1,-->0,1,0,--
R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
R5) 0,1,0,-->
R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
R7) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
R8) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R9) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R10)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,
1,--
R11)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
--0,1,--0,1,--
R12)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
0,1,--0,1,--0,1,--0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, : 0,1,0, :
LEN=4) 0,0,0,0, :

LEN=5) 0,0,0,0,0, :
 LEN=6) 0,0,0,0,0,0, :
 LEN=7) 0,0,0,0,0,0,0, :
 LEN=8) 0,0,0,0,0,0,0,0, :
 LEN=9) 0,0,0,0,0,0,0,0,0, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :
 Number new nodes in level n is given by : 1,2,2,1,1,1,1,1,1,1,1,

-----Class

1611-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][012][021][100][102][120][210]]$

--
Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,1,--
- R3) 0,1,-->0,1,0,--
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
- R5) 0,1,0,-->
- R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
- R7) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R8) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R9) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R10) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R11) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R12) 0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0, :
 LEN=2) 0,0, : 0,1, :
 LEN=3) 0,0,0, : 0,1,0, :
 LEN=4) 0,0,0,0, :
 LEN=5) 0,0,0,0,0, :
 LEN=6) 0,0,0,0,0,0, :
 LEN=7) 0,0,0,0,0,0,0, :
 LEN=8) 0,0,0,0,0,0,0,0, :
 LEN=9) 0,0,0,0,0,0,0,0,0, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :
 Number new nodes in level n is given by : 1,2,2,1,1,1,1,1,1,1,1,

-----Class

1612-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][012][021][100][102][201][210]]$

```

-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,1,--0,1,--
R3) 0,1,-->0,1,0,--
R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
R5) 0,1,0,-->
R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
R7) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
R8) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R9) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R10)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
1,--
R11)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
--0,1,--0,1,--
R12)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
0,1,--0,1,--0,1,--0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,0,: 0,1,0,:
LEN=4) 0,0,0,0,:
LEN=5) 0,0,0,0,0,:
LEN=6) 0,0,0,0,0,0,:
LEN=7) 0,0,0,0,0,0,0,:
LEN=8) 0,0,0,0,0,0,0,0,:
LEN=9) 0,0,0,0,0,0,0,0,0,:
LEN=10) 0,0,0,0,0,0,0,0,0,0,:
LEN=11) 0,0,0,0,0,0,0,0,0,0,0,:
Number new nodes in level n is given by : 1,2,2,1,1,1,1,1,1,1,1,

```

```

-----Class
1613-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  $L=[[011][012][021][100][110][120][201]]$ 
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,1,--0,1,--
R3) 0,1,-->0,1,0,--
R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
R5) 0,1,0,-->
R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
R7) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
R8) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R9) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

```


LEN=3) 0,0,0,: 0,1,0,:
 LEN=4) 0,0,0,0,:
 LEN=5) 0,0,0,0,0,:
 LEN=6) 0,0,0,0,0,0,:
 LEN=7) 0,0,0,0,0,0,0,:
 LEN=8) 0,0,0,0,0,0,0,0,:
 LEN=9) 0,0,0,0,0,0,0,0,0,:
 LEN=10) 0,0,0,0,0,0,0,0,0,0,:
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,:
 Number new nodes in level n is given by : 1,2,2,1,1,1,1,1,1,1,1,

-----Class

1615-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][012][021][100][110][201][210]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,1,--
- R3) 0,1,-->0,1,0,--
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
- R5) 0,1,0,-->
- R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
- R7) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R8) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R9) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R10) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R11) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R12) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0,:
 LEN=2) 0,0,: 0,1,:
 LEN=3) 0,0,0,: 0,1,0,:
 LEN=4) 0,0,0,0,:
 LEN=5) 0,0,0,0,0,:
 LEN=6) 0,0,0,0,0,0,:
 LEN=7) 0,0,0,0,0,0,0,:
 LEN=8) 0,0,0,0,0,0,0,0,:
 LEN=9) 0,0,0,0,0,0,0,0,0,:
 LEN=10) 0,0,0,0,0,0,0,0,0,0,:
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,:
 Number new nodes in level n is given by : 1,2,2,1,1,1,1,1,1,1,1,

-----Class

1616-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][012][021][100][120][201][210]]$

--
Rules of $T[L]$:

- R1) $0, -->0,0, --0,1, --$
- R2) $0,0, -->0,0,0, --0,1, --0,1, --$
- R3) $0,1, -->0,1,0, --$
- R4) $0,0,0, -->0,0,0,0, --0,1, --0,1, --0,1, --$
- R5) $0,1,0, -->$
- R6) $0,0,0,0, -->0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --$
- R7) $0,0,0,0,0, -->0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --$
- R8) $0,0,0,0,0,0, -->0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --$
- R9) $0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --$
- R10) $0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --$
- R11) $0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --$
- R12) $0,0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --$

List of different nodes in $T[L]$

- LEN=1) $0, :$
 - LEN=2) $0,0, : 0,1, :$
 - LEN=3) $0,0,0, : 0,1,0, :$
 - LEN=4) $0,0,0,0, :$
 - LEN=5) $0,0,0,0,0, :$
 - LEN=6) $0,0,0,0,0,0, :$
 - LEN=7) $0,0,0,0,0,0,0, :$
 - LEN=8) $0,0,0,0,0,0,0,0, :$
 - LEN=9) $0,0,0,0,0,0,0,0,0, :$
 - LEN=10) $0,0,0,0,0,0,0,0,0,0, :$
 - LEN=11) $0,0,0,0,0,0,0,0,0,0,0, :$
- Number new nodes in level n is given by : 1,2,2,1,1,1,1,1,1,1,1,

-----Class

1617-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][012][021][101][102][110][120]]$

--
Rules of $T[L]$:

- R1) $0, -->0,0, --0,1, --$
- R2) $0,0, -->0,0,0, --0,1, --0,1, --$
- R3) $0,1, -->0,1, --$
- R4) $0,0,0, -->0,0,0,0, --0,1, --0,1, --0,1, --$
- R5) $0,0,0,0, -->0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --$
- R6) $0,0,0,0,0, -->0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --$
- R7) $0,0,0,0,0,0, -->0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --$

R8) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R9) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
1,--
R10) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
--0,1,--0,1,--
R11) 0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
0,1,--0,1,--0,1,--0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, :
LEN=4) 0,0,0,0, :
LEN=5) 0,0,0,0,0, :
LEN=6) 0,0,0,0,0,0, :
LEN=7) 0,0,0,0,0,0,0, :
LEN=8) 0,0,0,0,0,0,0,0, :
LEN=9) 0,0,0,0,0,0,0,0,0, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :
Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

-----Class
1618-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][012][021][101][102][110][201]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,1,--0,1,--
R3) 0,1,-->0,1,--
R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R9) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
1,--
R10) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
--0,1,--0,1,--
R11) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
0,1,--0,1,--0,1,--0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :

LEN=3) 0,0,0,:
 LEN=4) 0,0,0,0,:
 LEN=5) 0,0,0,0,0,:
 LEN=6) 0,0,0,0,0,0,:
 LEN=7) 0,0,0,0,0,0,0,:
 LEN=8) 0,0,0,0,0,0,0,0,:
 LEN=9) 0,0,0,0,0,0,0,0,0,:
 LEN=10) 0,0,0,0,0,0,0,0,0,0,:
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,:
 Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

-----Class

1619-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][012][021][101][102][110][210]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,1,--
- R3) 0,1,-->0,1,--
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
- R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
- R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
- R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R9) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R10) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R11) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0,:
 LEN=2) 0,0,: 0,1,:
 LEN=3) 0,0,0,:
 LEN=4) 0,0,0,0,:
 LEN=5) 0,0,0,0,0,:
 LEN=6) 0,0,0,0,0,0,:
 LEN=7) 0,0,0,0,0,0,0,:
 LEN=8) 0,0,0,0,0,0,0,0,:
 LEN=9) 0,0,0,0,0,0,0,0,0,:
 LEN=10) 0,0,0,0,0,0,0,0,0,0,:
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,:
 Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

-----Class

1620-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][012][021][101][102][120][201]]$

--

Rules of $T[L]$:

R1) $0, -->0,0, --0,1, --$

R2) $0,0, -->0,0,0, --0,1, --0,1, --$

R3) $0,1, -->0,1, --$

R4) $0,0,0, -->0,0,0,0, --0,1, --0,1, --0,1, --$

R5) $0,0,0,0, -->0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --$

R6) $0,0,0,0,0, -->0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --$

R7) $0,0,0,0,0,0, -->0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --$

R8) $0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --$

R9)

$0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --$
 $1, --$

R10)

$0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --$
 $--0,1, --0,1, --$

R11)

$0,0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --$
 $0,1, --0,1, --0,1, --0,1, --$

List of different nodes in $T[L]$

LEN=1) $0, :$

LEN=2) $0,0, : 0,1, :$

LEN=3) $0,0,0, :$

LEN=4) $0,0,0,0, :$

LEN=5) $0,0,0,0,0, :$

LEN=6) $0,0,0,0,0,0, :$

LEN=7) $0,0,0,0,0,0,0, :$

LEN=8) $0,0,0,0,0,0,0,0, :$

LEN=9) $0,0,0,0,0,0,0,0,0, :$

LEN=10) $0,0,0,0,0,0,0,0,0,0, :$

LEN=11) $0,0,0,0,0,0,0,0,0,0,0, :$

Number new nodes in level n is given by : $1,2,1,1,1,1,1,1,1,1,1,$

-----Class

1621-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][012][021][101][102][120][210]]$

--

Rules of $T[L]$:

R1) $0, -->0,0, --0,1, --$

R2) $0,0, -->0,0,0, --0,1, --0,1, --$

R3) $0,1, -->0,1, --$

R4) $0,0,0, -->0,0,0,0, --0,1, --0,1, --0,1, --$

R5) $0,0,0,0, -->0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --$

R6) $0,0,0,0,0, -->0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --$

R7) $0,0,0,0,0,0, -->0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --$

R8) $0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --$

R9)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
1,--
R10)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
--0,1,--0,1,--
R11)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
0,1,--0,1,--0,1,--0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, :
LEN=4) 0,0,0,0, :
LEN=5) 0,0,0,0,0, :
LEN=6) 0,0,0,0,0,0, :
LEN=7) 0,0,0,0,0,0,0, :
LEN=8) 0,0,0,0,0,0,0,0, :
LEN=9) 0,0,0,0,0,0,0,0,0, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :
Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

-----Class
1622-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][012][021][101][102][201][210]]$

--
Rules of T[L]:
R1) 0, -->0,0, --0,1, --
R2) 0,0, -->0,0,0, --0,1, --0,1, --
R3) 0,1, -->0,1, --
R4) 0,0,0, -->0,0,0,0, --0,1, --0,1, --0,1, --
R5) 0,0,0,0, -->0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --
R6) 0,0,0,0,0, -->0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --
R7) 0,0,0,0,0,0, -->0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --
R8) 0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --
R9)
0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --
1, --
R10)
0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --
--0,1, --0,1, --
R11)
0,0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --
0,1, --0,1, --0,1, --0,1, --
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, :
LEN=4) 0,0,0,0, :

LEN=5) 0,0,0,0,0, :
 LEN=6) 0,0,0,0,0,0, :
 LEN=7) 0,0,0,0,0,0,0, :
 LEN=8) 0,0,0,0,0,0,0,0, :
 LEN=9) 0,0,0,0,0,0,0,0,0, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :
 Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

-----Class

1623-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][012][021][101][110][120][201]]$

--
 Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,1,--
- R3) 0,1,-->0,1,--
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
- R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
- R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R9) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R10) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R11) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0, :
 LEN=2) 0,0, : 0,1, :
 LEN=3) 0,0,0, :
 LEN=4) 0,0,0,0, :
 LEN=5) 0,0,0,0,0, :
 LEN=6) 0,0,0,0,0,0, :
 LEN=7) 0,0,0,0,0,0,0, :
 LEN=8) 0,0,0,0,0,0,0,0, :
 LEN=9) 0,0,0,0,0,0,0,0,0, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :
 Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

-----Class

1624-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][012][021][101][110][120][210]]$

--

Rules of T[L]:

- R1) 0, -->0,0,--0,1,--
- R2) 0,0, -->0,0,0,--0,1,--0,1,--
- R3) 0,1, -->0,1,--
- R4) 0,0,0, -->0,0,0,0,--0,1,--0,1,--0,1,--
- R5) 0,0,0,0, -->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
- R6) 0,0,0,0,0, -->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R7) 0,0,0,0,0,0, -->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R8) 0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R9) 0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R10) 0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R11) 0,0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, : 0,1, :
- LEN=3) 0,0,0, :
- LEN=4) 0,0,0,0, :
- LEN=5) 0,0,0,0,0, :
- LEN=6) 0,0,0,0,0,0, :
- LEN=7) 0,0,0,0,0,0,0, :
- LEN=8) 0,0,0,0,0,0,0,0, :
- LEN=9) 0,0,0,0,0,0,0,0,0, :
- LEN=10) 0,0,0,0,0,0,0,0,0,0, :
- LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :

Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,1,

-----Class

1625-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][012][021][101][110][201][210]]$

--

Rules of T[L]:

- R1) 0, -->0,0,--0,1,--
- R2) 0,0, -->0,0,0,--0,1,--0,1,--
- R3) 0,1, -->0,1,--
- R4) 0,0,0, -->0,0,0,0,--0,1,--0,1,--0,1,--
- R5) 0,0,0,0, -->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
- R6) 0,0,0,0,0, -->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R7) 0,0,0,0,0,0, -->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R8) 0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R9) 0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

LEN=7) 0,0,0,0,0,0,0,:
 LEN=8) 0,0,0,0,0,0,0,0,:
 LEN=9) 0,0,0,0,0,0,0,0,0,:
 LEN=10) 0,0,0,0,0,0,0,0,0,0,:
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,:
 Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

-----Class

1627-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][012][021][102][110][120][201]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,1,--0,1,--

R3) 0,1,-->0,1,--

R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--

R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--

R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--

R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--

R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

R9)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

1,--

R10)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

--0,1,--0,1,--

R11)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0,:
 LEN=2) 0,0,: 0,1,:
 LEN=3) 0,0,0,:
 LEN=4) 0,0,0,0,:
 LEN=5) 0,0,0,0,0,:
 LEN=6) 0,0,0,0,0,0,:
 LEN=7) 0,0,0,0,0,0,0,:
 LEN=8) 0,0,0,0,0,0,0,0,:
 LEN=9) 0,0,0,0,0,0,0,0,0,:
 LEN=10) 0,0,0,0,0,0,0,0,0,0,:
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,:
 Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

-----Class

1628-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][012][021][102][110][120][210]]$

--

Rules of T[L]:

- R1) 0, -->0,0, --0,1, --
- R2) 0,0, -->0,0,0, --0,1, --0,1, --
- R3) 0,1, -->0,1, --
- R4) 0,0,0, -->0,0,0,0, --0,1, --0,1, --0,1, --
- R5) 0,0,0,0, -->0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --
- R6) 0,0,0,0,0, -->0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --
- R7) 0,0,0,0,0,0, -->0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --
- R8) 0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --
- R9) 0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --
- R10) 0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --
- R11) 0,0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, : 0,1, :
- LEN=3) 0,0,0, :
- LEN=4) 0,0,0,0, :
- LEN=5) 0,0,0,0,0, :
- LEN=6) 0,0,0,0,0,0, :
- LEN=7) 0,0,0,0,0,0,0, :
- LEN=8) 0,0,0,0,0,0,0,0, :
- LEN=9) 0,0,0,0,0,0,0,0,0, :
- LEN=10) 0,0,0,0,0,0,0,0,0,0, :
- LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :

Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,1,

-----Class

1629-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][012][021][102][110][201][210]]$

--

Rules of T[L]:

- R1) 0, -->0,0, --0,1, --
- R2) 0,0, -->0,0,0, --0,1, --0,1, --
- R3) 0,1, -->0,1, --
- R4) 0,0,0, -->0,0,0,0, --0,1, --0,1, --0,1, --
- R5) 0,0,0,0, -->0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --
- R6) 0,0,0,0,0, -->0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --
- R7) 0,0,0,0,0,0, -->0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --
- R8) 0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --
- R9) 0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --
- R10) 0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --

```

--0,1,--0,1,--
R11)
0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
0,1,--0,1,--0,1,--0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,0,:
LEN=4) 0,0,0,0,:
LEN=5) 0,0,0,0,0,:
LEN=6) 0,0,0,0,0,0,:
LEN=7) 0,0,0,0,0,0,0,:
LEN=8) 0,0,0,0,0,0,0,0,:
LEN=9) 0,0,0,0,0,0,0,0,0,:
LEN=10) 0,0,0,0,0,0,0,0,0,0,:
LEN=11) 0,0,0,0,0,0,0,0,0,0,0,:
Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

```

-----Class

1630-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][012][021][102][120][201][210]]$

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,1,--0,1,--
R3) 0,1,-->0,1,--
R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R9)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,
1,--
R10)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,
--0,1,--0,1,--
R11)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
0,1,--0,1,--0,1,--0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,0,:
LEN=4) 0,0,0,0,:
LEN=5) 0,0,0,0,0,:
LEN=6) 0,0,0,0,0,0,:
LEN=7) 0,0,0,0,0,0,0,:
LEN=8) 0,0,0,0,0,0,0,0,:

```

LEN=9) 0,0,0,0,0,0,0,0,0,0,0,:
 LEN=10) 0,0,0,0,0,0,0,0,0,0,0,0,:
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,0,0,:
 Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,1,

-----Class

1631-----
 Inversion Sequences (I_n=(n+1)!) avoiding L=[[011][012][021][110][120][201][210]]

-
- Rules of T[L]:
- R1) 0,-->0,0,--0,1,--
 - R2) 0,0,-->0,0,0,--0,1,--0,1,--
 - R3) 0,1,-->0,1,--
 - R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
 - R5) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
 - R6) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
 - R7) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
 - R8) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 - R9) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 - R10) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 - R11) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

- LEN=1) 0,:
 - LEN=2) 0,0,: 0,1,:
 - LEN=3) 0,0,0,:
 - LEN=4) 0,0,0,0,:
 - LEN=5) 0,0,0,0,0,:
 - LEN=6) 0,0,0,0,0,0,:
 - LEN=7) 0,0,0,0,0,0,0,:
 - LEN=8) 0,0,0,0,0,0,0,0,:
 - LEN=9) 0,0,0,0,0,0,0,0,0,:
 - LEN=10) 0,0,0,0,0,0,0,0,0,0,:
 - LEN=11) 0,0,0,0,0,0,0,0,0,0,0,0,:
- Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,

-----Class

1632-----
 Inversion Sequences (I_n=(n+1)!) avoiding L=[[011][012][100][101][102][110][120]]

-
- Rules of T[L]:
- R1) 0,-->0,0,--0,1,--
 - R2) 0,0,-->0,0,0,--0,1,--0,0,2,--

R3) 0,1,-->0,1,0,--
R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
R5) 0,0,2,-->0,1,--0,1,--
R6) 0,1,0,-->
R7) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
R8) 0,0,0,3,-->0,0,0,3,0,--0,1,--0,0,2,--
R9) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
R10) 0,0,0,0,4,-->0,0,0,0,4,0,--0,1,--0,0,2,--0,0,0,3,--
R11) 0,0,0,3,0,-->0,1,0,--0,1,--
R12)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,
0,0,0,0,0,6,--
R13) 0,0,0,0,0,5,-->0,0,0,0,0,5,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,4,--
R14) 0,0,0,0,4,0,-->0,1,0,--0,1,--0,0,0,3,0,--
R15)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,
--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--
R16)
0,0,0,0,0,0,6,-->0,0,0,0,0,0,6,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,
--
R17) 0,0,0,0,0,5,0,-->0,1,0,--0,1,--0,0,0,3,0,--0,0,0,0,4,0,--
R18)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,
0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--
R19)
0,0,0,0,0,0,0,7,-->0,0,0,0,0,0,0,7,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,
0,5,--0,0,0,0,0,0,6,--
R20) 0,0,0,0,0,0,6,0,-->0,1,0,--0,1,--0,0,0,3,0,--0,0,0,0,4,0,--0,0,0,0,0,5,0,--
R21)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,
0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,9
,--
R22)
0,0,0,0,0,0,0,0,8,-->0,0,0,0,0,0,0,0,8,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,
0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--
R23)
0,0,0,0,0,0,0,7,0,-->0,1,0,--0,1,--0,0,0,3,0,--0,0,0,0,4,0,--0,0,0,0,0,5,0,--0,0,0,
0,0,0,6,0,--
R24)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,
0,9,--0,0,0,0,0,0,0,0,0,0,10,--
R25)
0,0,0,0,0,0,0,0,0,9,-->0,0,0,0,0,0,0,0,0,9,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--
R26)
0,0,0,0,0,0,0,0,8,0,-->0,1,0,--0,1,--0,0,0,3,0,--0,0,0,0,4,0,--0,0,0,0,0,5,0,--0,0,
0,0,0,0,6,0,--0,0,0,0,0,0,7,0,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:
 LEN=3) 0,0,0,: 0,0,2,: 0,1,0,:
 LEN=4) 0,0,0,0,: 0,0,0,3,:
 LEN=5) 0,0,0,0,0,: 0,0,0,0,4,: 0,0,0,3,0,:
 LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,5,: 0,0,0,0,4,0,:
 LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,6,: 0,0,0,0,0,5,0,:
 LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,7,: 0,0,0,0,0,0,6,0,:
 LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,8,: 0,0,0,0,0,0,0,7,0,:
 LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,9,: 0,0,0,0,0,0,0,0,8,0,:
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,10,: 0,0,0,0,0,0,0,0,0,9,0,:
 Number new nodes in level n is given by : 1,2,3,2,3,3,3,3,3,3,3,3,

-----Class

1633-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][012][100][101][102][110][201]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--
 R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
 R3) 0,1,-->0,1,0,--
 R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
 R5) 0,0,2,-->0,1,0,--0,1,--
 R6) 0,1,0,-->
 R7) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
 R8) 0,0,0,3,-->0,1,0,--0,1,--0,0,2,--
 R9) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
 R10) 0,0,0,0,4,-->0,1,0,--0,1,--0,0,2,--0,0,0,3,--
 R11)
 0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,
 0,0,0,0,0,6,--
 R12) 0,0,0,0,0,5,-->0,1,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
 R13)
 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,
 --0,0,0,0,0,6,--0,0,0,0,0,0,7,--
 R14) 0,0,0,0,0,0,6,-->0,1,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
 R15)
 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,
 0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--
 R16)
 0,0,0,0,0,0,0,7,-->0,1,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,
 0,0,0,6,--
 R17)
 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,
 0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--0,0,0,0,0,0,9,
 ,--
 R18)
 0,0,0,0,0,0,0,0,8,-->0,1,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,
 0,0,0,6,--0,0,0,0,0,0,7,--
 R19)

0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,7,--0,0,0,0,0,0,8,--0,0,0,0,0,0,9,--0,0,0,0,0,0,10,--

R20)

0,0,0,0,0,0,0,0,0,9,-->0,1,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,5,--0,
0,0,0,0,0,6,--0,0,0,0,0,7,--0,0,0,0,0,0,8,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, : 0,1, :

LEN=3) 0,0,0, : 0,0,2, : 0,1,0, :

LEN=4) 0,0,0,0, : 0,0,0,3, :

LEN=5) 0,0,0,0,0, : 0,0,0,0,4, :

LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,5, :

LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,6, :

LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,7, :

LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,8, :

LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,9, :

LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,10, :

Number new nodes in level n is given by : 1,2,3,2,2,2,2,2,2,2,2,

-----Class

1634-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][012][100][101][102][110][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,1,--0,0,2,--

R3) 0,1,-->0,1,0,--

R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--

R5) 0,0,2,-->0,1,--0,1,0,--

R6) 0,1,0,-->

R7) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--

R8) 0,0,0,3,-->0,0,0,3,0,--0,1,0,--0,1,0,--

R9) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--

R10) 0,0,0,0,4,-->0,0,0,0,4,0,--0,1,0,--0,1,0,--0,1,0,--

R11) 0,0,0,3,0,-->0,1,0,--0,1,0,--

R12)

0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,
0,0,0,0,0,6,--

R13) 0,0,0,0,0,5,-->0,0,0,0,0,5,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--

R14) 0,0,0,0,4,0,-->0,1,0,--0,1,0,--0,1,0,--

R15)

0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,
--0,0,0,0,0,6,--0,0,0,0,0,0,7,--

R16) 0,0,0,0,0,0,6,-->0,0,0,0,0,0,6,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--

R17) 0,0,0,0,0,5,0,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--

R18)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,
0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--

R10) 0,0,0,0,4,-->0,1,0,--0,1,--0,0,2,--0,0,0,3,--
R11)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,
0,0,0,0,0,6,--
R12) 0,0,0,0,0,5,-->0,1,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
R13)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,
--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--
R14) 0,0,0,0,0,0,0,6,-->0,1,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
R15)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,
0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--
R16)
0,0,0,0,0,0,0,0,7,-->0,1,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,
0,0,0,6,--
R17)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,
0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9
,--
R18)
0,0,0,0,0,0,0,0,0,8,-->0,1,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,
0,0,0,0,6,--0,0,0,0,0,0,0,7,--
R19)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,
0,9,--0,0,0,0,0,0,0,0,0,0,10,--
R20)
0,0,0,0,0,0,0,0,0,0,9,-->0,1,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,
0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, : 0,0,2, : 0,1,0, :
LEN=4) 0,0,0,0, : 0,0,0,3, :
LEN=5) 0,0,0,0,0, : 0,0,0,0,4, :
LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,5, :
LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,6, :
LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,7, :
LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,8, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,9, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,10, :
Number new nodes in level n is given by : 1,2,3,2,2,2,2,2,2,2,2,

-----Class

1636-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[011][012][100][101][102][120][210]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
R3) 0,1,-->0,1,0,--
R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
R5) 0,0,2,-->0,1,--0,1,0,--
R6) 0,1,0,-->
R7) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
R8) 0,0,0,3,-->0,0,0,3,0,--0,1,0,--0,1,0,--
R9) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
R10) 0,0,0,0,4,-->0,0,0,0,4,0,--0,1,0,--0,1,0,--0,1,0,--
R11) 0,0,0,3,0,-->0,1,0,--0,1,0,--
R12)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,
0,0,0,0,0,6,--
R13) 0,0,0,0,0,5,-->0,0,0,0,0,5,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--
R14) 0,0,0,0,4,0,-->0,1,0,--0,1,0,--0,1,0,--
R15)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,
--0,0,0,0,0,6,--0,0,0,0,0,0,7,--
R16) 0,0,0,0,0,0,6,-->0,0,0,0,0,6,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--
R17) 0,0,0,0,0,5,0,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--
R18)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,
0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--
R19)
0,0,0,0,0,0,0,7,-->0,0,0,0,0,0,0,7,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,
0,--
R20) 0,0,0,0,0,0,6,0,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--
R21)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,
0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,9
,--
R22)
0,0,0,0,0,0,0,0,8,-->0,0,0,0,0,0,0,0,8,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--
0,1,0,--0,1,0,--
R23) 0,0,0,0,0,0,0,7,0,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--
R24)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,
0,9,--0,0,0,0,0,0,0,0,0,10,--
R25)
0,0,0,0,0,0,0,0,9,-->0,0,0,0,0,0,0,0,9,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,
0,--0,1,0,--0,1,0,--0,1,0,--
R26)
0,0,0,0,0,0,0,0,8,0,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, : 0,0,2, : 0,1,0, :
LEN=4) 0,0,0,0, : 0,0,0,3, :
LEN=5) 0,0,0,0,0, : 0,0,0,0,4, : 0,0,0,3,0, :

List of different nodes in T[L]

- LEN=1) 0,:
 - LEN=2) 0,0,: 0,1,:
 - LEN=3) 0,0,0,: 0,0,2,: 0,1,0,:
 - LEN=4) 0,0,0,0,: 0,0,0,3,:
 - LEN=5) 0,0,0,0,0,: 0,0,0,0,4,:
 - LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,5,:
 - LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,6,:
 - LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,7,:
 - LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,8,:
 - LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,9,:
 - LEN=11) 0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,10,:
- Number new nodes in level n is given by : 1,2,3,2,2,2,2,2,2,2,2,

-----Class

1638-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[011][012][100][101][110][120][201]]

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
- R3) 0,1,-->0,1,0,--
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
- R5) 0,0,2,-->0,1,0,--0,1,--
- R6) 0,1,0,-->
- R7) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
- R8) 0,0,0,3,-->0,1,0,--0,1,--0,0,2,--
- R9) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
- R10) 0,0,0,0,4,-->0,1,0,--0,1,--0,0,2,--0,0,0,3,--
- R11)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--
- R12) 0,0,0,0,0,5,-->0,1,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
- R13)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--
- R14) 0,0,0,0,0,0,6,-->0,1,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
- R15)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--
- R16)
0,0,0,0,0,0,0,7,-->0,1,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--
- R17)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--
- R18)
0,0,0,0,0,0,0,0,8,-->0,1,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,

0,0,0,0,6,--0,0,0,0,0,0,7,--
R19)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--0,0,0,0,0,0,0
,0,9,--0,0,0,0,0,0,0,0,0,10,--
R20)
0,0,0,0,0,0,0,0,9,-->0,1,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,5,--0,
0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--
List of different nodes in $T[L]$
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, : 0,0,2, : 0,1,0, :
LEN=4) 0,0,0,0, : 0,0,0,3, :
LEN=5) 0,0,0,0,0, : 0,0,0,0,4, :
LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,5, :
LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,6, :
LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,7, :
LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,8, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,9, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,10, :
Number new nodes in level n is given by : 1,2,3,2,2,2,2,2,2,2,2,

-----Class

1639-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][012][100][101][110][120][210]]$

--
Rules of $T[L]$:

R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
R3) 0,1,-->0,1,0,--
R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
R5) 0,0,2,-->0,1,--0,1,0,--
R6) 0,1,0,-->
R7) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
R8) 0,0,0,3,-->0,0,0,3,0,--0,1,0,--0,1,0,--
R9) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
R10) 0,0,0,0,4,-->0,0,0,0,4,0,--0,1,0,--0,1,0,--0,1,0,--
R11) 0,0,0,3,0,-->0,1,0,--0,1,0,--
R12)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,
0,0,0,0,0,6,--
R13) 0,0,0,0,0,5,-->0,0,0,0,0,5,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--
R14) 0,0,0,0,4,0,-->0,1,0,--0,1,0,--0,1,0,--
R15)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,
--0,0,0,0,0,6,--0,0,0,0,0,0,7,--
R16) 0,0,0,0,0,0,6,-->0,0,0,0,0,6,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--
R17) 0,0,0,0,0,5,0,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--
R18)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--
R19)
0,0,0,0,0,0,0,7,-->0,0,0,0,0,0,0,7,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--
0,--
R20) 0,0,0,0,0,0,6,0,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--
R21)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--
,--
R22)
0,0,0,0,0,0,0,0,8,-->0,0,0,0,0,0,0,0,8,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--
0,1,0,--0,1,0,--
R23) 0,0,0,0,0,0,0,7,0,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--
R24)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--0,0,0,0,0,0,0,0,10,--
R25)
0,0,0,0,0,0,0,0,0,9,-->0,0,0,0,0,0,0,0,0,9,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--
0,--0,1,0,--0,1,0,--0,1,0,--
R26)
0,0,0,0,0,0,0,0,8,0,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, : 0,0,2, : 0,1,0, :
LEN=4) 0,0,0,0, : 0,0,0,3, :
LEN=5) 0,0,0,0,0, : 0,0,0,0,4, : 0,0,0,3,0, :
LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,5, : 0,0,0,0,4,0, :
LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,6, : 0,0,0,0,0,5,0, :
LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,6,0, :
LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,8, : 0,0,0,0,0,0,0,7,0, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,9, : 0,0,0,0,0,0,0,0,8,0, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,10, : 0,0,0,0,0,0,0,0,0,9,0, :
Number new nodes in level n is given by : 1,2,3,2,3,3,3,3,3,3,3,3,

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1640-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[011][012][100][101][110][201][210]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
R3) 0,1,-->0,1,0,--
R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
R5) 0,0,2,-->0,1,0,--0,1,0,--
R6) 0,1,0,-->
R7) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--

R8) 0,0,0,3,-->0,1,0,--0,1,0,--0,1,0,--
 R9) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
 R10) 0,0,0,0,4,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--
 R11)
 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,
 0,0,0,0,0,6,--
 R12) 0,0,0,0,0,5,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--
 R13)
 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,
 --0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--
 R14) 0,0,0,0,0,0,6,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--
 R15)
 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,
 0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--
 R16) 0,0,0,0,0,0,0,7,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--
 R17)
 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,
 0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9
 ,--
 R18)
 0,0,0,0,0,0,0,0,8,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,
 --
 R19)
 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
 0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,
 ,0,9,--0,0,0,0,0,0,0,0,0,0,10,--
 R20)
 0,0,0,0,0,0,0,0,0,9,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,
 0,--0,1,0,--

List of different nodes in T[L]

LEN=1) 0, :
 LEN=2) 0,0, : 0,1, :
 LEN=3) 0,0,0, : 0,0,2, : 0,1,0, :
 LEN=4) 0,0,0,0, : 0,0,0,3, :
 LEN=5) 0,0,0,0,0, : 0,0,0,0,4, :
 LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,5, :
 LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,6, :
 LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,7, :
 LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,8, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,9, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,10, :
 Number new nodes in level n is given by : 1,2,3,2,2,2,2,2,2,2,2,

-----Class

1641-----
 Inversion Sequences (I_n=(n+1)!) avoiding L=[[011][012][100][101][120][201][210]]

 --

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

- R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
- R3) 0,1,-->0,1,0,--
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
- R5) 0,0,2,-->0,1,0,--0,1,0,--
- R6) 0,1,0,-->
- R7) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
- R8) 0,0,0,3,-->0,1,0,--0,1,0,--0,1,0,--
- R9) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
- R10) 0,0,0,0,4,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--
- R11) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--
- R12) 0,0,0,0,0,5,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--
- R13) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--
- R14) 0,0,0,0,0,0,6,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--
- R15) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--
- R16) 0,0,0,0,0,0,0,7,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--
- R17) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--
- R18) 0,0,0,0,0,0,0,0,8,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--
- R19) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--0,0,0,0,0,0,0,0,0,10,--
- R20) 0,0,0,0,0,0,0,0,0,9,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--

List of different nodes in T[L]

- LEN=1) 0,:
- LEN=2) 0,0,: 0,1,:
- LEN=3) 0,0,0,: 0,0,2,: 0,1,0,:
- LEN=4) 0,0,0,0,: 0,0,0,3,:
- LEN=5) 0,0,0,0,0,: 0,0,0,0,4,:
- LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,5,:
- LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,6,:
- LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,7,:
- LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,8,:
- LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,9,:
- LEN=11) 0,0,0,0,0,0,0,0,0,0,0,0,0,10,:

Number new nodes in level n is given by : 1,2,3,2,2,2,2,2,2,2,2,

-----Class

1642-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][012][100][102][110][120][201]]$

--
Rules of $T[L]$:

- R1) $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$
 - R2) $0, 0, \rightarrow 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow$
 - R3) $0, 1, \rightarrow 0, 1, 0, \rightarrow$
 - R4) $0, 0, 0, \rightarrow 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow 0, 0, 0, 3, \rightarrow$
 - R5) $0, 0, 2, \rightarrow 0, 1, 0, \rightarrow 0, 1, \rightarrow$
 - R6) $0, 1, 0, \rightarrow$
 - R7) $0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow 0, 0, 0, 3, \rightarrow 0, 0, 0, 0, 4, \rightarrow$
 - R8) $0, 0, 0, 3, \rightarrow 0, 1, 0, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow$
 - R9) $0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow 0, 0, 0, 3, \rightarrow 0, 0, 0, 0, 4, \rightarrow 0, 0, 0, 0, 0, 5, \rightarrow$
 - R10) $0, 0, 0, 0, 4, \rightarrow 0, 1, 0, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow 0, 0, 0, 3, \rightarrow$
 - R11)
 $0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow 0, 0, 0, 3, \rightarrow 0, 0, 0, 0, 4, \rightarrow 0, 0, 0, 0, 0, 5, \rightarrow 0, 0, 0, 0, 0, 6, \rightarrow$
 - R12) $0, 0, 0, 0, 0, 5, \rightarrow 0, 1, 0, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow 0, 0, 0, 3, \rightarrow 0, 0, 0, 0, 4, \rightarrow$
 - R13)
 $0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow 0, 0, 0, 3, \rightarrow 0, 0, 0, 0, 4, \rightarrow 0, 0, 0, 0, 0, 5, \rightarrow 0, 0, 0, 0, 0, 0, 6, \rightarrow 0, 0, 0, 0, 0, 0, 0, 7, \rightarrow$
 - R14) $0, 0, 0, 0, 0, 0, 6, \rightarrow 0, 1, 0, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow 0, 0, 0, 3, \rightarrow 0, 0, 0, 0, 4, \rightarrow 0, 0, 0, 0, 0, 5, \rightarrow$
 - R15)
 $0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow 0, 0, 0, 3, \rightarrow 0, 0, 0, 0, 4, \rightarrow 0, 0, 0, 0, 0, 5, \rightarrow 0, 0, 0, 0, 0, 0, 6, \rightarrow 0, 0, 0, 0, 0, 0, 0, 7, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 8, \rightarrow$
 - R16)
 $0, 0, 0, 0, 0, 0, 0, 7, \rightarrow 0, 1, 0, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow 0, 0, 0, 3, \rightarrow 0, 0, 0, 0, 4, \rightarrow 0, 0, 0, 0, 0, 5, \rightarrow 0, 0, 0, 0, 0, 6, \rightarrow$
 - R17)
 $0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow 0, 0, 0, 3, \rightarrow 0, 0, 0, 0, 4, \rightarrow 0, 0, 0, 0, 5, \rightarrow 0, 0, 0, 0, 0, 0, 6, \rightarrow 0, 0, 0, 0, 0, 0, 0, 7, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 8, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 9, \rightarrow$
 - R18)
 $0, 0, 0, 0, 0, 0, 0, 0, 8, \rightarrow 0, 1, 0, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow 0, 0, 0, 3, \rightarrow 0, 0, 0, 0, 4, \rightarrow 0, 0, 0, 0, 0, 5, \rightarrow 0, 0, 0, 0, 0, 6, \rightarrow 0, 0, 0, 0, 0, 0, 7, \rightarrow$
 - R19)
 $0, 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow 0, 0, 0, 3, \rightarrow 0, 0, 0, 0, 4, \rightarrow 0, 0, 0, 0, 0, 5, \rightarrow 0, 0, 0, 0, 0, 0, 6, \rightarrow 0, 0, 0, 0, 0, 0, 0, 7, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 8, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 9, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, 10, \rightarrow$
 - R20)
 $0, 0, 0, 0, 0, 0, 0, 0, 0, 9, \rightarrow 0, 1, 0, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow 0, 0, 0, 3, \rightarrow 0, 0, 0, 0, 4, \rightarrow 0, 0, 0, 0, 0, 5, \rightarrow 0, 0, 0, 0, 0, 6, \rightarrow 0, 0, 0, 0, 0, 0, 7, \rightarrow 0, 0, 0, 0, 0, 0, 0, 8, \rightarrow$
- List of different nodes in $T[L]$
- LEN=1) $0, :$
 - LEN=2) $0, 0, : 0, 1, :$
 - LEN=3) $0, 0, 0, : 0, 0, 2, : 0, 1, 0, :$
 - LEN=4) $0, 0, 0, 0, : 0, 0, 0, 3, :$
 - LEN=5) $0, 0, 0, 0, 0, : 0, 0, 0, 0, 4, :$
 - LEN=6) $0, 0, 0, 0, 0, 0, : 0, 0, 0, 0, 0, 5, :$

LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,6,:
 LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,7,:
 LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,8,:
 LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,9,:
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,10,:
 Number new nodes in level n is given by : 1,2,3,2,2,2,2,2,2,2,

-----Class

1643-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][012][100][102][110][120][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--
 R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
 R3) 0,1,-->0,1,0,--
 R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
 R5) 0,0,2,-->0,1,--0,1,0,--
 R6) 0,1,0,-->
 R7) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
 R8) 0,0,0,3,-->0,0,0,3,0,--0,1,0,--0,1,0,--
 R9) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
 R10) 0,0,0,0,4,-->0,0,0,0,4,0,--0,1,0,--0,1,0,--0,1,0,--
 R11) 0,0,0,3,0,-->0,1,0,--0,1,0,--
 R12)
 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,
 0,0,0,0,0,6,--
 R13) 0,0,0,0,0,5,-->0,0,0,0,0,5,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--
 R14) 0,0,0,0,4,0,-->0,1,0,--0,1,0,--0,1,0,--
 R15)
 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,
 --0,0,0,0,0,6,--0,0,0,0,0,0,7,--
 R16) 0,0,0,0,0,0,6,-->0,0,0,0,0,0,6,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--
 R17) 0,0,0,0,0,5,0,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--
 R18)
 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,
 0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--
 R19)
 0,0,0,0,0,0,0,7,-->0,0,0,0,0,0,0,7,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,
 0,--
 R20) 0,0,0,0,0,0,6,0,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--
 R21)
 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,
 0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,9,
 ,--
 R22)
 0,0,0,0,0,0,0,0,8,-->0,0,0,0,0,0,0,0,8,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--
 0,1,0,--0,1,0,--
 R23) 0,0,0,0,0,0,0,7,0,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--
 R24)

R17)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--

R18)
0,0,0,0,0,0,0,0,8,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--

R19)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--0,0,0,0,0,0,0,0,0,10,--

R20)
0,0,0,0,0,0,0,0,9,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,0,0,: 0,0,2,: 0,1,0,:

LEN=4) 0,0,0,0,: 0,0,0,3,:

LEN=5) 0,0,0,0,0,: 0,0,0,0,4,:

LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,5,:

LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,6,:

LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,7,:

LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,8,:

LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,9,:

LEN=11) 0,0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,10,:

Number new nodes in level n is given by : 1,2,3,2,2,2,2,2,2,2,2,

-----Class

1645-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][012][100][102][120][201][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,1,--0,0,2,--

R3) 0,1,-->0,1,0,--

R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--

R5) 0,0,2,-->0,1,0,--0,1,0,--

R6) 0,1,0,-->

R7) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--

R8) 0,0,0,3,-->0,1,0,--0,1,0,--0,1,0,--

R9) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--

R10) 0,0,0,0,4,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--

R11)

0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--

R12) 0,0,0,0,5,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--

R13)

0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,

--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--
R14) 0,0,0,0,0,0,6,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--
R15)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,
0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--
R16) 0,0,0,0,0,0,0,7,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--
R17)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,
0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9
,--
R18)
0,0,0,0,0,0,0,0,8,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--
--
R19)
0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,
0,9,--0,0,0,0,0,0,0,0,0,0,10,--
R20)
0,0,0,0,0,0,0,0,0,0,9,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,
0,--0,1,0,--

List of different nodes in T[L]

- LEN=1) 0,:
- LEN=2) 0,0,: 0,1,:
- LEN=3) 0,0,0,: 0,0,2,: 0,1,0,:
- LEN=4) 0,0,0,0,: 0,0,0,3,:
- LEN=5) 0,0,0,0,0,: 0,0,0,0,4,:
- LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,5,:
- LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,6,:
- LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,7,:
- LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,8,:
- LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,9,:
- LEN=11) 0,0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,10,:

Number new nodes in level n is given by : 1,2,3,2,2,2,2,2,2,2,2,2,

-----Class

1646-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][012][100][110][120][201][210]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
- R3) 0,1,-->0,1,0,--
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
- R5) 0,0,2,-->0,1,0,--0,1,0,--
- R6) 0,1,0,-->
- R7) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
- R8) 0,0,0,3,-->0,1,0,--0,1,0,--0,1,0,--
- R9) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
- R10) 0,0,0,0,4,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--

R11)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,
0,0,0,0,0,6,--
R12) 0,0,0,0,0,5,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--
R13)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,
--0,0,0,0,0,6,--0,0,0,0,0,0,7,--
R14) 0,0,0,0,0,0,6,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--
R15)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,
0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--
R16) 0,0,0,0,0,0,0,7,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--
R17)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,
0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,9
,--
R18)
0,0,0,0,0,0,0,0,8,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,
--
R19)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,
0,9,--0,0,0,0,0,0,0,0,0,0,10,--
R20)
0,0,0,0,0,0,0,0,0,9,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,
0,--0,1,0,--

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, : 0,0,2, : 0,1,0, :
LEN=4) 0,0,0,0, : 0,0,0,3, :
LEN=5) 0,0,0,0,0, : 0,0,0,0,4, :
LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,5, :
LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,6, :
LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,7, :
LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,8, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,9, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,10, :
Number new nodes in level n is given by : 1,2,3,2,2,2,2,2,2,2,2,

-----Class

1647-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][012][101][102][110][120][201]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
R3) 0,1,-->0,1,--
R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--

R5) 0,0,2,-->0,1,--0,1,--
 R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
 R7) 0,0,0,3,-->0,1,--0,1,--0,0,2,--
 R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
 R9) 0,0,0,0,4,-->0,1,--0,1,--0,0,2,--0,0,0,3,--
 R10) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--
 R11) 0,0,0,0,0,0,5,-->0,1,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
 R12) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,7,--
 R13) 0,0,0,0,0,0,6,-->0,1,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
 R14) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,7,--0,0,0,0,0,8,--
 R15) 0,0,0,0,0,0,0,7,-->0,1,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--
 R16) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,7,--0,0,0,0,0,8,--0,0,0,0,0,9,--
 R17) 0,0,0,0,0,0,0,0,8,-->0,1,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,7,--
 R18) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,7,--0,0,0,0,0,8,--0,0,0,0,0,9,--0,0,0,0,0,10,--
 R19) 0,0,0,0,0,0,0,0,0,9,-->0,1,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,7,--0,0,0,0,0,8,--

List of different nodes in T[L]

LEN=1) 0, :
 LEN=2) 0,0, : 0,1, :
 LEN=3) 0,0,0, : 0,0,2, :
 LEN=4) 0,0,0,0, : 0,0,0,3, :
 LEN=5) 0,0,0,0,0, : 0,0,0,0,4, :
 LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,5, :
 LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,6, :
 LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,7, :
 LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,8, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,9, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,10, :

Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1648-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][012][101][102][110][120][210]]$

--
Rules of T[L]:

R1) 0, -->0,0,--0,1,--

R2) 0,0, -->0,0,0,--0,1,--0,0,2,--

R3) 0,1, -->0,1,--

R4) 0,0,0, -->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--

R5) 0,0,2, -->0,0,2,--0,0,2,1,--

R6) 0,0,0,0, -->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--

R7) 0,0,0,3, -->0,0,0,3,--0,0,2,1,--0,0,2,1,--

R8) 0,0,2,1, -->

R9) 0,0,0,0,0, -->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--

R10) 0,0,0,0,4, -->0,0,0,0,4,--0,0,2,1,--0,0,2,1,--0,0,2,1,--

R11)

0,0,0,0,0,0, -->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,
0,0,0,0,0,6,--

R12) 0,0,0,0,0,5, -->0,0,0,0,0,5,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--

R13)

0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,
--0,0,0,0,0,6,--0,0,0,0,0,0,7,--

R14)

0,0,0,0,0,0,6, -->0,0,0,0,0,0,6,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--

R15)

0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,
0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--

R16)

0,0,0,0,0,0,0,7, -->0,0,0,0,0,0,0,7,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,
1,--0,0,2,1,--

R17)

0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,
0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--0,0,0,0,0,0,9

, --

R18)

0,0,0,0,0,0,0,0,8, -->0,0,0,0,0,0,0,0,8,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,
0,2,1,--0,0,2,1,--0,0,2,1,--

R19)

0,0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--0,0,0,0,0,0,9

,0,9,--0,0,0,0,0,0,0,10,--

R20)

0,0,0,0,0,0,0,0,0,9, -->0,0,0,0,0,0,0,0,0,9,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,
--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, : 0,1, :

LEN=3) 0,0,0, : 0,0,2, :

LEN=4) 0,0,0,0, : 0,0,0,3, : 0,0,2,1, :

LEN=5) 0,0,0,0,0, : 0,0,0,0,4, :

LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,5, :

LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,6, :

LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,7, :
 LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,8, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,9, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,10, :
 Number new nodes in level n is given by : 1,2,2,3,2,2,2,2,2,2,

-----Class

1649-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][012][101][102][110][201][210]]$

--
 Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
- R3) 0,1,-->0,1,--
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
- R5) 0,0,2,-->0,1,--0,0,2,1,--
- R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
- R7) 0,0,0,3,-->0,1,--0,0,2,1,--0,0,2,1,--
- R8) 0,0,2,1,-->
- R9) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
- R10) 0,0,0,0,4,-->0,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--
- R11)
 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,
 0,0,0,0,0,6,--
- R12) 0,0,0,0,0,5,-->0,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--
- R13)
 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,
 --0,0,0,0,0,6,--0,0,0,0,0,0,7,--
- R14) 0,0,0,0,0,0,6,-->0,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--
- R15)
 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,
 0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--
- R16)
 0,0,0,0,0,0,0,7,-->0,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,
 --
- R17)
 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,
 0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,9
 ,--
- R18)
 0,0,0,0,0,0,0,0,8,-->0,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,
 1,--0,0,2,1,--
- R19)
 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
 0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,
 ,0,9,--0,0,0,0,0,0,0,0,0,10,--
- R20)
 0,0,0,0,0,0,0,0,0,9,-->0,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,
 2,1,--0,0,2,1,--0,0,2,1,--

List of different nodes in T[L]

- LEN=1) 0,:
 - LEN=2) 0,0,: 0,1,:
 - LEN=3) 0,0,0,: 0,0,2,:
 - LEN=4) 0,0,0,0,: 0,0,0,3,: 0,0,2,1,:
 - LEN=5) 0,0,0,0,0,: 0,0,0,0,4,:
 - LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,5,:
 - LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,6,:
 - LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,7,:
 - LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,8,:
 - LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,9,:
 - LEN=11) 0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,10,:
- Number new nodes in level n is given by : 1,2,2,3,2,2,2,2,2,2,2,

-----Class

1650-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][012][101][102][120][201][210]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
- R3) 0,1,-->0,1,--
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
- R5) 0,0,2,-->0,1,--0,0,2,1,--
- R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
- R7) 0,0,0,3,-->0,1,--0,0,2,1,--0,0,2,1,--
- R8) 0,0,2,1,-->
- R9) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
- R10) 0,0,0,0,4,-->0,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--
- R11)
- 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--
- R12) 0,0,0,0,0,5,-->0,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--
- R13)
- 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--
- R14) 0,0,0,0,0,0,6,-->0,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--
- R15)
- 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--
- R16)
- 0,0,0,0,0,0,0,7,-->0,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--
-
- R17)
- 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,9,--
- R18)
- 0,0,0,0,0,0,0,0,8,-->0,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,

1,--0,0,2,1,--
R19)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,7,--0,0,0,0,0,8,--0,0,0,0,0,9,--0,0,0,0,0,10,--
R20)
0,0,0,0,0,0,0,0,0,9,-->0,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,
2,1,--0,0,2,1,--0,0,2,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, : 0,0,2, :
LEN=4) 0,0,0,0, : 0,0,0,3, : 0,0,2,1, :
LEN=5) 0,0,0,0,0, : 0,0,0,0,4, :
LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,5, :
LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,6, :
LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,7, :
LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,8, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,9, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,10, :
Number new nodes in level n is given by : 1,2,2,3,2,2,2,2,2,2,2,

-----Class
1651-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][012][101][110][120][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
R3) 0,1,-->0,1,--
R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
R5) 0,0,2,-->0,1,--0,0,2,1,--
R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
R7) 0,0,0,3,-->0,1,--0,0,2,1,--0,0,2,1,--
R8) 0,0,2,1,-->
R9) 0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
R10) 0,0,0,0,4,-->0,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--
R11)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,
0,0,0,0,0,6,--
R12) 0,0,0,0,0,5,-->0,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--
R13)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,
--0,0,0,0,0,6,--0,0,0,0,0,0,7,--
R14) 0,0,0,0,0,0,6,-->0,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--
R15)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,
0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--
R16)

0,0,0,0,0,0,0,7,-->0,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--

R17)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--

R18)

0,0,0,0,0,0,0,0,8,-->0,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--

R19)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--0,0,0,0,0,0,0,0,0,10,--

R20)

0,0,0,0,0,0,0,0,0,9,-->0,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,0,0,: 0,0,2,:

LEN=4) 0,0,0,0,: 0,0,0,3,: 0,0,2,1,:

LEN=5) 0,0,0,0,0,: 0,0,0,0,4,:

LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,5,:

LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,6,:

LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,7,:

LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,8,:

LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,9,:

LEN=11) 0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,10,:

Number new nodes in level n is given by : 1,2,2,3,2,2,2,2,2,2,2,2,

-----Class

1652-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[011][012][102][110][120][201][210]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,1,--0,0,2,--

R3) 0,1,-->0,1,--

R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--

R5) 0,0,2,-->0,1,--0,0,2,1,--

R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--

R7) 0,0,0,3,-->0,1,--0,0,2,1,--0,0,2,1,--

R8) 0,0,2,1,-->

R9) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--

R10) 0,0,0,0,4,-->0,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--

R11)

0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--

R12) 0,0,0,0,0,5,-->0,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--

R13)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,
--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--
R14) 0,0,0,0,0,0,6,-->0,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--
R15)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,
0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--
R16)
0,0,0,0,0,0,0,7,-->0,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,
--
R17)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,
0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--0,0,0,0,0,0,9,
,--
R18)
0,0,0,0,0,0,0,0,8,-->0,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,
1,--0,0,2,1,--
R19)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--0,0,0,0,0,0,0,
,0,9,--0,0,0,0,0,0,0,0,0,10,--
R20)
0,0,0,0,0,0,0,0,0,9,-->0,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,
2,1,--0,0,2,1,--0,0,2,1,--

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, : 0,0,2, :
LEN=4) 0,0,0,0, : 0,0,0,3, : 0,0,2,1, :
LEN=5) 0,0,0,0,0, : 0,0,0,0,4, :
LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,5, :
LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,6, :
LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,7, :
LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,8, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,9, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,10, :
Number new nodes in level n is given by : 1,2,2,3,2,2,2,2,2,2,2,

-----Class

1653-----

Inversion Sequences ($I_n=(n+1)!$) avoiding L=[[011][021][100][101][102][110][120]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
R3) 0,1,-->0,1,0,--0,1,2,--
R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
R5) 0,0,1,-->0,1,0,--0,0,1,2,--0,1,2,--
R6) 0,1,0,-->

R7) 0,1,2,-->0,1,2,--
R8) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R9) 0,0,0,1,-->0,1,0,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R10) 0,0,1,2,-->0,0,1,2,--0,1,2,--
R11) 0,0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R12) 0,0,0,0,1,-->0,1,0,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R13) 0,0,0,1,2,-->0,0,0,1,2,--0,0,1,2,--0,1,2,--
R14)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
0,0,1,--0,1,--
R15)
0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R16) 0,0,0,0,1,2,-->0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R17)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--
0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R18)
0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--
--0,0,1,2,--0,1,2,--
R19) 0,0,0,0,0,1,2,-->0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R20)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,
0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R21)
0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,
0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R22)
0,0,0,0,0,0,1,2,-->0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,
1,2,--0,1,2,--
R23)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,
--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,
--
R24)
0,0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,
1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R25)
0,0,0,0,0,0,0,1,2,-->0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,
1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R26)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,
0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,
,0,1,--0,0,0,1,--0,0,1,--0,1,--
R27)
0,0,0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,0,1,2,--0,0,0,
0,0,0,0,1,2,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--
-0,1,2,--
R28)
0,0,0,0,0,0,0,0,1,2,-->0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,1,2,--
0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--

List of different nodes in T[L]

- LEN=1) 0, :
 - LEN=2) 0,0, : 0,1, :
 - LEN=3) 0,0,0, : 0,0,1, : 0,1,0, : 0,1,2, :
 - LEN=4) 0,0,0,0, : 0,0,0,1, : 0,0,1,2, :
 - LEN=5) 0,0,0,0,0, : 0,0,0,0,1, : 0,0,0,1,2, :
 - LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, : 0,0,0,0,1,2, :
 - LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, : 0,0,0,0,0,1,2, :
 - LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,1,2, :
 - LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,1,2, :
 - LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,1,2, :
 - LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,0,1,2, :
- Number new nodes in level n is given by : 1,2,4,3,3,3,3,3,3,3,3,

-----Class

1654-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][021][100][101][102][110][201]]$

--

Rules of T[L]:

- R1) 0, -->0,0, --0,1, --
- R2) 0,0, -->0,0,0, --0,0,1, --0,1, --
- R3) 0,1, -->0,1,0, --0,1, --
- R4) 0,0,0, -->0,0,0,0, --0,0,0,1, --0,0,1, --0,1, --
- R5) 0,0,1, -->0,1,0, --0,0,1, --0,1, --
- R6) 0,1,0, -->
- R7) 0,0,0,0, -->0,0,0,0,0, --0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --
- R8) 0,0,0,1, -->0,1,0, --0,0,0,1, --0,0,1, --0,1, --
- R9) 0,0,0,0,0, -->0,0,0,0,0,0, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --
- R10) 0,0,0,0,1, -->0,1,0, --0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --
- R11)
0,0,0,0,0,0, -->0,0,0,0,0,0,0, --0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --
- R12) 0,0,0,0,0,1, -->0,1,0, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --
- R13)
0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,1, --0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,1, --
- R14)
0,0,0,0,0,0,1, -->0,1,0, --0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --
- R15)
0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,1, --0,0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,1, --
- R16)
0,0,0,0,0,0,0,1, -->0,1,0, --0,0,0,0,0,0,0,1, --0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --
- R17)
0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,1, --0,1, --

R18)
0,0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--
0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R19)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,
0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,
,0,1,--0,0,0,1,--0,0,1,--0,1,--

R20)
0,0,0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,
0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

List of different nodes in T[L]

- LEN=1) 0,:
 - LEN=2) 0,0,: 0,1,:
 - LEN=3) 0,0,0,: 0,0,1,: 0,1,0,:
 - LEN=4) 0,0,0,0,: 0,0,0,1,:
 - LEN=5) 0,0,0,0,0,: 0,0,0,0,1,:
 - LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,1,:
 - LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,1,:
 - LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,1,:
 - LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,1,:
 - LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,1,:
 - LEN=11) 0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,1,:
- Number new nodes in level n is given by : 1,2,3,2,2,2,2,2,2,2,2,

-----Class

1655-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][021][100][101][102][110][210]]$

--
Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
- R3) 0,1,-->0,1,0,--0,1,--
- R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
- R5) 0,0,1,-->0,1,0,--0,0,1,--0,1,--
- R6) 0,1,0,-->
- R7) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R8) 0,0,0,1,-->0,1,0,--0,0,0,1,--0,0,1,--0,1,--
- R9) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,1,--
- R10) 0,0,0,0,1,-->0,1,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R11)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
0,0,1,--0,1,--
- R12) 0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R13)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--
0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R14)
0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
--0,1,--

R11) 0,0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 R12) 0,0,0,0,1,-->0,1,0,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
 R13) 0,0,0,1,2,-->0,0,0,1,2,--0,0,1,2,--0,1,2,--
 R14)
 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
 0,0,1,--0,1,--
 R15)
 0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
 R16) 0,0,0,0,1,2,-->0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
 R17)
 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--
 0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 R18)
 0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--
 --0,0,1,2,--0,1,2,--
 R19) 0,0,0,0,0,1,2,-->0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
 R20)
 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,
 0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 R21)
 0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,
 0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
 R22)
 0,0,0,0,0,0,1,2,-->0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,
 1,2,--0,1,2,--
 R23)
 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,
 --0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 ,--
 R24)
 0,0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,
 1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
 R25)
 0,0,0,0,0,0,0,1,2,-->0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,
 1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
 R26)
 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,
 0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,
 ,0,1,--0,0,0,1,--0,0,1,--0,1,--
 R27)
 0,0,0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,0,1,2,--0,0,0,
 0,0,0,0,1,2,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--
 -0,1,2,--
 R28)
 0,0,0,0,0,0,0,0,1,2,-->0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,2,--
 0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--

List of different nodes in T[L]
 LEN=1) 0,
 LEN=2) 0,0, 0,1,
 LEN=3) 0,0,0, 0,0,1, 0,1,0, 0,1,2,

LEN=4) 0,0,0,0,: 0,0,0,1,: 0,0,1,2,:
 LEN=5) 0,0,0,0,0,: 0,0,0,0,1,: 0,0,0,1,2,:
 LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,1,: 0,0,0,0,1,2,:
 LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,1,: 0,0,0,0,0,1,2,:
 LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,1,2,:
 LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,1,2,:
 LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,0,1,2,:
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,0,0,1,2,:
 Number new nodes in level n is given by : 1,2,4,3,3,3,3,3,3,3,3,

-----Class

1657-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][021][100][101][102][120][210]]$

--

Rules of $T[L]$:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
- R3) 0,1,-->0,1,0,--0,1,2,--
- R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
- R5) 0,0,1,-->0,1,0,--0,0,1,2,--0,1,2,--
- R6) 0,1,0,-->
- R7) 0,1,2,-->0,1,2,--
- R8) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R9) 0,0,0,1,-->0,1,0,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
- R10) 0,0,1,2,-->0,0,1,2,--0,1,2,--
- R11) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R12) 0,0,0,0,1,-->0,1,0,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
- R13) 0,0,0,1,2,-->0,0,0,1,2,--0,0,1,2,--0,1,2,--
- R14)
- 0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--
- R15)
- 0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
- R16) 0,0,0,0,1,2,-->0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
- R17)
- 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--
- R18)
- 0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--
- R19) 0,0,0,0,0,1,2,-->0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
- R20)
- 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--
- R21)
- 0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--
- R22)
- 0,0,0,0,0,0,1,2,-->0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,0,1,2,--

1,2,--0,1,2,--
R23)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,0,1,
--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,
,--
R24)
0,0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,
1,2,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,1,2,--0,1,2,--
R25)
0,0,0,0,0,0,0,1,2,-->0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,0,
1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,1,2,--
R26)
0,0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,
0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,
,0,1,--0,0,0,1,--0,0,1,--0,1,--
R27)
0,0,0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,0,0,1,2,--0,0,0,
0,0,0,0,1,2,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--
-0,1,2,--
R28)
0,0,0,0,0,0,0,0,1,2,-->0,0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,1,2,--
0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,1,2,--0,1,2,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, : 0,0,1, : 0,1,0, : 0,1,2, :
LEN=4) 0,0,0,0, : 0,0,0,1, : 0,0,1,2, :
LEN=5) 0,0,0,0,0, : 0,0,0,0,1, : 0,0,0,1,2, :
LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, : 0,0,0,0,1,2, :
LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, : 0,0,0,0,0,1,2, :
LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,1,2, :
LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,1,2, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,1,2, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,0,1,2, :
Number new nodes in level n is given by : 1,2,4,3,3,3,3,3,3,3,3,

-----Class
1658-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[011][021][100][101][102][201][210]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
R3) 0,1,-->0,1,0,--0,1,--
R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
R5) 0,0,1,-->0,1,0,--0,0,1,--0,1,--
R6) 0,1,0,-->
R7) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R8) 0,0,0,1,-->0,1,0,--0,0,0,1,--0,0,1,--0,1,--

R9) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R10) 0,0,0,0,1,-->0,1,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R11)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
0,0,1,--0,1,--
R12) 0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R13)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--
0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R14)
0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,
--0,1,--
R15)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,
0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R16)
0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,
1,--0,0,0,1,--0,0,1,--0,1,--
R17)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,
--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,0,1,--0,1,
--
R18)
0,0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--
0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R19)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,
0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,
,0,1,--0,0,0,1,--0,0,1,--0,1,--
R20)
0,0,0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,
0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, : 0,0,1, : 0,1,0, :
LEN=4) 0,0,0,0, : 0,0,0,1, :
LEN=5) 0,0,0,0,0, : 0,0,0,0,1, :
LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, :
LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, :
LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, :
LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, :

Number new nodes in level n is given by : 1,2,3,2,2,2,2,2,2,2,2,

-----Class

1659-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011]][021][100][101][110][120][201]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,0,1,--0,1,--

R3) 0,1,-->0,1,--0,1,2,--

R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--

R5) 0,0,1,-->0,0,1,--0,1,--0,1,2,--

R6) 0,1,2,-->0,1,2,--

R7) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R8) 0,0,0,1,-->0,0,0,1,--0,0,1,--0,1,--0,1,2,--

R9) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R10) 0,0,0,0,1,-->0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--0,1,2,--

R11)

0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R12) 0,0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--0,1,2,--

R13)

0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,1,--

0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R14)

0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--0,1,--0,1,2,--

R15)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,1,--0,1,--0,1,2,--

R16)

0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,2,--

R17)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,1,--0,1,2,--

R18)

0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,1,2,--

R19)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,2,--

0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,1,--0,1,--0,1,2,--

R20)

0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,2,--

0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--0,1,2,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, : 0,1, :

LEN=3) 0,0,0, : 0,0,1, : 0,1,2, :

LEN=4) 0,0,0,0, : 0,0,0,1, :

LEN=5) 0,0,0,0,0, : 0,0,0,0,1, :

LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, :

LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, :

LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, :
 LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, :
 Number new nodes in level n is given by : 1,2,3,2,2,2,2,2,2,2,

-----Class

1660-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][021][100][101][110][120][210]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
- R3) 0,1,-->0,1,--0,1,2,--
- R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
- R5) 0,0,1,-->0,0,1,--0,1,--0,1,2,--
- R6) 0,1,2,-->0,1,2,--
- R7) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R8) 0,0,0,1,-->0,0,0,1,--0,0,1,--0,1,--0,1,2,--
- R9) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--
- R10) 0,0,0,0,1,-->0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--0,1,2,--
- R11) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R12) 0,0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--0,1,2,--
- R13) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R14) 0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--0,1,2,--
- R15) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R16) 0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--0,1,2,--
- R17) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--0,1,2,--
- R18) 0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--0,1,2,--
- R19) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R20)

0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--
0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--0,1,2,--

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, : 0,1, :
- LEN=3) 0,0,0, : 0,0,1, : 0,1,2, :
- LEN=4) 0,0,0,0, : 0,0,0,1, :
- LEN=5) 0,0,0,0,0, : 0,0,0,0,1, :
- LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, :
- LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, :
- LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, :
- LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, :
- LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, :
- LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, :

Number new nodes in level n is given by : 1,2,3,2,2,2,2,2,2,2,2,

-----Class

1661-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[011][021][100][101][110][201][210]]

Rules of T[L]:

- R1) 0, -->0,0, --0,1, --
- R2) 0,0, -->0,0,0, --0,0,1, --0,1, --
- R3) 0,1, -->0,1,0, --0,1, --
- R4) 0,0,0, -->0,0,0,0, --0,0,0,1, --0,0,1, --0,1, --
- R5) 0,0,1, -->0,0,1,0, --0,0,1, --0,1, --
- R6) 0,1,0, -->0,1,0, --0,1,0,3, --
- R7) 0,0,0,0, -->0,0,0,0,0, --0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --
- R8) 0,0,0,1, -->0,0,0,1,0, --0,0,0,1, --0,0,1, --0,1, --
- R9) 0,0,1,0, -->0,0,1,0, --0,1,0, --0,1,0,3, --
- R10) 0,1,0,3, -->0,1,0,3, --
- R11) 0,0,0,0,0, -->0,0,0,0,0,0, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --
- R12) 0,0,0,0,1, -->0,0,0,0,1,0, --0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --
- R13) 0,0,0,1,0, -->0,0,0,1,0, --0,0,1,0, --0,1,0, --0,1,0,3, --
- R14)
- 0,0,0,0,0,0, -->0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,1, --0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,1, --
- R15)
- 0,0,0,0,0,1, -->0,0,0,0,0,0,1,0, --0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,1, --0,1, --
- R16) 0,0,0,0,1,0, -->0,0,0,0,1,0, --0,0,0,0,1,0, --0,0,1,0, --0,1,0, --0,1,0,3, --
- R17)
- 0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,1, --0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,1, --
- R18)
- 0,0,0,0,0,0,1, -->0,0,0,0,0,0,0,1,0, --0,0,0,0,0,0,0,1, --0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,1, --0,1, --
- R19)
- 0,0,0,0,0,1,0, -->0,0,0,0,0,0,1,0, --0,0,0,0,0,1,0, --0,0,0,0,1,0, --0,0,1,0, --0,1,0, --0,1,0,3, --

R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
R3) 0,1,-->0,1,--0,1,2,--
R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
R5) 0,0,1,-->0,0,1,--0,1,--0,1,2,--
R6) 0,1,2,-->0,1,2,--
R7) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R8) 0,0,0,1,-->0,0,0,1,--0,0,1,--0,1,--0,1,2,--
R9) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--
R10) 0,0,0,0,1,-->0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--0,1,2,--
R11)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
0,0,1,--0,1,--
R12) 0,0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--0,1,2,--
R13)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--
0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R14)
0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,1,--0,1,--
0,1,2,--
R15)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,
0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R16)
0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,
0,1,--0,0,1,--0,1,--0,1,2,--
R17)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,
--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,
--
R18)
0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,
0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--0,1,2,--
R19)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,
0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,
,0,1,--0,0,0,1,--0,0,1,--0,1,--
R20)
0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--
0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--0,1,2,--

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, : 0,0,1, : 0,1,2, :
LEN=4) 0,0,0,0, : 0,0,0,1, :
LEN=5) 0,0,0,0,0, : 0,0,0,0,1, :
LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, :
LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, :
LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, :
LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, :

LEN=10) 0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,:
LEN=11) 0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,:
Number new nodes in level n is given by : 1,2,3,2,2,2,2,2,2,2,2,2,

-----Class

1663-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[011][021][100][102][110][120][201]$

Rules of $T[L]$:

- R1) 0, -->0,0,--0,1,--
- R2) 0,0, -->0,0,0,--0,0,1,--0,1,--
- R3) 0,1, -->0,1,0,--0,1,2,--
- R4) 0,0,0, -->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
- R5) 0,0,1, -->0,1,0,--0,0,1,2,--0,1,2,--
- R6) 0,1,0, -->
- R7) 0,1,2, -->0,1,2,--
- R8) 0,0,0,0, -->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R9) 0,0,0,1, -->0,1,0,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
- R10) 0,0,1,2, -->0,0,1,2,--0,1,2,--
- R11) 0,0,0,0,0, -->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R12) 0,0,0,0,1, -->0,1,0,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
- R13) 0,0,0,1,2, -->0,0,0,1,2,--0,0,1,2,--0,1,2,--
- R14) 0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R15) 0,0,0,0,0,1, -->0,1,0,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
- R16) 0,0,0,0,1,2, -->0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
- R17) 0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--
- R18) 0,0,0,0,0,0,1, -->0,1,0,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
- R19) 0,0,0,0,0,1,2, -->0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
- R20) 0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--
- R21) 0,0,0,0,0,0,0,1, -->0,1,0,--0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
- R22) 0,0,0,0,0,0,1,2, -->0,0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
- R23) 0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--
- R24) 0,0,0,0,0,0,0,1, -->0,1,0,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--

0,0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,
1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R25)

0,0,0,0,0,0,0,1,2,-->0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,
1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R26)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,
0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,
0,1,--0,0,0,1,--0,0,1,--0,1,--
R27)

0,0,0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,0,1,2,--0,0,0,
0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--
-0,1,2,--
R28)

0,0,0,0,0,0,0,0,1,2,-->0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,2,--
0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, : 0,0,1, : 0,1,0, : 0,1,2, :
LEN=4) 0,0,0,0, : 0,0,0,1, : 0,0,1,2, :
LEN=5) 0,0,0,0,0, : 0,0,0,0,1, : 0,0,0,1,2, :
LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, : 0,0,0,0,1,2, :
LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, : 0,0,0,0,0,1,2, :
LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,1,2, :
LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,1,2, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,1,2, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,0,1,2, :
Number new nodes in level n is given by : 1,2,4,3,3,3,3,3,3,3,3,

-----Class
1664-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[011][021][100][102][110][120][210]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
R3) 0,1,-->0,1,0,--0,1,2,--
R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
R5) 0,0,1,-->0,1,0,--0,0,1,2,--0,1,2,--
R6) 0,1,0,-->
R7) 0,1,2,-->0,1,2,--
R8) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R9) 0,0,0,1,-->0,1,0,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R10) 0,0,1,2,-->0,0,1,2,--0,1,2,--
R11) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R12) 0,0,0,0,1,-->0,1,0,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R13) 0,0,0,1,2,-->0,0,0,1,2,--0,0,1,2,--0,1,2,--
R14)

0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,1,--

R15)

0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R16) 0,0,0,0,1,2,-->0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--

R17)

0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--
0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R18)

0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,0,1,2,--
--0,0,1,2,--0,1,2,--

R19) 0,0,0,0,0,1,2,-->0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R20)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--
0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R21)

0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--
0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--

R22)

0,0,0,0,0,0,1,2,-->0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
1,2,--0,1,2,--

R23)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--
--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--0,1,--
,--

R24)

0,0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,2,--
1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--

R25)

0,0,0,0,0,0,0,1,2,-->0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--
1,2,--0,0,0,0,1,2,--0,0,1,2,--0,1,2,--

R26)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--
0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,0,1,--
0,1,--0,0,0,1,--0,0,1,--0,1,--

R27)

0,0,0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,1,2,--
0,0,0,0,1,2,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--
-0,1,2,--

R28)

0,0,0,0,0,0,0,0,1,2,-->0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,2,--
0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, : 0,1, :
- LEN=3) 0,0,0, : 0,0,1, : 0,1,0, : 0,1,2, :
- LEN=4) 0,0,0,0, : 0,0,0,1, : 0,0,1,2, :
- LEN=5) 0,0,0,0,0, : 0,0,0,0,1, : 0,0,0,1,2, :
- LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, : 0,0,0,0,1,2, :
- LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, : 0,0,0,0,0,1,2, :

LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,1,2, :
 LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,1,2, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,1,2, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,1,2, :
 Number new nodes in level n is given by : 1,2,4,3,3,3,3,3,3,3,

-----Class

1665-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][021][100][102][110][201][210]]$

- Rules of T[L]:
 R1) 0,-->0,0,--0,1,--
 R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
 R3) 0,1,-->0,1,0,--0,1,--
 R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
 R5) 0,0,1,-->0,1,0,--0,0,1,--0,1,--
 R6) 0,1,0,-->
 R7) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 R8) 0,0,0,1,-->0,1,0,--0,0,0,1,--0,0,1,--0,1,--
 R9) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--
 R10) 0,0,0,0,1,-->0,1,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 R11)
 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
 0,0,1,--0,1,--
 R12) 0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--
 R13)
 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--
 0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 R14)
 0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 --0,1,--
 R15)
 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,
 0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 R16)
 0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,
 1,--0,0,0,1,--0,0,1,--0,1,--
 R17)
 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,
 --0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 ,--
 R18)
 0,0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--
 0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
 R19)
 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,
 0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,
 ,0,1,--0,0,0,1,--0,0,1,--0,1,--
 R20)

0,0,0,0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,
0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, : 0,1, :
- LEN=3) 0,0,0, : 0,0,1, : 0,1,0, :
- LEN=4) 0,0,0,0, : 0,0,0,1, :
- LEN=5) 0,0,0,0,0, : 0,0,0,0,1, :
- LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, :
- LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, :
- LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, :
- LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, :
- LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, :
- LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, :

Number new nodes in level n is given by : 1,2,3,2,2,2,2,2,2,2,2,

-----Class

1666-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][021][100][102][120][201][210]]$

--

Rules of T[L]:

- R1) 0, -->0,0, --0,1, --
- R2) 0,0, -->0,0,0, --0,0,1, --0,1, --
- R3) 0,1, -->0,1,0, --0,1,2, --
- R4) 0,0,0, -->0,0,0,0, --0,0,0,1, --0,0,1, --0,1, --
- R5) 0,0,1, -->0,1,0, --0,0,1,2, --0,1,2, --
- R6) 0,1,0, -->
- R7) 0,1,2, -->0,1,2, --
- R8) 0,0,0,0, -->0,0,0,0,0, --0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --
- R9) 0,0,0,1, -->0,1,0, --0,0,0,1,2, --0,0,1,2, --0,1,2, --
- R10) 0,0,1,2, -->0,0,1,2, --0,1,2, --
- R11) 0,0,0,0,0, -->0,0,0,0,0,0, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --
- R12) 0,0,0,0,1, -->0,1,0, --0,0,0,0,1,2, --0,0,0,1,2, --0,0,1,2, --0,1,2, --
- R13) 0,0,0,1,2, -->0,0,0,1,2, --0,0,1,2, --0,1,2, --
- R14)
0,0,0,0,0,0, -->0,0,0,0,0,0,0,0, --0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --
- R15)
0,0,0,0,0,1, -->0,1,0, --0,0,0,0,0,1,2, --0,0,0,0,1,2, --0,0,0,1,2, --0,0,1,2, --0,1,2, --
- R16) 0,0,0,0,1,2, -->0,0,0,0,1,2, --0,0,0,1,2, --0,0,1,2, --0,1,2, --
- R17)
0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,1, --0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,1, --
- R18)
0,0,0,0,0,0,1, -->0,1,0, --0,0,0,0,0,0,1,2, --0,0,0,0,0,1,2, --0,0,0,0,1,2, --0,0,0,1,2, --0,0,1,2, --
- R19) 0,0,0,0,0,1,2, -->0,0,0,0,0,1,2, --0,0,0,0,1,2, --0,0,0,1,2, --0,0,1,2, --0,1,2, --
- R20)
0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,1, --0,0,0,0,

$0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --$
 R21)
 $0,0,0,0,0,0,0,1, -->0,1,0, --0,0,0,0,0,0,0,1,2, --0,0,0,0,0,0,1,2, --0,0,0,0,0,1,2, --0,$
 $0,0,0,1,2, --0,0,0,1,2, --0,0,1,2, --0,1,2, --$
 R22)
 $0,0,0,0,0,0,1,2, -->0,0,0,0,0,0,1,2, --0,0,0,0,0,1,2, --0,0,0,0,1,2, --0,0,$
 $1,2, --0,1,2, --$
 R23)
 $0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,0,1,$
 $--0,0,0,0,0,0,0,1, --0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --0,1$
 $, --$
 R24)
 $0,0,0,0,0,0,0,0,1, -->0,1,0, --0,0,0,0,0,0,0,0,1,2, --0,0,0,0,0,0,0,1,2, --0,0,0,0,0,0,$
 $1,2, --0,0,0,0,0,1,2, --0,0,0,0,1,2, --0,0,0,1,2, --0,0,1,2, --0,1,2, --$
 R25)
 $0,0,0,0,0,0,0,1,2, -->0,0,0,0,0,0,0,1,2, --0,0,0,0,0,0,1,2, --0,0,0,0,0,1,2, --0,0,0,0,$
 $1,2, --0,0,0,1,2, --0,0,1,2, --0,1,2, --$
 R26)
 $0,0,0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,$
 $0,0,0,1, --0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,1, --0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,$
 $0,1, --0,0,0,1, --0,0,1, --0,1, --$
 R27)
 $0,0,0,0,0,0,0,0,0,1, -->0,1,0, --0,0,0,0,0,0,0,0,0,1,2, --0,0,0,0,0,0,0,0,1,2, --0,0,0,$
 $0,0,0,0,1,2, --0,0,0,0,0,0,1,2, --0,0,0,0,0,1,2, --0,0,0,0,1,2, --0,0,0,1,2, --$
 $-0,1,2, --$
 R28)
 $0,0,0,0,0,0,0,0,1,2, -->0,0,0,0,0,0,0,0,1,2, --0,0,0,0,0,0,0,1,2, --0,0,0,0,0,0,1,2, --$
 $0,0,0,0,0,1,2, --0,0,0,0,1,2, --0,0,0,1,2, --0,0,1,2, --0,1,2, --$
 List of different nodes in $T[L]$
 LEN=1) $0, :$
 LEN=2) $0,0, : 0,1, :$
 LEN=3) $0,0,0, : 0,0,1, : 0,1,0, : 0,1,2, :$
 LEN=4) $0,0,0,0, : 0,0,0,1, : 0,0,1,2, :$
 LEN=5) $0,0,0,0,0, : 0,0,0,0,1, : 0,0,0,1,2, :$
 LEN=6) $0,0,0,0,0,0, : 0,0,0,0,0,1, : 0,0,0,0,1,2, :$
 LEN=7) $0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, : 0,0,0,0,0,1,2, :$
 LEN=8) $0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,1,2, :$
 LEN=9) $0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,1,2, :$
 LEN=10) $0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,1,2, :$
 LEN=11) $0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,0,1,2, :$
 Number new nodes in level n is given by : 1,2,4,3,3,3,3,3,3,3,3,

-----Class
 1667-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][021][100][110][120][201][210]]$

 --
 Rules of $T[L]$:
 R1) $0, -->0,0, --0,1, --$
 R2) $0,0, -->0,0,0, --0,0,1, --0,1, --$

- R3) 0,1,-->0,1,--0,1,2,--
- R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
- R5) 0,0,1,-->0,0,1,--0,1,--0,1,2,--
- R6) 0,1,2,-->0,1,2,--
- R7) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R8) 0,0,0,1,-->0,0,0,1,--0,0,1,--0,1,--0,1,2,--
- R9) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R10) 0,0,0,0,1,-->0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--0,1,2,--
- R11) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R12) 0,0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--0,1,2,--
- R13) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R14) 0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--0,1,2,--
- R15) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R16) 0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--0,1,2,--
- R17) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--0,1,2,--
- R18) 0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--0,1,2,--
- R19) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--0,1,2,--
- R20) 0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--0,1,2,--

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, : 0,1, :
- LEN=3) 0,0,0, : 0,0,1, : 0,1,2, :
- LEN=4) 0,0,0,0, : 0,0,0,1, :
- LEN=5) 0,0,0,0,0, : 0,0,0,0,1, :
- LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, :
- LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, :
- LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, :
- LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, :
- LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, :
- LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, :

Number new nodes in level n is given by : 1,2,3,2,2,2,2,2,2,2,2,

-----Class

1668-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][021][101][102][110][120][201]]$

--

Rules of $T[L]$:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
- R3) 0,1,-->0,1,0,--0,1,0,--
- R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
- R5) 0,0,1,-->0,1,0,--0,0,1,2,--0,1,0,--
- R6) 0,1,0,-->0,1,0,--
- R7) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R8) 0,0,0,1,-->0,1,0,--0,0,0,1,2,--0,0,1,2,--0,1,0,--
- R9) 0,0,1,2,-->0,0,1,2,--0,1,0,--
- R10) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,1,--
- R11) 0,0,0,0,1,-->0,1,0,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,0,--
- R12) 0,0,0,1,2,-->0,0,0,1,2,--0,0,1,2,--0,1,0,--
- R13)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,1,--
- R14)
0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,0,--
- R15) 0,0,0,0,1,2,-->0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,0,--
- R16)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,1,--
- R17)
0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,0,1,2,--0,1,0,--
- R18) 0,0,0,0,0,1,2,-->0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,0,--
- R19)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,1,--
- R20)
0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,0,--
- R21)
0,0,0,0,0,0,1,2,-->0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,0,--
- R22)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,1,--
- R23)
0,0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,0,--
- R24)

0,0,0,0,0,0,0,1,2,-->0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,0,--

R25)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--

R26)

0,0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,1,2,--0,1,0,--

R27)

0,0,0,0,0,0,0,0,1,2,-->0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,1,2,--0,1,0,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, : 0,1, :

LEN=3) 0,0,0, : 0,0,1, : 0,1,0, :

LEN=4) 0,0,0,0, : 0,0,0,1, : 0,0,1,2, :

LEN=5) 0,0,0,0,0, : 0,0,0,0,1, : 0,0,0,1,2, :

LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, : 0,0,0,0,1,2, :

LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, : 0,0,0,0,0,1,2, :

LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,1,2, :

LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,1,2, :

LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,1,2, :

LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,0,1,2, :

Number new nodes in level n is given by : 1,2,3,3,3,3,3,3,3,3,3,

-----Class

1669-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[011][021][101][102][110][120][210]]

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,0,1,--0,1,--

R3) 0,1,-->0,1,0,--0,1,0,--

R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--

R5) 0,0,1,-->0,1,0,--0,0,1,2,--0,1,0,--

R6) 0,1,0,-->0,1,0,--

R7) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R8) 0,0,0,1,-->0,1,0,--0,0,0,1,2,--0,0,1,2,--0,1,0,--

R9) 0,0,1,2,-->0,0,1,2,--0,1,0,--

R10) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R11) 0,0,0,0,1,-->0,1,0,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,0,--

R12) 0,0,0,1,2,-->0,0,0,1,2,--0,0,1,2,--0,1,0,--

R13)

0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R14)

0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,0,--

R15) 0,0,0,0,1,2,-->0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,0,--
R16)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--
0,0,0,1,--0,0,1,--0,0,1,--0,1,--
R17)
0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,0,1,2,
--0,0,1,2,--0,1,0,--
R18) 0,0,0,0,0,1,2,-->0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,0,--
R19)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,
0,0,1,--0,0,0,1,--0,0,0,1,--0,0,1,--0,0,1,--0,1,--
R20)
0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,0,1,2,--0,
0,0,1,2,--0,0,1,2,--0,0,1,2,--0,1,0,--
R21)
0,0,0,0,0,1,2,-->0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,0,
1,2,--0,1,0,--
R22)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,0,1,
--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--0,1,
--
R23)
0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,0,
1,2,--0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,0,1,2,--0,1,0,--
R24)
0,0,0,0,0,1,2,-->0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,0,
1,2,--0,0,1,2,--0,0,1,2,--0,1,0,--
R25)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,
0,0,1,--0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,
,0,1,--0,0,1,--0,0,1,--0,1,--
R26)
0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,2,--0,0,0,
0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,0,1,2,-
-0,1,0,--
R27)
0,0,0,0,0,0,1,2,-->0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--
0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,0,1,2,--0,1,0,--

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, : 0,0,1, : 0,1,0, :
LEN=4) 0,0,0,0, : 0,0,0,1, : 0,0,1,2, :
LEN=5) 0,0,0,0,0, : 0,0,0,0,1, : 0,0,0,1,2, :
LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, : 0,0,0,0,1,2, :
LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, : 0,0,0,0,0,1,2, :
LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,1,2, :
LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,1,2, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,1,2, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,0,1,2, :

Number new nodes in level n is given by : 1,2,3,3,3,3,3,3,3,3,3,

-----Class

1670-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][021][101][102][110][201][210]]$

--

Rules of $T[L]$:

R1) $0, \rightarrow 0,0, \rightarrow 0,1, \rightarrow$

R2) $0,0, \rightarrow 0,0,0, \rightarrow 0,0,1, \rightarrow 0,1, \rightarrow$

R3) $0,1, \rightarrow 0,1,0, \rightarrow 0,1, \rightarrow$

R4) $0,0,0, \rightarrow 0,0,0,0, \rightarrow 0,0,0,1, \rightarrow 0,0,1, \rightarrow 0,1, \rightarrow$

R5) $0,0,1, \rightarrow 0,1,0, \rightarrow 0,0,1, \rightarrow 0,1, \rightarrow$

R6) $0,1,0, \rightarrow 0,1,0, \rightarrow$

R7) $0,0,0,0, \rightarrow 0,0,0,0,0, \rightarrow 0,0,0,0,1, \rightarrow 0,0,0,1, \rightarrow 0,0,1, \rightarrow 0,1, \rightarrow$

R8) $0,0,0,1, \rightarrow 0,1,0, \rightarrow 0,0,0,1, \rightarrow 0,0,1, \rightarrow 0,1, \rightarrow$

R9) $0,0,0,0,0, \rightarrow 0,0,0,0,0,0, \rightarrow 0,0,0,0,0,1, \rightarrow 0,0,0,0,1, \rightarrow 0,0,0,1, \rightarrow 0,0,1, \rightarrow 0,1, \rightarrow$

R10) $0,0,0,0,1, \rightarrow 0,1,0, \rightarrow 0,0,0,0,1, \rightarrow 0,0,0,1, \rightarrow 0,0,1, \rightarrow 0,1, \rightarrow$

R11)

$0,0,0,0,0,0, \rightarrow 0,0,0,0,0,0,0, \rightarrow 0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,1, \rightarrow 0,0,0,0,1, \rightarrow 0,0,0,0,1, \rightarrow$

$0,0,1, \rightarrow 0,1, \rightarrow$

R12) $0,0,0,0,0,1, \rightarrow 0,1,0, \rightarrow 0,0,0,0,0,1, \rightarrow 0,0,0,0,1, \rightarrow 0,0,0,1, \rightarrow 0,0,1, \rightarrow 0,1, \rightarrow$

R13)

$0,0,0,0,0,0,0, \rightarrow 0,0,0,0,0,0,0,0, \rightarrow 0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,1, \rightarrow 0,0,0,0,0,1, \rightarrow$

$0,0,0,0,1, \rightarrow 0,0,0,1, \rightarrow 0,0,1, \rightarrow 0,1, \rightarrow$

R14)

$0,0,0,0,0,0,1, \rightarrow 0,1,0, \rightarrow 0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,1, \rightarrow 0,0,0,0,1, \rightarrow 0,0,0,1, \rightarrow 0,0,1, \rightarrow 0,0,1, \rightarrow$

$\rightarrow 0,1, \rightarrow$

R15)

$0,0,0,0,0,0,0,0, \rightarrow 0,0,0,0,0,0,0,0,0, \rightarrow 0,0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0, \rightarrow$

$0,0,0,1, \rightarrow 0,0,0,0,0,1, \rightarrow 0,0,0,0,1, \rightarrow 0,0,0,1, \rightarrow 0,0,1, \rightarrow 0,1, \rightarrow$

R16)

$0,0,0,0,0,0,0,1, \rightarrow 0,1,0, \rightarrow 0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,1, \rightarrow 0,0,0,0, \rightarrow$

$1, \rightarrow 0,0,0,1, \rightarrow 0,0,1, \rightarrow 0,1, \rightarrow$

R17)

$0,0,0,0,0,0,0,0,0, \rightarrow 0,0,0,0,0,0,0,0,0,0, \rightarrow 0,0,0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,0,1, \rightarrow$

$\rightarrow 0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,1, \rightarrow 0,0,0,0,1, \rightarrow 0,0,0,1, \rightarrow 0,0,1, \rightarrow 0,0,1, \rightarrow 0,0,1, \rightarrow 0,0,1, \rightarrow$

\rightarrow

R18)

$0,0,0,0,0,0,0,0,1, \rightarrow 0,1,0, \rightarrow 0,0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,0,1, \rightarrow$

$0,0,0,0,0,1, \rightarrow 0,0,0,0,1, \rightarrow 0,0,0,1, \rightarrow 0,0,1, \rightarrow 0,0,1, \rightarrow 0,1, \rightarrow$

R19)

$0,0,0,0,0,0,0,0,0, \rightarrow 0,0,0,0,0,0,0,0,0,0, \rightarrow 0,0,0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,0, \rightarrow$

$0,0,0,1, \rightarrow 0,0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,1, \rightarrow 0,0,0,0, \rightarrow$

$0,1, \rightarrow 0,0,0,1, \rightarrow 0,0,1, \rightarrow 0,1, \rightarrow$

R20)

$0,0,0,0,0,0,0,0,0,1, \rightarrow 0,1,0, \rightarrow 0,0,0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0, \rightarrow$

$0,0,1, \rightarrow 0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,1, \rightarrow 0,0,0,0,1, \rightarrow 0,0,0,1, \rightarrow 0,0,1, \rightarrow 0,0,1, \rightarrow$

List of different nodes in $T[L]$

LEN=1) $0, :$

LEN=2) 0,0,: 0,1,:
 LEN=3) 0,0,0,: 0,0,1,: 0,1,0,:
 LEN=4) 0,0,0,0,: 0,0,0,1,:
 LEN=5) 0,0,0,0,0,: 0,0,0,0,1,:
 LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,1,:
 LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,1,:
 LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,1,:
 LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,1,:
 LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,1,:
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,1,:
 Number new nodes in level n is given by : 1,2,3,2,2,2,2,2,2,2,2,

-----Class

1671-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][021][101][102][120][201][210]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
- R3) 0,1,-->0,1,0,--0,1,0,--
- R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
- R5) 0,0,1,-->0,1,0,--0,0,1,2,--0,1,0,--
- R6) 0,1,0,-->0,1,0,--
- R7) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R8) 0,0,0,1,-->0,1,0,--0,0,0,1,2,--0,0,1,2,--0,1,0,--
- R9) 0,0,1,2,-->0,0,1,2,--0,1,0,--
- R10) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R11) 0,0,0,0,1,-->0,1,0,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,0,--
- R12) 0,0,0,1,2,-->0,0,0,1,2,--0,0,1,2,--0,1,0,--
- R13)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R14)
0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,0,--
- R15) 0,0,0,0,1,2,-->0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,0,--
- R16)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--
- R17)
0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,0,--
- R18) 0,0,0,0,0,1,2,-->0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,0,--
- R19)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,1,--
- R20)
0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,0,--
- R21)

0,0,0,0,0,0,1,2,-->0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,0,--

R22)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--0,1,--

R23)

0,0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,1,2,--0,1,0,--

R24)

0,0,0,0,0,0,0,0,1,2,-->0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,1,2,--0,1,0,--

R25)

0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R26)

0,0,0,0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,1,2,--0,1,0,--

R27)

0,0,0,0,0,0,0,0,0,1,2,-->0,0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,1,2,--0,1,0,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,0,0,: 0,0,1,: 0,1,0,:

LEN=4) 0,0,0,0,: 0,0,0,1,: 0,0,1,2,:

LEN=5) 0,0,0,0,0,: 0,0,0,0,1,: 0,0,0,1,2,:

LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,1,: 0,0,0,0,1,2,:

LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,1,: 0,0,0,0,0,1,2,:

LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,1,2,:

LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,1,2,:

LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,0,1,2,:

LEN=11) 0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,0,0,1,2,:

Number new nodes in level n is given by : 1,2,3,3,3,3,3,3,3,3,3,

-----Class

1672-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][021][101][110][120][201][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,0,1,--0,1,--

R3) 0,1,-->0,0,1,--0,1,2,--

R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--

R5) 0,0,1,-->0,0,0,1,--0,0,1,2,--0,1,2,--

R6) 0,1,2,-->0,1,2,--

R7) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R8) 0,0,0,1,-->0,0,0,0,1,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R9) 0,0,1,2,-->0,0,1,2,--0,1,2,--
R10) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R11) 0,0,0,0,1,-->0,0,0,0,1,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R12) 0,0,0,1,2,-->0,0,0,1,2,--0,0,1,2,--0,1,2,--
R13)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--
0,0,1,--0,1,--
R14)
0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,0,1,2,--
0,1,2,--
R15) 0,0,0,0,1,2,-->0,0,0,0,1,2,--0,0,1,2,--0,1,2,--0,1,2,--
R16)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
0,0,0,1,--0,0,1,--0,1,--0,1,--
R17)
0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,0,1,2,--
0,0,1,2,--0,1,2,--0,1,2,--
R18) 0,0,0,0,0,1,2,-->0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--0,1,2,--
R19)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,
0,0,1,--0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--0,1,--
R20)
0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,0,
0,1,2,--0,0,1,2,--0,0,1,2,--0,1,2,--0,1,2,--
R21)
0,0,0,0,0,1,2,-->0,0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,0,1,2,--0,0,
1,2,--0,1,2,--
R22)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,0,1,
--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--0,1,
,--
R23)
0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--0,1,2,--0,1,2,--
R24)
0,0,0,0,0,1,2,-->0,0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,0,0,
1,2,--0,0,1,2,--0,0,1,2,--0,1,2,--
R25)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,0,
0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,0,1,--0,0,0,
,0,1,--0,0,1,--0,0,1,--0,1,--
R26)
0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,1,2,--0,0,0,0,0,
0,1,2,--0,0,0,1,2,--0,0,0,1,2,--0,0,0,1,2,--0,0,0,1,2,--0,0,0,
,1,2,--0,0,1,2,--0,1,2,--
R27)
0,0,0,0,0,0,1,2,-->0,0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--
0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--0,1,2,--

List of different nodes in T[L]

LEN=1) 0, :
 LEN=2) 0,0, : 0,1, :
 LEN=3) 0,0,0, : 0,0,1, : 0,1,2, :
 LEN=4) 0,0,0,0, : 0,0,0,1, : 0,0,1,2, :
 LEN=5) 0,0,0,0,0, : 0,0,0,0,1, : 0,0,0,1,2, :
 LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, : 0,0,0,0,1,2, :
 LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, : 0,0,0,0,0,1,2, :
 LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,1,2, :
 LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,1,2, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,1,2, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,0,1,2, :
 Number new nodes in level n is given by : 1,2,3,3,3,3,3,3,3,3,3,

-----Class

1673-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][021][102][110][120][201][210]]$

--

Rules of T[L]:

- R1) 0, -->0,0, --0,1, --
- R2) 0,0, -->0,0,0, --0,0,1, --0,1, --
- R3) 0,1, -->0,1,0, --0,1,0, --
- R4) 0,0,0, -->0,0,0,0, --0,0,0,1, --0,0,1, --0,1, --
- R5) 0,0,1, -->0,1,0, --0,0,1,2, --0,1,0, --
- R6) 0,1,0, -->0,1,0, --
- R7) 0,0,0,0, -->0,0,0,0,0, --0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --
- R8) 0,0,0,1, -->0,1,0, --0,0,0,1,2, --0,0,1,2, --0,1,0, --
- R9) 0,0,1,2, -->0,0,1,2, --0,1,0, --
- R10) 0,0,0,0,0, -->0,0,0,0,0,0, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --
- R11) 0,0,0,0,1, -->0,1,0, --0,0,0,0,1,2, --0,0,0,1,2, --0,0,1,2, --0,1,0, --
- R12) 0,0,0,1,2, -->0,0,0,1,2, --0,0,1,2, --0,1,0, --
- R13) 0,0,0,0,0,0, -->0,0,0,0,0,0,0, --0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --
- R14) 0,0,0,0,0,1, -->0,1,0, --0,0,0,0,0,1,2, --0,0,0,0,1,2, --0,0,0,1,2, --0,0,1,2, --0,1,0, --
- R15) 0,0,0,0,1,2, -->0,0,0,0,1,2, --0,0,0,1,2, --0,0,1,2, --0,1,0, --
- R16) 0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,1, --0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --
- R17) 0,0,0,0,0,0,1, -->0,1,0, --0,0,0,0,0,0,1,2, --0,0,0,0,0,1,2, --0,0,0,0,1,2, --0,0,0,1,2, --0,0,0,1,2, --0,0,1,2, --0,1,0, --
- R18) 0,0,0,0,0,0,1,2, -->0,0,0,0,0,1,2, --0,0,0,0,1,2, --0,0,0,1,2, --0,0,1,2, --0,1,0, --
- R19) 0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --
- R20) 0,0,0,0,0,0,0,1, -->0,1,0, --0,0,0,0,0,0,0,1,2, --0,0,0,0,0,0,1,2, --0,0,0,0,0,1,2, --0,0,0,0,1,2, --0,0,0,1,2, --0,0,0,1,2, --0,0,1,2, --0,1,0, --

R21)
0,0,0,0,0,0,1,2,-->0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,1,2,--0,1,0,--

R22)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--0,1,--

R23)
0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,0,--

R24)
0,0,0,0,0,0,0,1,2,-->0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,0,--

R25)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R26)
0,0,0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,0,--

R27)
0,0,0,0,0,0,0,0,1,2,-->0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,0,--

List of different nodes in T[L]

- LEN=1) 0,:
 - LEN=2) 0,0,: 0,1,:
 - LEN=3) 0,0,0,: 0,0,1,: 0,1,0,:
 - LEN=4) 0,0,0,0,: 0,0,0,1,: 0,0,1,2,:
 - LEN=5) 0,0,0,0,0,: 0,0,0,0,1,: 0,0,0,1,2,:
 - LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,1,: 0,0,0,0,1,2,:
 - LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,1,: 0,0,0,0,0,1,2,:
 - LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,1,2,:
 - LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,1,2,:
 - LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,0,1,2,:
 - LEN=11) 0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,0,0,1,2,:
- Number new nodes in level n is given by : 1,2,3,3,3,3,3,3,3,3,3,

-----Class

1674-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][100][101][102][110][120][201]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,0,1,--0,0,2,--
- R3) 0,1,-->0,1,0,--0,1,2,--
- R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
- R5) 0,0,1,-->0,1,0,--0,0,1,2,--0,1,--
- R6) 0,0,2,-->0,1,0,--0,0,2,1,--0,1,2,--

R7) 0,1,0,-->
R8) 0,1,2,-->0,1,2,--
R9) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
R10) 0,0,0,1,-->0,1,0,--0,0,1,2,--0,0,1,--0,0,2,--
R11) 0,0,0,2,-->0,1,0,--0,0,2,1,--0,0,1,2,--0,1,--
R12) 0,0,0,3,-->0,1,0,--0,0,2,1,--0,0,0,3,2,--0,1,2,--
R13) 0,0,1,2,-->0,0,1,2,--0,1,--
R14) 0,0,2,1,-->0,1,0,--
R15)
0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--
0,0,0,0,0,5,--
R16) 0,0,0,0,1,-->0,1,0,--0,0,0,1,2,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
R17) 0,0,0,0,2,-->0,1,0,--0,0,2,1,--0,0,0,1,2,--0,0,1,--0,0,2,--
R18) 0,0,0,0,3,-->0,1,0,--0,0,2,1,--0,0,0,3,2,--0,0,1,2,--0,1,--
R19) 0,0,0,0,4,-->0,1,0,--0,0,2,1,--0,0,0,3,2,--0,0,0,4,3,--0,1,2,--
R20) 0,0,0,1,2,-->0,0,1,2,--0,0,1,--0,0,2,--
R21) 0,0,0,3,2,-->0,1,0,--0,0,2,1,--
R22)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,
0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--
R23)
0,0,0,0,0,1,-->0,1,0,--0,0,0,0,1,2,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,
4,--
R24) 0,0,0,0,0,2,-->0,1,0,--0,0,2,1,--0,0,0,0,1,2,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
R25) 0,0,0,0,0,3,-->0,1,0,--0,0,2,1,--0,0,0,3,2,--0,0,0,1,2,--0,0,1,--0,0,2,--
R26) 0,0,0,0,0,4,-->0,1,0,--0,0,2,1,--0,0,0,3,2,--0,0,0,4,3,--0,0,1,2,--0,1,--
R27)
0,0,0,0,0,5,-->0,1,0,--0,0,2,1,--0,0,0,3,2,--0,0,0,4,3,--0,0,0,0,5,4,--0,1,2,--
R28) 0,0,0,0,1,2,-->0,0,0,1,2,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
R29) 0,0,0,0,4,3,-->0,1,0,--0,0,2,1,--0,0,0,3,2,--
R30)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,
0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--
R31)
0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,1,2,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,
--0,0,0,0,0,4,--0,0,0,0,0,5,--
R32)
0,0,0,0,0,0,2,-->0,1,0,--0,0,2,1,--0,0,0,0,0,1,2,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,
3,--0,0,0,0,4,--
R33)
0,0,0,0,0,0,3,-->0,1,0,--0,0,2,1,--0,0,0,3,2,--0,0,0,0,1,2,--0,0,0,1,--0,0,0,2,--0,
0,0,3,--
R34)
0,0,0,0,0,0,4,-->0,1,0,--0,0,2,1,--0,0,0,3,2,--0,0,0,4,3,--0,0,0,1,2,--0,0,1,--0,
0,2,--
R35)
0,0,0,0,0,0,5,-->0,1,0,--0,0,2,1,--0,0,0,3,2,--0,0,0,4,3,--0,0,0,0,5,4,--0,0,1,
2,--0,1,--
R36)
0,0,0,0,0,0,6,-->0,1,0,--0,0,2,1,--0,0,0,3,2,--0,0,0,4,3,--0,0,0,0,5,4,--0,0,0,

0,0,0,6,5,--0,1,2,--

R37)

0,0,0,0,0,1,2,-->0,0,0,0,0,1,2,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R38) 0,0,0,0,0,5,4,-->0,1,0,--0,0,2,1,--0,0,0,3,2,--0,0,0,4,3,--

R39)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--

R40)

0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--

R41)

0,0,0,0,0,0,0,2,-->0,1,0,--0,0,2,1,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--

R42)

0,0,0,0,0,0,0,3,-->0,1,0,--0,0,2,1,--0,0,0,3,2,--0,0,0,0,0,1,2,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R43)

0,0,0,0,0,0,0,4,-->0,1,0,--0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,1,2,--0,0,0,1,--0,0,0,2,--0,0,0,3,--

R44)

0,0,0,0,0,0,0,5,-->0,1,0,--0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,1,2,--0,0,1,--0,0,2,--

R45)

0,0,0,0,0,0,0,6,-->0,1,0,--0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,6,5,--0,0,1,2,--0,1,--

R46)

0,0,0,0,0,0,0,7,-->0,1,0,--0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,6,5,--0,0,0,0,0,0,7,6,--0,1,2,--

R47)

0,0,0,0,0,0,1,2,-->0,0,0,0,0,0,1,2,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--

R48)

0,0,0,0,0,0,6,5,-->0,1,0,--0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--

R49)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--

R50)

0,0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--

R51)

0,0,0,0,0,0,0,0,2,-->0,1,0,--0,0,2,1,--0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--

R52)

0,0,0,0,0,0,0,0,3,-->0,1,0,--0,0,2,1,--0,0,0,3,2,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--

R53)

0,0,0,0,0,0,0,0,4,-->0,1,0,--0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,1,2,--0,

0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
R54)
0,0,0,0,0,0,0,0,5,-->0,1,0,--0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,
0,0,0,1,2,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
R55)
0,0,0,0,0,0,0,0,6,-->0,1,0,--0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,
0,0,0,0,0,6,5,--0,0,0,1,2,--0,0,1,--0,0,2,--
R56)
0,0,0,0,0,0,0,0,7,-->0,1,0,--0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,
0,0,0,0,0,6,5,--0,0,0,0,0,0,7,6,--0,0,1,2,--0,1,--
R57)
0,0,0,0,0,0,0,0,8,-->0,1,0,--0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,
0,0,0,0,0,6,5,--0,0,0,0,0,0,7,6,--0,0,0,0,0,0,8,7,--0,1,2,--
R58)
0,0,0,0,0,0,0,1,2,-->0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,
0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--
R59)
0,0,0,0,0,0,0,7,6,-->0,1,0,--0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,
0,0,0,0,0,6,5,--
R60)
0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,
0,0,0,0,2,--0,0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,0,5,-
-0,0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,
0,0,0,0,0,9,--0,0,0,0,0,0,0,0,0,0,10,--
R61)
0,0,0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,0,1,--0,0,0,0,
0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,
,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--
R62)
0,0,0,0,0,0,0,0,0,2,-->0,1,0,--0,0,2,1,--0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,1,--0,
0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,
,6,--0,0,0,0,0,0,7,--
R63)
0,0,0,0,0,0,0,0,0,3,-->0,1,0,--0,0,2,1,--0,0,0,3,2,--0,0,0,0,0,0,0,1,2,--0,0,0,0,
0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6
,--
R64)
0,0,0,0,0,0,0,0,0,4,-->0,1,0,--0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,0,1,2,
--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--
R65)
0,0,0,0,0,0,0,0,5,-->0,1,0,--0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--
0,0,0,0,0,1,2,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
R66)
0,0,0,0,0,0,0,0,6,-->0,1,0,--0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--
0,0,0,0,0,6,5,--0,0,0,0,1,2,--0,0,0,1,--0,0,2,--0,0,3,--
R67)
0,0,0,0,0,0,0,0,7,-->0,1,0,--0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--
0,0,0,0,0,6,5,--0,0,0,0,0,7,6,--0,0,0,1,2,--0,0,1,--0,0,2,--
R68)
0,0,0,0,0,0,0,0,8,-->0,1,0,--0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--

0,0,0,0,0,0,6,5,--0,0,0,0,0,0,7,6,--0,0,0,0,0,0,8,7,--0,0,1,2,--0,1,--
R69)
0,0,0,0,0,0,0,0,9,-->0,1,0,--0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,5,4,--
0,0,0,0,0,0,6,5,--0,0,0,0,0,0,7,6,--0,0,0,0,0,0,8,7,--0,0,0,0,0,0,9,8,--
-0,1,2,--
R70)
0,0,0,0,0,0,0,1,2,-->0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,
0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,
,7,--
R71)
0,0,0,0,0,0,0,8,7,-->0,1,0,--0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,5,4,--
0,0,0,0,0,0,6,5,--0,0,0,0,0,0,7,6,--

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, : 0,0,1, : 0,0,2, : 0,1,0, : 0,1,2, :
LEN=4) 0,0,0,0, : 0,0,0,1, : 0,0,0,2, : 0,0,0,3, : 0,0,1,2, : 0,0,2,1, :
LEN=5) 0,0,0,0,0, : 0,0,0,0,1, : 0,0,0,0,2, : 0,0,0,0,3, : 0,0,0,0,4, : 0,0,0,1,2, :
0,0,0,3,2, :
LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, : 0,0,0,0,0,2, : 0,0,0,0,0,3, : 0,0,0,0,0,4, :
0,0,0,0,0,5, : 0,0,0,0,1,2, : 0,0,0,0,4,3, :
LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, : 0,0,0,0,0,0,2, : 0,0,0,0,0,0,3, :
0,0,0,0,0,0,4, : 0,0,0,0,0,0,5, : 0,0,0,0,0,0,6, : 0,0,0,0,0,1,2, : 0,0,0,0,0,5,4, :
LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,2, : 0,0,0,0,0,0,0,3, :
0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,7, :
0,0,0,0,0,0,1,2, : 0,0,0,0,0,0,6,5, :
LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,2, :
0,0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,0,6, :
0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,8, : 0,0,0,0,0,0,0,1,2, : 0,0,0,0,0,0,0,7,6, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,0,2, :
0,0,0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,0,5, :
0,0,0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,0,8, :
0,0,0,0,0,0,0,0,0,9, : 0,0,0,0,0,0,0,0,0,10, : 0,0,0,0,0,0,0,0,0,1,2, :
0,0,0,0,0,0,0,0,0,9,8, :

Number new nodes in level n is given by : 1,2,5,6,7,8,9,10,11,12,13,

-----Class

1675-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][100][101][102][110][120][210]]$

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Rules of T[L]:

R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,0,1,--0,0,2,--
R3) 0,1,-->0,1,0,--0,1,2,--
R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,0,2,--0,0,0,3,--

R5) 0,0,1,-->0,1,0,--0,0,1,2,--0,1,--
R6) 0,0,2,-->0,0,2,0,--0,1,0,--0,1,2,--
R7) 0,1,0,-->
R8) 0,1,2,-->0,1,2,--
R9) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
R10) 0,0,0,1,-->0,1,0,--0,0,0,1,2,--0,0,1,--0,0,2,--
R11) 0,0,0,2,-->0,0,2,0,--0,1,0,--0,0,1,2,--0,1,--
R12) 0,0,0,3,-->0,0,0,3,0,--0,0,2,0,--0,1,0,--0,1,2,--
R13) 0,0,1,2,-->0,0,1,2,--0,1,--
R14) 0,0,2,0,-->0,1,0,--
R15)
0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--
0,0,0,0,0,5,--
R16) 0,0,0,0,1,-->0,1,0,--0,0,0,0,1,2,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
R17) 0,0,0,0,2,-->0,0,2,0,--0,1,0,--0,0,0,1,2,--0,0,1,--0,0,2,--
R18) 0,0,0,0,3,-->0,0,0,3,0,--0,0,2,0,--0,1,0,--0,0,1,2,--0,1,--
R19) 0,0,0,0,4,-->0,0,0,0,4,0,--0,0,0,3,0,--0,0,2,0,--0,1,0,--0,1,2,--
R20) 0,0,0,1,2,-->0,0,0,1,2,--0,0,1,--0,0,2,--
R21) 0,0,0,3,0,-->0,0,2,0,--0,1,0,--
R22)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,
0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--
R23)
0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,1,2,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,
4,--
R24) 0,0,0,0,0,2,-->0,0,2,0,--0,1,0,--0,0,0,0,1,2,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
R25) 0,0,0,0,0,3,-->0,0,0,3,0,--0,0,2,0,--0,1,0,--0,0,0,1,2,--0,0,1,--0,0,2,--
R26) 0,0,0,0,0,4,-->0,0,0,0,4,0,--0,0,0,3,0,--0,0,2,0,--0,1,0,--0,0,1,2,--0,1,--
R27)
0,0,0,0,0,5,-->0,0,0,0,0,5,0,--0,0,0,0,4,0,--0,0,0,3,0,--0,0,2,0,--0,1,0,--0,1,2,--
R28) 0,0,0,0,1,2,-->0,0,0,0,1,2,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
R29) 0,0,0,0,4,0,-->0,0,0,3,0,--0,0,2,0,--0,1,0,--
R30)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,
0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--
R31)
0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,
--0,0,0,0,0,4,--0,0,0,0,0,5,--
R32)
0,0,0,0,0,0,2,-->0,0,2,0,--0,1,0,--0,0,0,0,0,1,2,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,
3,--0,0,0,0,4,--
R33)
0,0,0,0,0,0,3,-->0,0,0,3,0,--0,0,2,0,--0,1,0,--0,0,0,0,1,2,--0,0,0,1,--0,0,0,2,--0,
0,0,3,--
R34)
0,0,0,0,0,0,4,-->0,0,0,0,4,0,--0,0,0,3,0,--0,0,2,0,--0,1,0,--0,0,0,1,2,--0,0,1,--0,
0,2,--
R35)
0,0,0,0,0,0,5,-->0,0,0,0,0,5,0,--0,0,0,0,4,0,--0,0,0,3,0,--0,0,2,0,--0,1,0,--0,0,1,
2,--0,1,--

R36)

0,0,0,0,0,0,6,-->0,0,0,0,0,0,6,0,--0,0,0,0,0,0,5,0,--0,0,0,0,0,0,4,0,--0,0,0,0,0,0,3,0,--0,0,2,0,--0,1,0,--0,1,2,--

R37)

0,0,0,0,0,0,1,2,-->0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--

R38) 0,0,0,0,0,0,5,0,-->0,0,0,0,0,0,4,0,--0,0,0,0,0,0,3,0,--0,0,2,0,--0,1,0,--

R39)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,0,8,--

R40)

0,0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--

R41)

0,0,0,0,0,0,0,0,2,-->0,0,2,0,--0,1,0,--0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--

R42)

0,0,0,0,0,0,0,0,3,-->0,0,0,3,0,--0,0,2,0,--0,1,0,--0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R43)

0,0,0,0,0,0,0,0,4,-->0,0,0,0,4,0,--0,0,0,3,0,--0,0,2,0,--0,1,0,--0,0,0,0,0,0,1,2,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--

R44)

0,0,0,0,0,0,0,0,5,-->0,0,0,0,0,0,5,0,--0,0,0,0,0,0,4,0,--0,0,0,0,0,0,3,0,--0,0,2,0,--0,1,0,--0,0,0,1,2,--0,0,1,--0,0,2,--

R45)

0,0,0,0,0,0,0,0,6,-->0,0,0,0,0,0,6,0,--0,0,0,0,0,0,5,0,--0,0,0,0,0,0,4,0,--0,0,0,0,0,0,3,0,--0,0,2,0,--0,1,0,--0,0,1,2,--0,1,--

R46)

0,0,0,0,0,0,0,0,7,-->0,0,0,0,0,0,0,7,0,--0,0,0,0,0,0,0,6,0,--0,0,0,0,0,0,5,0,--0,0,0,0,0,0,4,0,--0,0,0,0,3,0,--0,0,2,0,--0,1,0,--0,1,2,--

R47)

0,0,0,0,0,0,0,0,1,2,-->0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--

R48)

0,0,0,0,0,0,0,0,6,0,-->0,0,0,0,0,0,5,0,--0,0,0,0,0,0,4,0,--0,0,0,0,0,0,3,0,--0,0,2,0,--0,1,0,--

R49)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,0,9,--

R50)

0,0,0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--

R51)

0,0,0,0,0,0,0,0,0,2,-->0,0,2,0,--0,1,0,--0,0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--

R52)

0,0,0,0,0,0,0,0,0,3,-->0,0,0,3,0,--0,0,2,0,--0,1,0,--0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--

R53)

0,0,0,0,0,0,0,0,4,-->0,0,0,0,4,0,--0,0,0,3,0,--0,0,2,0,--0,1,0,--0,0,0,0,0,1,2,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R54)

0,0,0,0,0,0,0,0,5,-->0,0,0,0,5,0,--0,0,0,4,0,--0,0,0,3,0,--0,0,2,0,--0,1,0,--0,0,0,0,1,2,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--

R55)

0,0,0,0,0,0,0,0,6,-->0,0,0,0,6,0,--0,0,0,5,0,--0,0,0,4,0,--0,0,0,3,0,--0,0,2,0,--0,1,0,--0,0,0,0,1,2,--0,0,0,0,1,--0,0,0,0,2,--

R56)

0,0,0,0,0,0,0,0,7,-->0,0,0,0,7,0,--0,0,0,6,0,--0,0,0,5,0,--0,0,0,4,0,--0,0,0,3,0,--0,0,2,0,--0,1,0,--0,0,1,2,--0,1,--

R57)

0,0,0,0,0,0,0,0,8,-->0,0,0,0,8,0,--0,0,0,7,0,--0,0,0,6,0,--0,0,0,5,0,--0,0,0,4,0,--0,0,0,3,0,--0,0,2,0,--0,1,0,--0,1,2,--

R58)

0,0,0,0,0,0,0,1,2,-->0,0,0,0,1,2,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,4,--0,0,0,0,5,--0,0,0,0,6,--

R59)

0,0,0,0,0,0,0,7,0,-->0,0,0,0,6,0,--0,0,0,5,0,--0,0,0,4,0,--0,0,0,3,0,--0,0,2,0,--0,1,0,--

R60)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--0,0,0,0,0,0,0,0,0,10,--

R61)

0,0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--

R62)

0,0,0,0,0,0,0,0,2,-->0,0,2,0,--0,1,0,--0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--

R63)

0,0,0,0,0,0,0,0,3,-->0,0,0,3,0,--0,0,2,0,--0,1,0,--0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--

R64)

0,0,0,0,0,0,0,0,4,-->0,0,0,4,0,--0,0,0,3,0,--0,0,2,0,--0,1,0,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--

R65)

0,0,0,0,0,0,0,0,5,-->0,0,0,0,5,0,--0,0,0,4,0,--0,0,0,3,0,--0,0,2,0,--0,1,0,--0,0,0,0,0,1,2,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R66)

0,0,0,0,0,0,0,0,6,-->0,0,0,0,6,0,--0,0,0,5,0,--0,0,0,4,0,--0,0,0,3,0,--0,0,2,0,--0,1,0,--0,0,0,0,1,2,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--

R67)

0,0,0,0,0,0,0,0,7,-->0,0,0,0,7,0,--0,0,0,6,0,--0,0,0,5,0,--0,0,0,4,0,--0,0,0,3,0,--0,0,2,0,--0,1,0,--0,0,0,1,2,--0,0,1,--0,0,2,--

R68)

0,0,0,0,0,0,0,0,0,8,-->0,0,0,0,0,0,0,0,8,0,--0,0,0,0,0,0,0,0,7,0,--0,0,0,0,0,0,0,6,0,--
0,0,0,0,0,0,5,0,--0,0,0,0,4,0,--0,0,0,0,3,0,--0,0,2,0,--0,1,0,--0,0,1,2,--0,1,--

R69)

0,0,0,0,0,0,0,0,0,9,-->0,0,0,0,0,0,0,0,9,0,--0,0,0,0,0,0,0,0,8,0,--0,0,0,0,0,0,0,
7,0,--0,0,0,0,0,0,6,0,--0,0,0,0,0,0,5,0,--0,0,0,0,4,0,--0,0,0,0,3,0,--0,0,2,0,--0,1,0,--
-0,1,2,--

R70)

0,0,0,0,0,0,0,0,1,2,-->0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,
0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,
7,--

R71)

0,0,0,0,0,0,0,0,8,0,-->0,0,0,0,0,0,0,0,7,0,--0,0,0,0,0,0,0,6,0,--0,0,0,0,0,0,5,0,--0,0,0,
0,4,0,--0,0,0,3,0,--0,0,2,0,--0,1,0,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, : 0,1, :

LEN=3) 0,0,0, : 0,0,1, : 0,0,2, : 0,1,0, : 0,1,2, :

LEN=4) 0,0,0,0, : 0,0,0,1, : 0,0,0,2, : 0,0,0,3, : 0,0,1,2, : 0,0,2,0, :

LEN=5) 0,0,0,0,0, : 0,0,0,0,1, : 0,0,0,0,2, : 0,0,0,0,3, : 0,0,0,0,4, : 0,0,0,1,2, :
0,0,0,3,0, :

LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, : 0,0,0,0,0,2, : 0,0,0,0,0,3, : 0,0,0,0,0,4, :
0,0,0,0,0,5, : 0,0,0,0,1,2, : 0,0,0,0,4,0, :

LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, : 0,0,0,0,0,0,2, : 0,0,0,0,0,0,3, :
0,0,0,0,0,0,4, : 0,0,0,0,0,0,5, : 0,0,0,0,0,0,6, : 0,0,0,0,0,1,2, : 0,0,0,0,0,5,0, :

LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,2, : 0,0,0,0,0,0,0,3, :
0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,7, :
0,0,0,0,0,0,1,2, : 0,0,0,0,0,0,6,0, :

LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,2, :
0,0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,0,6, :
0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,8, : 0,0,0,0,0,0,0,1,2, : 0,0,0,0,0,0,0,7,0, :

LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,0,2, :
0,0,0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,0,5, :
0,0,0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,0,8, :
0,0,0,0,0,0,0,0,0,9, : 0,0,0,0,0,0,0,0,1,2, : 0,0,0,0,0,0,0,0,8,0, :

LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,0,0,2, :
0,0,0,0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,0,0,5, :
0,0,0,0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,0,0,8, :
0,0,0,0,0,0,0,0,0,0,9, : 0,0,0,0,0,0,0,0,0,0,10, : 0,0,0,0,0,0,0,0,0,0,1,2, :
0,0,0,0,0,0,0,0,0,0,9,0, :

Number new nodes in level n is given by : 1,2,5,6,7,8,9,10,11,12,13,

-----Class

1676-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[011][100][101][102][110][201][210]]

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Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,0,1,--0,0,2,--

R3) 0,1,-->0,1,0,--0,1,--
R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
R5) 0,0,1,-->0,1,0,--0,0,1,--0,0,2,--
R6) 0,0,2,-->0,1,0,--0,1,0,--0,0,2,--
R7) 0,1,0,-->
R8) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
R9) 0,0,0,1,-->0,1,0,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
R10) 0,0,0,2,-->0,1,0,--0,1,0,--0,0,0,2,--0,0,0,3,--
R11) 0,0,0,3,-->0,1,0,--0,1,0,--0,1,0,--0,0,0,3,--
R12)
0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--
0,0,0,0,0,5,--
R13) 0,0,0,0,1,-->0,1,0,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
R14) 0,0,0,0,2,-->0,1,0,--0,1,0,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
R15) 0,0,0,0,3,-->0,1,0,--0,1,0,--0,1,0,--0,0,0,0,3,--0,0,0,0,4,--
R16) 0,0,0,0,4,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,0,0,4,--
R17)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,
0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--
R18)
0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,
0,0,0,5,--
R19)
0,0,0,0,0,2,-->0,1,0,--0,1,0,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,
5,--
R20)
0,0,0,0,0,3,-->0,1,0,--0,1,0,--0,1,0,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--
R21) 0,0,0,0,0,4,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,0,0,0,4,--0,0,0,0,0,5,--
R22) 0,0,0,0,0,5,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,0,0,0,5,--
R23)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,
0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--
R24)
0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,
0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--
R25)
0,0,0,0,0,0,2,-->0,1,0,--0,1,0,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,
0,0,0,0,0,5,--0,0,0,0,0,0,6,--
R26)
0,0,0,0,0,0,3,-->0,1,0,--0,1,0,--0,1,0,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,
0,5,--0,0,0,0,0,0,6,--
R27)
0,0,0,0,0,0,4,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,
0,0,0,0,0,6,--
R28)
0,0,0,0,0,0,5,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,0,0,0,0,5,--0,0,0,0,0,
0,6,--
R29)
0,0,0,0,0,0,6,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,0,0,0,0,6,--
R30)

0,0,0,0,0,0,4,: 0,0,0,0,0,0,5,: 0,0,0,0,0,0,6,:
 LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,2,: 0,0,0,0,0,0,0,3,:
 0,0,0,0,0,0,0,4,: 0,0,0,0,0,0,0,5,: 0,0,0,0,0,0,0,6,: 0,0,0,0,0,0,0,7,:
 LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,0,2,:
 0,0,0,0,0,0,0,0,3,: 0,0,0,0,0,0,0,0,4,: 0,0,0,0,0,0,0,0,5,: 0,0,0,0,0,0,0,0,6,:
 0,0,0,0,0,0,0,0,7,: 0,0,0,0,0,0,0,0,8,:
 LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,0,0,2,:
 0,0,0,0,0,0,0,0,0,3,: 0,0,0,0,0,0,0,0,0,4,: 0,0,0,0,0,0,0,0,0,5,:
 0,0,0,0,0,0,0,0,0,6,: 0,0,0,0,0,0,0,0,0,7,: 0,0,0,0,0,0,0,0,0,8,:
 0,0,0,0,0,0,0,0,0,9,:
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,0,0,0,2,:
 0,0,0,0,0,0,0,0,0,0,3,: 0,0,0,0,0,0,0,0,0,0,4,: 0,0,0,0,0,0,0,0,0,0,5,:
 0,0,0,0,0,0,0,0,0,0,6,: 0,0,0,0,0,0,0,0,0,0,7,: 0,0,0,0,0,0,0,0,0,0,8,:
 0,0,0,0,0,0,0,0,0,0,9,: 0,0,0,0,0,0,0,0,0,0,10,:
 Number new nodes in level n is given by : 1,2,4,4,5,6,7,8,9,10,11,

-----Class

1677-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][100][101][102][120][201][210]]$

--

Rules of $T[L]$:

- R1) 0, -->0,0, --0,1, --
- R2) 0,0, -->0,0,0, --0,0,1, --0,0,2, --
- R3) 0,1, -->0,1,0, --0,1,2, --
- R4) 0,0,0, -->0,0,0,0, --0,0,0,1, --0,0,0,2, --0,0,0,3, --
- R5) 0,0,1, -->0,1,0, --0,0,1,2, --0,1, --
- R6) 0,0,2, -->0,1,0, --0,1,0, --0,1,2, --
- R7) 0,1,0, -->
- R8) 0,1,2, -->0,1,2, --
- R9) 0,0,0,0, -->0,0,0,0,0, --0,0,0,0,1, --0,0,0,0,2, --0,0,0,0,3, --0,0,0,0,4, --
- R10) 0,0,0,1, -->0,1,0, --0,0,0,1,2, --0,0,1, --0,0,2, --
- R11) 0,0,0,2, -->0,1,0, --0,1,0, --0,0,1,2, --0,1, --
- R12) 0,0,0,3, -->0,1,0, --0,1,0, --0,1,0, --0,1,2, --
- R13) 0,0,1,2, -->0,0,1,2, --0,1, --
- R14)
- 0,0,0,0,0, -->0,0,0,0,0,0, --0,0,0,0,0,1, --0,0,0,0,0,2, --0,0,0,0,0,3, --0,0,0,0,0,4, --
0,0,0,0,0,5, --
- R15) 0,0,0,0,1, -->0,1,0, --0,0,0,0,1,2, --0,0,0,1, --0,0,0,2, --0,0,0,3, --
- R16) 0,0,0,0,2, -->0,1,0, --0,1,0, --0,0,0,1,2, --0,0,1, --0,0,2, --
- R17) 0,0,0,0,3, -->0,1,0, --0,1,0, --0,1,0, --0,0,1,2, --0,1, --
- R18) 0,0,0,0,4, -->0,1,0, --0,1,0, --0,1,0, --0,1,0, --0,1,2, --
- R19) 0,0,0,1,2, -->0,0,0,1,2, --0,0,1, --0,0,2, --
- R20)
- 0,0,0,0,0,0, -->0,0,0,0,0,0,0, --0,0,0,0,0,0,1, --0,0,0,0,0,0,2, --0,0,0,0,0,0,3, --0,0,
0,0,0,0,4, --0,0,0,0,0,0,5, --0,0,0,0,0,0,6, --
- R21)
- 0,0,0,0,0,1, -->0,1,0, --0,0,0,0,0,1,2, --0,0,0,0,1, --0,0,0,0,2, --0,0,0,0,3, --0,0,0,0,
4, --
- R22) 0,0,0,0,0,2, -->0,1,0, --0,1,0, --0,0,0,0,1,2, --0,0,0,1, --0,0,0,2, --0,0,0,3, --

R23) 0,0,0,0,0,3,-->0,1,0,--0,1,0,--0,1,0,--0,0,0,1,2,--0,0,1,--0,0,2,--
R24) 0,0,0,0,0,4,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,1,2,--0,1,--
R25) 0,0,0,0,0,5,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,2,--
R26) 0,0,0,0,1,2,-->0,0,0,0,1,2,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
R27)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,
0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--
R28)
0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,
--0,0,0,0,0,4,--0,0,0,0,0,5,--
R29)
0,0,0,0,0,0,2,-->0,1,0,--0,1,0,--0,0,0,0,0,1,2,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,
--0,0,0,0,4,--
R30)
0,0,0,0,0,0,3,-->0,1,0,--0,1,0,--0,1,0,--0,0,0,0,1,2,--0,0,0,1,--0,0,0,2,--0,0,0,3,
--
R31) 0,0,0,0,0,0,4,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,0,1,2,--0,0,1,--0,0,2,--
R32) 0,0,0,0,0,0,5,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,1,2,--0,1,--
R33) 0,0,0,0,0,0,6,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,2,--
R34)
0,0,0,0,0,1,2,-->0,0,0,0,0,1,2,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
R35)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,
0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,
0,0,0,0,7,--0,0,0,0,0,0,0,8,--
R36)
0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,
0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--
R37)
0,0,0,0,0,0,2,-->0,1,0,--0,1,0,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,
0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--
R38)
0,0,0,0,0,0,3,-->0,1,0,--0,1,0,--0,1,0,--0,0,0,0,0,1,2,--0,0,0,0,1,--0,0,0,0,2,--
0,0,0,0,3,--0,0,0,0,4,--
R39)
0,0,0,0,0,0,4,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,0,0,1,2,--0,0,0,1,--0,0,0,2,
--0,0,0,3,--
R40)
0,0,0,0,0,0,5,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,0,1,2,--0,0,1,--0,0,
2,--
R41)
0,0,0,0,0,0,6,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,1,2,--0,1,--
R42)
0,0,0,0,0,0,7,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,2,--
R43)
0,0,0,0,0,0,1,2,-->0,0,0,0,0,0,1,2,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,
0,0,0,4,--0,0,0,0,0,5,--
R44)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,
2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0

,0,0,6,--0,0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,0,9,--
R45)
0,0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,
2,--0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,
,0,0,0,7,--
R46)
0,0,0,0,0,0,0,0,2,-->0,1,0,--0,1,0,--0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,1,--0,0,0,0,0,
0,2,--0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--
R47)
0,0,0,0,0,0,0,0,3,-->0,1,0,--0,1,0,--0,1,0,--0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,--0,0,0,
0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--
R48)
0,0,0,0,0,0,0,0,4,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,0,0,0,1,2,--0,0,0,0,1,--0,
0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
R49)
0,0,0,0,0,0,0,0,5,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,0,0,1,2,--0,0,0,1,
--0,0,0,2,--0,0,0,3,--
R50)
0,0,0,0,0,0,0,0,6,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,0,1,2,--0,
0,1,--0,0,2,--
R51)
0,0,0,0,0,0,0,0,7,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,1,
2,--0,1,--
R52)
0,0,0,0,0,0,0,0,8,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,
--0,1,2,--
R53)
0,0,0,0,0,0,0,0,1,2,-->0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,
0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--
R54)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,
0,0,0,0,2,--0,0,0,0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,0,0,0,5,-
-0,0,0,0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,
0,0,0,0,0,0,9,--0,0,0,0,0,0,0,0,0,0,0,0,10,--
R55)
0,0,0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,
0,0,0,0,2,--0,0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,
,0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--
R56)
0,0,0,0,0,0,0,0,0,2,-->0,1,0,--0,1,0,--0,0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,0,1,--0,0,
0,0,0,0,0,2,--0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,
,--0,0,0,0,0,0,0,7,--
R57)
0,0,0,0,0,0,0,0,0,3,-->0,1,0,--0,1,0,--0,1,0,--0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,--
0,0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--
R58)
0,0,0,0,0,0,0,0,0,4,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,0,0,0,0,1,2,--0,0,0,0,0,
1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--
R59)
0,0,0,0,0,0,0,0,0,5,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,0,0,0,1,2,--0,0,

0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
 R60)
 0,0,0,0,0,0,0,0,0,6,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,0,0,1,2,
 --0,0,0,1,--0,0,0,2,--0,0,0,3,--
 R61)
 0,0,0,0,0,0,0,0,0,7,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,
 0,1,2,--0,0,1,--0,0,2,--
 R62)
 0,0,0,0,0,0,0,0,0,8,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,
 0,--0,0,1,2,--0,1,--
 R63)
 0,0,0,0,0,0,0,0,0,9,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,
 0,--0,1,0,--0,1,2,--
 R64)
 0,0,0,0,0,0,0,0,1,2,-->0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,
 0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,
 ,7,--

List of different nodes in T[L]

LEN=1) 0, :
 LEN=2) 0,0, : 0,1, :
 LEN=3) 0,0,0, : 0,0,1, : 0,0,2, : 0,1,0, : 0,1,2, :
 LEN=4) 0,0,0,0, : 0,0,0,1, : 0,0,0,2, : 0,0,0,3, : 0,0,1,2, :
 LEN=5) 0,0,0,0,0, : 0,0,0,0,1, : 0,0,0,0,2, : 0,0,0,0,3, : 0,0,0,0,4, : 0,0,0,1,2, :
 LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, : 0,0,0,0,0,2, : 0,0,0,0,0,3, : 0,0,0,0,0,4, :
 0,0,0,0,0,5, : 0,0,0,0,1,2, :
 LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, : 0,0,0,0,0,0,2, : 0,0,0,0,0,0,3, :
 0,0,0,0,0,0,4, : 0,0,0,0,0,0,5, : 0,0,0,0,0,0,6, : 0,0,0,0,0,1,2, :
 LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,2, : 0,0,0,0,0,0,0,3, :
 0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,7, :
 0,0,0,0,0,0,1,2, :
 LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,2, :
 0,0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,0,6, :
 0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,8, : 0,0,0,0,0,0,1,2, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,0,2, :
 0,0,0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,0,5, :
 0,0,0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,0,8, :
 0,0,0,0,0,0,0,0,0,9, : 0,0,0,0,0,0,0,0,1,2, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,0,0,2, :
 0,0,0,0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,0,0,5, :
 0,0,0,0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,0,0,8, :
 0,0,0,0,0,0,0,0,0,0,9, : 0,0,0,0,0,0,0,0,0,0,10, : 0,0,0,0,0,0,0,0,0,1,2, :

Number new nodes in level n is given by : 1,2,5,5,6,7,8,9,10,11,12,

-----Class

1678-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[011][100][101][110][120][201][210]]

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Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,0,1,--0,0,2,--
R3) 0,1,-->0,1,0,--0,1,2,--
R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
R5) 0,0,1,-->0,0,1,0,--0,1,0,--0,1,--
R6) 0,0,2,-->0,1,0,--0,1,0,--0,1,2,--
R7) 0,1,0,-->0,1,0,--0,1,--
R8) 0,1,2,-->0,1,2,--
R9) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
R10) 0,0,0,1,-->0,0,0,1,0,--0,0,1,0,--0,0,1,--0,0,2,--
R11) 0,0,0,2,-->0,0,1,0,--0,0,1,0,--0,1,0,--0,1,--
R12) 0,0,0,3,-->0,1,0,--0,1,0,--0,1,0,--0,1,2,--
R13) 0,0,1,0,-->0,0,1,0,--0,0,1,--0,0,2,--
R14)
0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--
0,0,0,0,0,5,--
R15) 0,0,0,0,1,-->0,0,0,0,1,0,--0,0,0,1,0,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
R16) 0,0,0,0,2,-->0,0,0,1,0,--0,0,0,1,0,--0,0,1,0,--0,0,1,--0,0,2,--
R17) 0,0,0,0,3,-->0,0,1,0,--0,0,1,0,--0,0,1,0,--0,1,0,--0,1,--
R18) 0,0,0,0,4,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,2,--
R19) 0,0,0,1,0,-->0,0,0,1,0,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
R20)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,
0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--
R21)
0,0,0,0,0,1,-->0,0,0,0,0,1,0,--0,0,0,0,1,0,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,
0,0,0,4,--
R22)
0,0,0,0,0,2,-->0,0,0,0,1,0,--0,0,0,0,1,0,--0,0,0,1,0,--0,0,0,1,--0,0,0,2,--0,0,0,3,
--
R23) 0,0,0,0,0,3,-->0,0,0,1,0,--0,0,0,1,0,--0,0,0,1,0,--0,0,1,0,--0,0,1,--0,0,2,--
R24) 0,0,0,0,0,4,-->0,0,1,0,--0,0,1,0,--0,0,1,0,--0,0,1,0,--0,1,0,--0,1,--
R25) 0,0,0,0,0,5,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,2,--
R26) 0,0,0,0,1,0,-->0,0,0,0,1,0,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
R27)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,
0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--
R28)
0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,0,--0,0,0,0,0,1,0,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,
0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--
R29)
0,0,0,0,0,0,2,-->0,0,0,0,0,1,0,--0,0,0,0,0,1,0,--0,0,0,0,1,0,--0,0,0,0,1,--0,0,0,0,
2,--0,0,0,0,3,--0,0,0,0,4,--
R30)
0,0,0,0,0,0,3,-->0,0,0,0,1,0,--0,0,0,0,1,0,--0,0,0,0,1,0,--0,0,0,1,0,--0,0,0,1,--0,
0,0,2,--0,0,0,3,--
R31)
0,0,0,0,0,0,4,-->0,0,0,1,0,--0,0,0,1,0,--0,0,0,1,0,--0,0,0,1,0,--0,0,1,0,--0,0,1,--
0,0,2,--
R32)
0,0,0,0,0,0,5,-->0,0,1,0,--0,0,1,0,--0,0,1,0,--0,0,1,0,--0,0,1,0,--0,1,0,--0,1,--

R33) 0,0,0,0,0,0,6,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,2,--
R34)
0,0,0,0,0,1,0,-->0,0,0,0,0,1,0,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,
0,4,--0,0,0,0,0,5,--
R35)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,
0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,
,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--
R36)
0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,0,--0,0,0,0,0,0,1,0,--0,0,0,0,0,0,1,--0,0,0,0,0,
0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--
R37)
0,0,0,0,0,0,0,2,-->0,0,0,0,0,0,1,0,--0,0,0,0,0,0,1,0,--0,0,0,0,0,1,0,--0,0,0,0,0,1,
--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--
R38)
0,0,0,0,0,0,0,3,-->0,0,0,0,0,1,0,--0,0,0,0,0,1,0,--0,0,0,0,0,1,0,--0,0,0,0,1,0,--0,
0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
R39)
0,0,0,0,0,0,0,4,-->0,0,0,0,1,0,--0,0,0,0,1,0,--0,0,0,0,1,0,--0,0,0,0,1,0,--0,0,0,1,
0,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
R40)
0,0,0,0,0,0,0,5,-->0,0,0,1,0,--0,0,0,1,0,--0,0,0,1,0,--0,0,0,1,0,--0,0,0,1,0,--0,0,
1,0,--0,0,1,--0,0,2,--
R41)
0,0,0,0,0,0,0,6,-->0,0,1,0,--0,0,1,0,--0,0,1,0,--0,0,1,0,--0,0,1,0,--0,0,1,0,--0,1,
0,--0,1,--
R42)
0,0,0,0,0,0,0,7,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,2,--
R43)
0,0,0,0,0,0,1,0,-->0,0,0,0,0,0,1,0,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,
--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--
R44)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,
2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,
,0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--
R45)
0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,0,--0,0,0,0,0,0,0,1,0,--0,0,0,0,0,0,0,1,--0,
0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,
,6,--0,0,0,0,0,0,0,7,--
R46)
0,0,0,0,0,0,0,0,2,-->0,0,0,0,0,0,0,1,0,--0,0,0,0,0,0,0,1,0,--0,0,0,0,0,0,1,0,--0,0,
0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,
,0,0,6,--
R47)
0,0,0,0,0,0,0,0,3,-->0,0,0,0,0,0,1,0,--0,0,0,0,0,0,1,0,--0,0,0,0,0,0,1,0,--0,0,0,0,
0,1,0,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--
R48)
0,0,0,0,0,0,0,0,4,-->0,0,0,0,0,1,0,--0,0,0,0,0,1,0,--0,0,0,0,0,1,0,--0,0,0,0,0,1,0,
--0,0,0,0,1,0,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
R49)

0,0,0,0,0,0,0,0,5,-->0,0,0,0,1,0,--0,0,0,0,1,0,--0,0,0,0,1,0,--0,0,0,0,1,0,--0,0,0,
0,1,0,--0,0,0,1,0,--0,0,0,1,--0,0,0,2,--0,0,0,3,--

R50)

0,0,0,0,0,0,0,0,6,-->0,0,0,1,0,--0,0,0,1,0,--0,0,0,1,0,--0,0,0,1,0,--0,0,0,1,0,--0,
0,0,1,0,--0,0,1,0,--0,0,1,--0,0,2,--

R51)

0,0,0,0,0,0,0,0,7,-->0,0,1,0,--0,0,1,0,--0,0,1,0,--0,0,1,0,--0,0,1,0,--0,0,1,0,--0,
0,1,0,--0,1,0,--0,1,--

R52)

0,0,0,0,0,0,0,0,8,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,
--0,1,2,--

R53)

0,0,0,0,0,0,0,1,0,-->0,0,0,0,0,0,0,1,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,
0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,-
-

R54)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,
0,0,0,0,2,--0,0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,0,5,-
-0,0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,
0,0,0,0,0,9,--0,0,0,0,0,0,0,0,0,0,10,--

R55)

0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,1,0,--0,0,0,0,0,0,0,0,1,0,--0,0,0,0,0,0,0,
0,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,
,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--

R56)

0,0,0,0,0,0,0,0,0,2,-->0,0,0,0,0,0,0,0,1,0,--0,0,0,0,0,0,0,0,1,0,--0,0,0,0,0,0,0,1,
0,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,
,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--

R57)

0,0,0,0,0,0,0,0,0,3,-->0,0,0,0,0,0,0,1,0,--0,0,0,0,0,0,0,1,0,--0,0,0,0,0,0,0,1,0,--
0,0,0,0,0,0,1,0,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,
,0,0,0,0,0,5,--0,0,0,0,0,0,6,--

R58)

0,0,0,0,0,0,0,0,0,4,-->0,0,0,0,0,0,1,0,--0,0,0,0,0,0,1,0,--0,0,0,0,0,0,1,0,--0,0,0,
0,0,0,1,0,--0,0,0,0,0,1,0,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,-
-0,0,0,0,0,5,--

R59)

0,0,0,0,0,0,0,0,0,5,-->0,0,0,0,0,1,0,--0,0,0,0,0,1,0,--0,0,0,0,0,1,0,--0,0,0,0,0,1,
0,--0,0,0,0,0,1,0,--0,0,0,0,1,0,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R60)

0,0,0,0,0,0,0,0,0,6,-->0,0,0,0,1,0,--0,0,0,0,1,0,--0,0,0,0,1,0,--0,0,0,0,1,0,--0,0,
0,0,1,0,--0,0,0,0,1,0,--0,0,0,1,0,--0,0,0,1,--0,0,0,2,--0,0,0,3,--

R61)

0,0,0,0,0,0,0,0,0,7,-->0,0,0,1,0,--0,0,0,1,0,--0,0,0,1,0,--0,0,0,1,0,--0,0,0,1,0,--
0,0,0,1,0,--0,0,0,1,0,--0,0,1,0,--0,0,1,--0,0,2,--

R62)

0,0,0,0,0,0,0,0,0,8,-->0,0,1,0,--0,0,1,0,--0,0,1,0,--0,0,1,0,--0,0,1,0,--0,0,1,0,--
0,0,1,0,--0,0,1,0,--0,1,0,--0,1,--

R63)

0,0,0,0,0,0,0,0,0,9,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,

0,--0,1,0,--0,1,2,--
R64)
0,0,0,0,0,0,0,0,1,0,-->0,0,0,0,0,0,0,0,1,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,
--0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0
,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, : 0,0,1, : 0,0,2, : 0,1,0, : 0,1,2, :
LEN=4) 0,0,0,0, : 0,0,0,1, : 0,0,0,2, : 0,0,0,3, : 0,0,1,0, :
LEN=5) 0,0,0,0,0, : 0,0,0,0,1, : 0,0,0,0,2, : 0,0,0,0,3, : 0,0,0,0,4, : 0,0,0,1,0, :
LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, : 0,0,0,0,0,2, : 0,0,0,0,0,3, : 0,0,0,0,0,4, :
0,0,0,0,0,5, : 0,0,0,0,1,0, :
LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, : 0,0,0,0,0,0,2, : 0,0,0,0,0,0,3, :
0,0,0,0,0,0,4, : 0,0,0,0,0,0,5, : 0,0,0,0,0,0,6, : 0,0,0,0,0,1,0, :
LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,2, : 0,0,0,0,0,0,0,3, :
0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,7, :
0,0,0,0,0,0,1,0, :
LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,2, :
0,0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,0,6, :
0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,8, : 0,0,0,0,0,0,0,1,0, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,2, :
0,0,0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,0,5, :
0,0,0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,0,8, :
0,0,0,0,0,0,0,0,0,9, : 0,0,0,0,0,0,0,0,1,0, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,0,2, :
0,0,0,0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,0,5, :
0,0,0,0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,0,8, :
0,0,0,0,0,0,0,0,0,0,9, : 0,0,0,0,0,0,0,0,0,10, : 0,0,0,0,0,0,0,0,1,0, :
Number new nodes in level n is given by : 1,2,5,5,6,7,8,9,10,11,12,

-----Class

1679-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][100][102][110][120][201][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,0,1,--0,0,2,--
R3) 0,1,-->0,1,0,--0,1,2,--
R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
R5) 0,0,1,-->0,1,0,--0,0,1,2,--0,1,--
R6) 0,0,2,-->0,1,0,--0,1,0,--0,1,2,--
R7) 0,1,0,-->
R8) 0,1,2,-->0,1,2,--
R9) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
R10) 0,0,0,1,-->0,1,0,--0,0,0,1,2,--0,0,1,--0,0,2,--
R11) 0,0,0,2,-->0,1,0,--0,1,0,--0,0,1,2,--0,1,--
R12) 0,0,0,3,-->0,1,0,--0,1,0,--0,1,0,--0,1,2,--
R13) 0,0,1,2,-->0,0,1,2,--0,1,--

R14)

0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--

R15) 0,0,0,0,1,-->0,1,0,--0,0,0,0,1,2,--0,0,0,1,--0,0,0,2,--0,0,0,3,--

R16) 0,0,0,0,2,-->0,1,0,--0,1,0,--0,0,0,1,2,--0,0,1,--0,0,2,--

R17) 0,0,0,0,3,-->0,1,0,--0,1,0,--0,1,0,--0,0,1,2,--0,1,--

R18) 0,0,0,0,4,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,2,--

R19) 0,0,0,1,2,-->0,0,0,1,2,--0,0,1,--0,0,2,--

R20)

0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--

R21)

0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,1,2,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R22) 0,0,0,0,0,2,-->0,1,0,--0,1,0,--0,0,0,0,1,2,--0,0,0,1,--0,0,0,2,--0,0,0,3,--

R23) 0,0,0,0,0,3,-->0,1,0,--0,1,0,--0,1,0,--0,0,0,1,2,--0,0,1,--0,0,2,--

R24) 0,0,0,0,0,4,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,1,2,--0,1,--

R25) 0,0,0,0,0,5,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,2,--

R26) 0,0,0,0,1,2,-->0,0,0,0,1,2,--0,0,0,1,--0,0,0,2,--0,0,0,3,--

R27)

0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--

R28)

0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--

R29)

0,0,0,0,0,0,2,-->0,1,0,--0,1,0,--0,0,0,0,0,1,2,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R30)

0,0,0,0,0,0,3,-->0,1,0,--0,1,0,--0,1,0,--0,0,0,0,1,2,--0,0,0,1,--0,0,0,2,--0,0,0,3,--

R31) 0,0,0,0,0,0,4,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,0,1,2,--0,0,1,--0,0,2,--

R32) 0,0,0,0,0,0,5,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,1,2,--0,1,--

R33) 0,0,0,0,0,0,6,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,2,--

R34)

0,0,0,0,0,1,2,-->0,0,0,0,0,1,2,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R35)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--

R36)

0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--

R37)

0,0,0,0,0,0,0,2,-->0,1,0,--0,1,0,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--

R38)

0,0,0,0,0,0,0,3,-->0,1,0,--0,1,0,--0,1,0,--0,0,0,0,0,1,2,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R39)

0,0,0,0,0,0,0,4,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,0,0,1,2,--0,0,0,1,--0,0,0,2,
--0,0,0,3,--

R40)

0,0,0,0,0,0,0,5,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,0,1,2,--0,0,1,--0,0,
2,--

R41)

0,0,0,0,0,0,0,6,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,1,2,--0,1,--
R42)

0,0,0,0,0,0,0,7,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,2,--
R43)

0,0,0,0,0,0,1,2,-->0,0,0,0,0,0,1,2,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,
0,0,0,4,--0,0,0,0,0,5,--

R44)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,
2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,
0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--

R45)

0,0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,
2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,
0,0,0,7,--

R46)

0,0,0,0,0,0,0,0,2,-->0,1,0,--0,1,0,--0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,--0,0,0,0,0,
0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--

R47)

0,0,0,0,0,0,0,0,3,-->0,1,0,--0,1,0,--0,1,0,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,--0,0,0,
0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--

R48)

0,0,0,0,0,0,0,0,4,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,0,0,0,1,2,--0,0,0,0,1,--0,
0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R49)

0,0,0,0,0,0,0,0,5,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,0,0,1,2,--0,0,0,1,
--0,0,0,2,--0,0,0,3,--

R50)

0,0,0,0,0,0,0,0,6,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,0,1,2,--0,
0,1,--0,0,2,--

R51)

0,0,0,0,0,0,0,0,7,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,1,
2,--0,1,--

R52)

0,0,0,0,0,0,0,0,8,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,
--0,1,2,--

R53)

0,0,0,0,0,0,0,1,2,-->0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,
0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--

R54)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,
0,0,0,0,2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--
-0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,
0,0,0,0,0,9,--0,0,0,0,0,0,0,0,0,10,--

R55)

0,0,0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,0,1,--0,0,0,0,
0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,
,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--

R56)

0,0,0,0,0,0,0,0,2,-->0,1,0,--0,1,0,--0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,--0,0,
0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,
,--0,0,0,0,0,0,7,--

R57)

0,0,0,0,0,0,0,0,3,-->0,1,0,--0,1,0,--0,1,0,--0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,--
0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--

R58)

0,0,0,0,0,0,0,0,4,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,0,0,0,0,1,2,--0,0,0,0,0,
1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--

R59)

0,0,0,0,0,0,0,0,5,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,0,0,0,1,2,--0,0,
0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R60)

0,0,0,0,0,0,0,0,6,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,0,0,1,2,
--0,0,0,1,--0,0,0,2,--0,0,0,3,--

R61)

0,0,0,0,0,0,0,0,7,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,
0,1,2,--0,0,1,--0,0,2,--

R62)

0,0,0,0,0,0,0,0,8,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,
0,--0,0,1,2,--0,1,--

R63)

0,0,0,0,0,0,0,0,9,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,
0,--0,1,0,--0,1,2,--

R64)

0,0,0,0,0,0,0,0,1,2,-->0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,
0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,
,7,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,0,0,: 0,0,1,: 0,0,2,: 0,1,0,: 0,1,2,:

LEN=4) 0,0,0,0,: 0,0,0,1,: 0,0,0,2,: 0,0,0,3,: 0,0,1,2,:

LEN=5) 0,0,0,0,0,: 0,0,0,0,1,: 0,0,0,0,2,: 0,0,0,0,3,: 0,0,0,0,4,: 0,0,0,1,2,:

LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,1,: 0,0,0,0,0,2,: 0,0,0,0,0,3,: 0,0,0,0,0,4,:

0,0,0,0,0,5,: 0,0,0,0,1,2,:

LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,1,: 0,0,0,0,0,0,2,: 0,0,0,0,0,0,3,:

0,0,0,0,0,0,4,: 0,0,0,0,0,0,5,: 0,0,0,0,0,0,6,: 0,0,0,0,0,1,2,:

LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,2,: 0,0,0,0,0,0,0,3,:

0,0,0,0,0,0,0,4,: 0,0,0,0,0,0,0,5,: 0,0,0,0,0,0,0,6,: 0,0,0,0,0,0,0,7,:

0,0,0,0,0,0,1,2,:

LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,0,2,:

0,0,0,0,0,0,0,0,3,: 0,0,0,0,0,0,0,0,4,: 0,0,0,0,0,0,0,0,5,: 0,0,0,0,0,0,0,0,6,:

0,0,0,0,0,0,0,0,7,: 0,0,0,0,0,0,0,0,8,: 0,0,0,0,0,0,0,1,2,:

LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,0,0,2,:

0,0,0,0,0,0,0,0,0,3,: 0,0,0,0,0,0,0,0,0,4,: 0,0,0,0,0,0,0,0,0,5,:

0,0,0,0,0,0,0,0,0,6,: 0,0,0,0,0,0,0,0,0,7,: 0,0,0,0,0,0,0,0,0,8,:
 0,0,0,0,0,0,0,0,0,9,: 0,0,0,0,0,0,0,0,1,2,:
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,0,0,0,2,:
 0,0,0,0,0,0,0,0,0,0,3,: 0,0,0,0,0,0,0,0,0,0,4,: 0,0,0,0,0,0,0,0,0,0,5,:
 0,0,0,0,0,0,0,0,0,0,6,: 0,0,0,0,0,0,0,0,0,0,7,: 0,0,0,0,0,0,0,0,0,0,8,:
 0,0,0,0,0,0,0,0,0,0,9,: 0,0,0,0,0,0,0,0,0,0,10,: 0,0,0,0,0,0,0,0,0,1,2,:
 Number new nodes in level n is given by : 1,2,5,5,6,7,8,9,10,11,12,

-----Class

1680-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[011][101][102][110][120][201][210]]$

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Rules of $T[L]$:

R1) 0,-->0,0,--0,1,--
 R2) 0,0,-->0,0,0,--0,0,1,--0,0,2,--
 R3) 0,1,-->0,1,0,--0,1,0,--
 R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
 R5) 0,0,1,-->0,1,0,--0,0,1,2,--0,0,1,3,--
 R6) 0,0,2,-->0,1,0,--0,0,2,1,--0,1,0,--
 R7) 0,1,0,-->0,1,0,--
 R8) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
 R9) 0,0,0,1,-->0,1,0,--0,0,0,1,2,--0,0,0,1,3,--0,0,0,1,4,--
 R10) 0,0,0,2,-->0,1,0,--0,0,2,1,--0,0,1,2,--0,0,1,3,--
 R11) 0,0,0,3,-->0,1,0,--0,0,2,1,--0,0,2,1,--0,1,0,--
 R12) 0,0,1,2,-->0,0,1,2,--0,0,1,3,--
 R13) 0,0,1,3,-->0,0,2,1,--0,1,0,--
 R14) 0,0,2,1,-->
 R15)
 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--
 0,0,0,0,0,5,--
 R16) 0,0,0,0,1,-->0,1,0,--0,0,0,0,1,2,--0,0,0,0,1,3,--0,0,0,0,1,4,--0,0,0,0,1,5,--
 R17) 0,0,0,0,2,-->0,1,0,--0,0,2,1,--0,0,0,1,2,--0,0,0,1,3,--0,0,0,1,4,--
 R18) 0,0,0,0,3,-->0,1,0,--0,0,2,1,--0,0,2,1,--0,0,1,2,--0,0,1,3,--
 R19) 0,0,0,0,4,-->0,1,0,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,1,0,--
 R20) 0,0,0,1,2,-->0,0,0,1,2,--0,0,0,1,3,--0,0,0,1,4,--
 R21) 0,0,0,1,3,-->0,0,2,1,--0,0,1,2,--0,0,1,3,--
 R22) 0,0,0,1,4,-->0,0,2,1,--0,0,2,1,--0,1,0,--
 R23)
 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,
 0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--
 R24)
 0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,1,2,--0,0,0,0,0,1,3,--0,0,0,0,0,1,4,--0,0,0,0,0,1,
 5,--0,0,0,0,0,1,6,--
 R25)
 0,0,0,0,0,2,-->0,1,0,--0,0,2,1,--0,0,0,0,1,2,--0,0,0,0,1,3,--0,0,0,0,1,4,--0,0,0,0,
 1,5,--
 R26)
 0,0,0,0,0,3,-->0,1,0,--0,0,2,1,--0,0,2,1,--0,0,0,1,2,--0,0,0,1,3,--0,0,0,1,4,--
 R27) 0,0,0,0,0,4,-->0,1,0,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,1,2,--0,0,1,3,--

R28) 0,0,0,0,0,5,-->0,1,0,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,1,0,--
R29) 0,0,0,0,1,2,-->0,0,0,0,1,2,--0,0,0,0,1,3,--0,0,0,0,1,4,--0,0,0,0,1,5,--
R30) 0,0,0,0,1,3,-->0,0,2,1,--0,0,0,1,2,--0,0,0,1,3,--0,0,0,1,4,--
R31) 0,0,0,0,1,4,-->0,0,2,1,--0,0,2,1,--0,0,1,2,--0,0,1,3,--
R32) 0,0,0,0,1,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,1,0,--
R33)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,
0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--
R34)
0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,3,--0,0,0,0,0,0,1,4,--0,0,
0,0,0,0,1,5,--0,0,0,0,0,0,1,6,--0,0,0,0,0,0,1,7,--
R35)
0,0,0,0,0,0,2,-->0,1,0,--0,0,2,1,--0,0,0,0,0,1,2,--0,0,0,0,0,1,3,--0,0,0,0,0,1,4,--
0,0,0,0,0,1,5,--0,0,0,0,0,1,6,--
R36)
0,0,0,0,0,0,3,-->0,1,0,--0,0,2,1,--0,0,2,1,--0,0,0,0,1,2,--0,0,0,0,1,3,--0,0,0,0,1,
4,--0,0,0,0,1,5,--
R37)
0,0,0,0,0,0,4,-->0,1,0,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,1,2,--0,0,0,1,3,--0,0,
0,1,4,--
R38)
0,0,0,0,0,0,5,-->0,1,0,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,1,2,--0,0,1,3,
--
R39)
0,0,0,0,0,0,6,-->0,1,0,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,1,0,--
R40)
0,0,0,0,0,1,2,-->0,0,0,0,0,1,2,--0,0,0,0,0,1,3,--0,0,0,0,0,1,4,--0,0,0,0,0,1,5,--0,
0,0,0,0,1,6,--
R41)
0,0,0,0,0,1,3,-->0,0,2,1,--0,0,0,0,1,2,--0,0,0,0,1,3,--0,0,0,0,1,4,--0,0,0,0,1,5,--
R42) 0,0,0,0,0,1,4,-->0,0,2,1,--0,0,2,1,--0,0,0,1,2,--0,0,0,1,3,--0,0,0,1,4,--
R43) 0,0,0,0,0,1,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,1,2,--0,0,1,3,--
R44) 0,0,0,0,0,1,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,1,0,--
R45)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,
0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,
0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--
R46)
0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,1,3,--0,0,0,0,0,0,0,1,
4,--0,0,0,0,0,0,0,1,5,--0,0,0,0,0,0,0,1,6,--0,0,0,0,0,0,0,1,7,--0,0,0,0,0,0,0,1,8,--
-
R47)
0,0,0,0,0,0,0,2,-->0,1,0,--0,0,2,1,--0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,3,--0,0,0,0,0,
0,1,4,--0,0,0,0,0,0,1,5,--0,0,0,0,0,0,1,6,--0,0,0,0,0,0,1,7,--
R48)
0,0,0,0,0,0,0,3,-->0,1,0,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,1,2,--0,0,0,0,0,1,3,--0,0,
0,0,0,1,4,--0,0,0,0,0,1,5,--0,0,0,0,0,1,6,--
R49)
0,0,0,0,0,0,0,4,-->0,1,0,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,1,2,--0,0,0,0,1,3,
--0,0,0,0,1,4,--0,0,0,0,1,5,--

2,1,--0,0,1,2,--0,0,1,3,--
R67)
0,0,0,0,0,0,0,0,8,-->0,1,0,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,
2,1,--0,0,2,1,--0,1,0,--
R68)
0,0,0,0,0,0,0,0,1,2,-->0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,0,1,3,--0,0,0,0,0,0,0,0,1,4,--0,
0,0,0,0,0,0,0,0,1,5,--0,0,0,0,0,0,0,0,1,6,--0,0,0,0,0,0,0,0,1,7,--0,0,0,0,0,0,0,0,1,8,--
R69)
0,0,0,0,0,0,0,0,1,3,-->0,0,2,1,--0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,0,1,3,--0,0,0,0,0,0,0,0,1,4,
--0,0,0,0,0,0,0,0,1,5,--0,0,0,0,0,0,0,0,1,6,--0,0,0,0,0,0,0,0,1,7,--
R70)
0,0,0,0,0,0,0,0,1,4,-->0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,0,1,3,--0,0,0,0,0,
1,4,--0,0,0,0,0,0,1,5,--0,0,0,0,0,0,1,6,--
R71)
0,0,0,0,0,0,0,0,1,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,1,2,--0,0,0,0,1,3,--0,0,
0,0,1,4,--0,0,0,0,1,5,--
R72)
0,0,0,0,0,0,0,0,1,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,1,2,--0,0,0,1,3,
--0,0,0,1,4,--
R73)
0,0,0,0,0,0,0,0,1,7,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,1,2,--0,
0,1,3,--
R74)
0,0,0,0,0,0,0,0,1,8,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,
1,0,--
R75)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,
0,0,0,0,2,--0,0,0,0,0,0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,0,0,5,--
-0,0,0,0,0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,
0,0,0,0,0,0,9,--0,0,0,0,0,0,0,0,0,0,0,0,10,--
R76)
0,0,0,0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,0,0,0,0,0,1,3,--0,0,
0,0,0,0,0,0,0,0,1,4,--0,0,0,0,0,0,0,0,0,0,0,0,1,5,--0,0,0,0,0,0,0,0,0,0,0,0,1,6,--0,0,0,0,0,0,0,0,
,0,1,7,--0,0,0,0,0,0,0,0,0,0,0,0,0,1,8,--0,0,0,0,0,0,0,0,0,0,0,0,0,1,9,--0,0,0,0,0,0,0,0,0,0,0,0,1,10,--
R77)
0,0,0,0,0,0,0,0,0,0,2,-->0,1,0,--0,0,2,1,--0,0,0,0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,0,0,0,0,1,3,
--0,0,0,0,0,0,0,0,0,0,1,4,--0,0,0,0,0,0,0,0,0,0,1,5,--0,0,0,0,0,0,0,0,0,0,1,6,--0,0,0,0,0,0,0,0,0,
,1,7,--0,0,0,0,0,0,0,0,0,0,1,8,--0,0,0,0,0,0,0,0,0,0,1,9,--
R78)
0,0,0,0,0,0,0,0,0,0,3,-->0,1,0,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,
0,1,3,--0,0,0,0,0,0,0,0,1,4,--0,0,0,0,0,0,0,0,1,5,--0,0,0,0,0,0,0,0,1,6,--0,0,0,0,0,0,0,0,1,
,7,--0,0,0,0,0,0,0,0,1,8,--
R79)
0,0,0,0,0,0,0,0,0,0,4,-->0,1,0,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,1,2,--0,0,
0,0,0,0,0,1,3,--0,0,0,0,0,0,0,0,1,4,--0,0,0,0,0,0,0,0,1,5,--0,0,0,0,0,0,0,0,1,6,--0,0,0,0,0,0,0,0,1,7,
,--
R80)
0,0,0,0,0,0,0,0,0,0,5,-->0,1,0,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,1,
2,--0,0,0,0,0,0,1,3,--0,0,0,0,0,0,1,4,--0,0,0,0,0,0,1,5,--0,0,0,0,0,0,1,6,--
R81)

0,0,0,0,0,0,0,0,0,6,-->0,1,0,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,
0,0,0,1,2,--0,0,0,1,3,--0,0,0,1,4,--0,0,0,1,5,--

R82)

0,0,0,0,0,0,0,0,0,7,-->0,1,0,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,
0,2,1,--0,0,0,1,2,--0,0,0,1,3,--0,0,0,1,4,--

R83)

0,0,0,0,0,0,0,0,0,8,-->0,1,0,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,
0,2,1,--0,0,2,1,--0,0,1,2,--0,0,1,3,--

R84)

0,0,0,0,0,0,0,0,0,9,-->0,1,0,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,
0,2,1,--0,0,2,1,--0,0,2,1,--0,1,0,--

R85)

0,0,0,0,0,0,0,0,1,2,-->0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,1,3,--0,0,0,0,0,0,0,0,
1,4,--0,0,0,0,0,0,0,1,5,--0,0,0,0,0,0,0,1,6,--0,0,0,0,0,0,0,1,7,--0,0,0,0,0,0,
0,0,1,8,--0,0,0,0,0,0,0,1,9,--

R86)

0,0,0,0,0,0,0,0,1,3,-->0,0,2,1,--0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,1,3,--0,0,0,0,0,
0,0,1,4,--0,0,0,0,0,0,0,1,5,--0,0,0,0,0,0,0,1,6,--0,0,0,0,0,0,0,1,7,--0,0,0,0,0,0,
1,8,--

R87)

0,0,0,0,0,0,0,0,1,4,-->0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,3,--0,0,
0,0,0,0,1,4,--0,0,0,0,0,0,1,5,--0,0,0,0,0,0,1,6,--0,0,0,0,0,0,1,7,--

R88)

0,0,0,0,0,0,0,0,1,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,1,2,--0,0,0,0,0,1,3,
--0,0,0,0,0,1,4,--0,0,0,0,0,1,5,--0,0,0,0,0,1,6,--

R89)

0,0,0,0,0,0,0,0,1,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,1,2,--0,0,0,
0,1,3,--0,0,0,0,1,4,--0,0,0,0,1,5,--

R90)

0,0,0,0,0,0,0,0,1,7,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,1,2,
--0,0,0,1,3,--0,0,0,1,4,--

R91)

0,0,0,0,0,0,0,0,1,8,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--
0,0,1,2,--0,0,1,3,--

R92)

0,0,0,0,0,0,0,0,1,9,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--
0,0,2,1,--0,1,0,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, : 0,1, :

LEN=3) 0,0,0, : 0,0,1, : 0,0,2, : 0,1,0, :

LEN=4) 0,0,0,0, : 0,0,0,1, : 0,0,0,2, : 0,0,0,3, : 0,0,1,2, : 0,0,1,3, : 0,0,2,1, :

LEN=5) 0,0,0,0,0, : 0,0,0,0,1, : 0,0,0,0,2, : 0,0,0,0,3, : 0,0,0,0,4, : 0,0,0,1,2, :

0,0,0,1,3, : 0,0,0,1,4, :

LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, : 0,0,0,0,0,2, : 0,0,0,0,0,3, : 0,0,0,0,0,4, :

0,0,0,0,0,5, : 0,0,0,0,1,2, : 0,0,0,0,1,3, : 0,0,0,0,1,4, : 0,0,0,0,1,5, :

LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, : 0,0,0,0,0,0,2, : 0,0,0,0,0,0,3, :

0,0,0,0,0,0,4, : 0,0,0,0,0,0,5, : 0,0,0,0,0,0,6, : 0,0,0,0,0,1,2, : 0,0,0,0,0,1,3, :

0,0,0,0,0,1,4, : 0,0,0,0,0,1,5, : 0,0,0,0,0,1,6, :

LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,2, : 0,0,0,0,0,0,0,3, :

0,0,0,0,0,0,0,4,: 0,0,0,0,0,0,0,5,: 0,0,0,0,0,0,0,6,: 0,0,0,0,0,0,0,7,:
 0,0,0,0,0,0,1,2,: 0,0,0,0,0,0,1,3,: 0,0,0,0,0,0,1,4,: 0,0,0,0,0,0,1,5,:
 0,0,0,0,0,0,1,6,: 0,0,0,0,0,0,1,7,:
 LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,0,2,:
 0,0,0,0,0,0,0,0,3,: 0,0,0,0,0,0,0,0,4,: 0,0,0,0,0,0,0,0,5,: 0,0,0,0,0,0,0,0,6,:
 0,0,0,0,0,0,0,0,7,: 0,0,0,0,0,0,0,0,8,: 0,0,0,0,0,0,0,1,2,: 0,0,0,0,0,0,0,1,3,:
 0,0,0,0,0,0,0,1,4,: 0,0,0,0,0,0,0,1,5,: 0,0,0,0,0,0,0,1,6,: 0,0,0,0,0,0,0,1,7,:
 0,0,0,0,0,0,0,1,8,:
 LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,0,0,2,:
 0,0,0,0,0,0,0,0,0,3,: 0,0,0,0,0,0,0,0,0,4,: 0,0,0,0,0,0,0,0,0,5,:
 0,0,0,0,0,0,0,0,0,6,: 0,0,0,0,0,0,0,0,0,7,: 0,0,0,0,0,0,0,0,0,8,:
 0,0,0,0,0,0,0,0,0,9,: 0,0,0,0,0,0,0,0,1,2,: 0,0,0,0,0,0,0,0,1,3,:
 0,0,0,0,0,0,0,0,1,4,: 0,0,0,0,0,0,0,0,1,5,: 0,0,0,0,0,0,0,0,1,6,:
 0,0,0,0,0,0,0,0,1,7,: 0,0,0,0,0,0,0,0,1,8,: 0,0,0,0,0,0,0,0,1,9,:
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,0,0,0,2,:
 0,0,0,0,0,0,0,0,0,0,3,: 0,0,0,0,0,0,0,0,0,0,4,: 0,0,0,0,0,0,0,0,0,0,5,:
 0,0,0,0,0,0,0,0,0,0,6,: 0,0,0,0,0,0,0,0,0,0,7,: 0,0,0,0,0,0,0,0,0,0,8,:
 0,0,0,0,0,0,0,0,0,0,9,: 0,0,0,0,0,0,0,0,0,0,10,: 0,0,0,0,0,0,0,0,0,1,2,:
 0,0,0,0,0,0,0,0,0,1,3,: 0,0,0,0,0,0,0,0,0,1,4,: 0,0,0,0,0,0,0,0,0,1,5,:
 0,0,0,0,0,0,0,0,0,1,6,: 0,0,0,0,0,0,0,0,0,1,7,: 0,0,0,0,0,0,0,0,0,1,8,:
 0,0,0,0,0,0,0,0,0,1,9,: 0,0,0,0,0,0,0,0,0,1,10,:
 Number new nodes in level n is given by : 1,2,4,7,8,10,12,14,16,18,20,

-----Class

1681-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[012][021][100][101][102][110][120]]$

--

Rules of $T[L]$:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,1,--
- R3) 0,1,-->0,1,0,--0,1,1,--
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
- R5) 0,1,0,-->
- R6) 0,1,1,-->0,1,1,--
- R7) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
- R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R9) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R10) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R11)
- 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R12)
- 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R13)
- 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- 0,1,--0,1,--0,1,--0,1,--

List of different nodes in $T[L]$

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:
 LEN=3) 0,0,0,: 0,1,0,: 0,1,1,:
 LEN=4) 0,0,0,0,:
 LEN=5) 0,0,0,0,0,:
 LEN=6) 0,0,0,0,0,0,:
 LEN=7) 0,0,0,0,0,0,0,:
 LEN=8) 0,0,0,0,0,0,0,0,:
 LEN=9) 0,0,0,0,0,0,0,0,0,:
 LEN=10) 0,0,0,0,0,0,0,0,0,0,:
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,:
 Number new nodes in level n is given by : 1,2,3,1,1,1,1,1,1,1,1,

-----Class

1682-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[012][021][100][101][102][110][201]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,1,--
- R3) 0,1,-->0,1,0,--0,1,1,--
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
- R5) 0,1,0,-->
- R6) 0,1,1,-->0,1,1,--
- R7) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
- R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R9) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R10) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R11) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R12) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R13) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0,:
 LEN=2) 0,0,: 0,1,:
 LEN=3) 0,0,0,: 0,1,0,: 0,1,1,:
 LEN=4) 0,0,0,0,:
 LEN=5) 0,0,0,0,0,:
 LEN=6) 0,0,0,0,0,0,:
 LEN=7) 0,0,0,0,0,0,0,:
 LEN=8) 0,0,0,0,0,0,0,0,:
 LEN=9) 0,0,0,0,0,0,0,0,0,:
 LEN=10) 0,0,0,0,0,0,0,0,0,0,:
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,:
 Number new nodes in level n is given by : 1,2,3,1,1,1,1,1,1,1,1,

-----Class

1683-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[012][021][100][101][102][110][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,1,--0,1,--

R3) 0,1,-->0,1,0,--0,1,1,--

R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--

R5) 0,1,0,-->

R6) 0,1,1,-->0,1,1,--

R7) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--

R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--

R9) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

R10) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

R11)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

R12)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

R13)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,0,0,: 0,1,0,: 0,1,1,:

LEN=4) 0,0,0,0,:

LEN=5) 0,0,0,0,0,:

LEN=6) 0,0,0,0,0,0,:

LEN=7) 0,0,0,0,0,0,0,:

LEN=8) 0,0,0,0,0,0,0,0,:

LEN=9) 0,0,0,0,0,0,0,0,0,:

LEN=10) 0,0,0,0,0,0,0,0,0,0,:

LEN=11) 0,0,0,0,0,0,0,0,0,0,0,:

Number new nodes in level n is given by : 1,2,3,1,1,1,1,1,1,1,1,

-----Class

1684-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[012][021][100][101][102][120][201]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,1,--0,1,--

R3) 0,1,-->0,1,0,--0,1,--

R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--

R5) 0,1,0,-->
 R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
 R7) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
 R8) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
 R9) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 R10)
 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 1,--
 R11)
 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 --0,1,--0,1,--
 R12)
 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0, :
 LEN=2) 0,0, : 0,1, :
 LEN=3) 0,0,0, : 0,1,0, :
 LEN=4) 0,0,0,0, :
 LEN=5) 0,0,0,0,0, :
 LEN=6) 0,0,0,0,0,0, :
 LEN=7) 0,0,0,0,0,0,0, :
 LEN=8) 0,0,0,0,0,0,0,0, :
 LEN=9) 0,0,0,0,0,0,0,0,0, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :
 Number new nodes in level n is given by : 1,2,2,1,1,1,1,1,1,1,1,

-----Class

1685-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[012][021][100][101][102][120][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--
 R2) 0,0,-->0,0,0,--0,1,--0,1,--
 R3) 0,1,-->0,1,0,--0,1,--
 R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
 R5) 0,1,0,-->
 R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
 R7) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
 R8) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 R9) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 R10)
 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 1,--
 R11)
 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
 --0,1,--0,1,--
 R12)

0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

- LEN=1) 0,:
- LEN=2) 0,0,: 0,1,:
- LEN=3) 0,0,0,: 0,1,0,:
- LEN=4) 0,0,0,0,:
- LEN=5) 0,0,0,0,0,:
- LEN=6) 0,0,0,0,0,0,:
- LEN=7) 0,0,0,0,0,0,0,:
- LEN=8) 0,0,0,0,0,0,0,0,:
- LEN=9) 0,0,0,0,0,0,0,0,0,:
- LEN=10) 0,0,0,0,0,0,0,0,0,0,:
- LEN=11) 0,0,0,0,0,0,0,0,0,0,0,0,:

Number new nodes in level n is given by : 1,2,2,1,1,1,1,1,1,1,1,1,

-----Class

1686-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[012][021][100][101][102][201][210]]

--
Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,1,--
- R3) 0,1,-->0,1,0,--0,1,--
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
- R5) 0,1,0,-->
- R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
- R7) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R8) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R9) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R10)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,
1,--
- R11)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,
--0,1,--0,1,--
- R12)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

- LEN=1) 0,:
- LEN=2) 0,0,: 0,1,:
- LEN=3) 0,0,0,: 0,1,0,:
- LEN=4) 0,0,0,0,:
- LEN=5) 0,0,0,0,0,:
- LEN=6) 0,0,0,0,0,0,:
- LEN=7) 0,0,0,0,0,0,0,:
- LEN=8) 0,0,0,0,0,0,0,0,:
- LEN=9) 0,0,0,0,0,0,0,0,0,0,:

LEN=10) 0,0,0,0,0,0,0,0,0,0,0,0,
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,0,0,0,
 Number new nodes in level n is given by : 1,2,2,1,1,1,1,1,1,1,1,1,

-----Class

1687-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[012][021][100][101][110][120][201]]$

 --

Rules of T[L]:

- R1) 0, -->0,0, --0,1, --
- R2) 0,0, -->0,0,0, --0,1, --0,1, --
- R3) 0,1, -->0,1,0, --0,1,1, --
- R4) 0,0,0, -->0,0,0,0, --0,1, --0,1, --0,1, --
- R5) 0,1,0, -->
- R6) 0,1,1, -->0,1,1, --
- R7) 0,0,0,0, -->0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --
- R8) 0,0,0,0,0, -->0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --
- R9) 0,0,0,0,0,0, -->0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --
- R10) 0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --
- R11) 0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --
- R12) 0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --
- R13) 0,0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, : 0,1, :
- LEN=3) 0,0,0, : 0,1,0, : 0,1,1, :
- LEN=4) 0,0,0,0, :
- LEN=5) 0,0,0,0,0, :
- LEN=6) 0,0,0,0,0,0, :
- LEN=7) 0,0,0,0,0,0,0, :
- LEN=8) 0,0,0,0,0,0,0,0, :
- LEN=9) 0,0,0,0,0,0,0,0,0, :
- LEN=10) 0,0,0,0,0,0,0,0,0,0,0, :
- LEN=11) 0,0,0,0,0,0,0,0,0,0,0,0,0,0, :
- Number new nodes in level n is given by : 1,2,3,1,1,1,1,1,1,1,1,1,

-----Class

1688-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[012][021][100][101][110][120][210]]$

 --

Rules of T[L]:

- R1) 0, -->0,0, --0,1, --

R2) 0,0,-->0,0,0,--0,1,--0,1,--
R3) 0,1,-->0,1,0,--0,1,1,--
R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
R5) 0,1,0,-->
R6) 0,1,1,-->0,1,1,--
R7) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
R9) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
R10) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R11)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,
1,--
R12)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
--0,1,--0,1,--
R13)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
0,1,--0,1,--0,1,--0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, : 0,1,0, : 0,1,1, :
LEN=4) 0,0,0,0, :
LEN=5) 0,0,0,0,0, :
LEN=6) 0,0,0,0,0,0, :
LEN=7) 0,0,0,0,0,0,0, :
LEN=8) 0,0,0,0,0,0,0,0, :
LEN=9) 0,0,0,0,0,0,0,0,0, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :
Number new nodes in level n is given by : 1,2,3,1,1,1,1,1,1,1,1,

-----Class
1689-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[012][021][100][101][110][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,1,--0,1,--
R3) 0,1,-->0,1,0,--0,1,1,--
R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
R5) 0,1,0,-->
R6) 0,1,1,-->0,1,1,--
R7) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
R8) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
R9) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
R10) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R11)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,


```

1, --
R12)
0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --
--0,1, --0,1, --
R13)
0,0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --
0,1, --0,1, --0,1, --0,1, --
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, : 0,1,0, : 0,1,1, :
LEN=4) 0,0,0,0, :
LEN=5) 0,0,0,0,0, :
LEN=6) 0,0,0,0,0,0, :
LEN=7) 0,0,0,0,0,0,0, :
LEN=8) 0,0,0,0,0,0,0,0, :
LEN=9) 0,0,0,0,0,0,0,0,0, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :
Number new nodes in level n is given by : 1,2,3,1,1,1,1,1,1,1,1,

```

-----Class

1690-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[012][021][100][101][120][201][210]]$

```

--
Rules of T[L]:
R1) 0, -->0,0, --0,1, --
R2) 0,0, -->0,0,0, --0,1, --0,1, --
R3) 0,1, -->0,1,0, --0,1, --
R4) 0,0,0, -->0,0,0,0, --0,1, --0,1, --0,1, --
R5) 0,1,0, -->
R6) 0,0,0,0, -->0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --
R7) 0,0,0,0,0, -->0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --
R8) 0,0,0,0,0,0, -->0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --
R9) 0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --
R10)
0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --
1, --
R11)
0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --
--0,1, --0,1, --
R12)
0,0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --
0,1, --0,1, --0,1, --0,1, --
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, : 0,1,0, :
LEN=4) 0,0,0,0, :

```

LEN=5) 0,0,0,0,0, :
 LEN=6) 0,0,0,0,0,0, :
 LEN=7) 0,0,0,0,0,0,0, :
 LEN=8) 0,0,0,0,0,0,0,0, :
 LEN=9) 0,0,0,0,0,0,0,0,0, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :
 Number new nodes in level n is given by : 1,2,2,1,1,1,1,1,1,1,1,

-----Class

1691-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[012][021][100][102][110][120][201]]$

--
Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,1,--
- R3) 0,1,-->0,1,0,--0,1,0,--
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
- R5) 0,1,0,-->0,1,0,--
- R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
- R7) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R8) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R9) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R10) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R11) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R12) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0, :
 LEN=2) 0,0, : 0,1, :
 LEN=3) 0,0,0, : 0,1,0, :
 LEN=4) 0,0,0,0, :
 LEN=5) 0,0,0,0,0, :
 LEN=6) 0,0,0,0,0,0, :
 LEN=7) 0,0,0,0,0,0,0, :
 LEN=8) 0,0,0,0,0,0,0,0, :
 LEN=9) 0,0,0,0,0,0,0,0,0, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :
 Number new nodes in level n is given by : 1,2,2,1,1,1,1,1,1,1,1,

-----Class

1692-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[012][021][100][102][110][120][210]]$

```

-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,1,--0,1,--
R3) 0,1,-->0,1,0,--0,1,0,--
R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
R5) 0,1,0,-->0,1,0,--
R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
R7) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
R8) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R9) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R10)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
1,--
R11)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
--0,1,--0,1,--
R12)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
0,1,--0,1,--0,1,--0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,0,: 0,1,0,:
LEN=4) 0,0,0,0,:
LEN=5) 0,0,0,0,0,:
LEN=6) 0,0,0,0,0,0,:
LEN=7) 0,0,0,0,0,0,0,:
LEN=8) 0,0,0,0,0,0,0,0,:
LEN=9) 0,0,0,0,0,0,0,0,0,:
LEN=10) 0,0,0,0,0,0,0,0,0,0,:
LEN=11) 0,0,0,0,0,0,0,0,0,0,0,:
Number new nodes in level n is given by : 1,2,2,1,1,1,1,1,1,1,1,

```

```

-----Class
1693-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  $L=[[012][021][100][102][110][201][210]]$ 
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,1,--0,1,--
R3) 0,1,-->0,1,0,--0,1,0,--
R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
R5) 0,1,0,-->0,1,0,--
R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
R7) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
R8) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R9) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

```

R10)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,
1,--

R11)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,
--0,1,--0,1,--

R12)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,0,0,: 0,1,0,:

LEN=4) 0,0,0,0,:

LEN=5) 0,0,0,0,0,:

LEN=6) 0,0,0,0,0,0,:

LEN=7) 0,0,0,0,0,0,0,:

LEN=8) 0,0,0,0,0,0,0,0,:

LEN=9) 0,0,0,0,0,0,0,0,0,:

LEN=10) 0,0,0,0,0,0,0,0,0,0,:

LEN=11) 0,0,0,0,0,0,0,0,0,0,0,:

Number new nodes in level n is given by : 1,2,2,1,1,1,1,1,1,1,1,1,

-----Class

1694-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[012][021][100][102][120][201][210]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--

R2) 0,0,-->0,0,0,--0,1,--0,1,--

R3) 0,1,-->0,1,0,--0,1,--

R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--

R5) 0,1,0,-->0,1,0,--

R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--

R7) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--

R8) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--

R9) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

R10)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,
1,--

R11)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,
--0,1,--0,1,--

R12)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0,: 0,1,:

LEN=3) 0,0,0,: 0,1,0,:
 LEN=4) 0,0,0,0,:
 LEN=5) 0,0,0,0,0,:
 LEN=6) 0,0,0,0,0,0,:
 LEN=7) 0,0,0,0,0,0,0,:
 LEN=8) 0,0,0,0,0,0,0,0,:
 LEN=9) 0,0,0,0,0,0,0,0,0,:
 LEN=10) 0,0,0,0,0,0,0,0,0,0,:
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,:
 Number new nodes in level n is given by : 1,2,2,1,1,1,1,1,1,1,1,

-----Class

1695-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[012][021][100][110][120][201][210]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,1,--
- R3) 0,1,-->0,1,0,--0,1,0,--
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
- R5) 0,1,0,-->0,1,0,--
- R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
- R7) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R8) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R9) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R10) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R11) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R12) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0,:
 LEN=2) 0,0,: 0,1,:
 LEN=3) 0,0,0,: 0,1,0,:
 LEN=4) 0,0,0,0,:
 LEN=5) 0,0,0,0,0,:
 LEN=6) 0,0,0,0,0,0,:
 LEN=7) 0,0,0,0,0,0,0,:
 LEN=8) 0,0,0,0,0,0,0,0,:
 LEN=9) 0,0,0,0,0,0,0,0,0,:
 LEN=10) 0,0,0,0,0,0,0,0,0,0,:
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,:
 Number new nodes in level n is given by : 1,2,2,1,1,1,1,1,1,1,1,

-----Class

1696-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[012][021][101][102][110][120][201]]$

--
Rules of $T[L]$:

- R1) $0, -->0,0, --0,1, --$
 - R2) $0,0, -->0,0,0, --0,1, --0,1, --$
 - R3) $0,1, -->0,1,0, --0,1,0, --$
 - R4) $0,0,0, -->0,0,0,0, --0,1, --0,1, --0,1, --$
 - R5) $0,1,0, -->0,1,0, --$
 - R6) $0,0,0,0, -->0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --$
 - R7) $0,0,0,0,0, -->0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --$
 - R8) $0,0,0,0,0,0, -->0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --$
 - R9) $0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --$
 - R10) $0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --$
 - R11) $0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --$
 - R12) $0,0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --$
- List of different nodes in $T[L]$
- LEN=1) $0, :$
 - LEN=2) $0,0, : 0,1, :$
 - LEN=3) $0,0,0, : 0,1,0, :$
 - LEN=4) $0,0,0,0, :$
 - LEN=5) $0,0,0,0,0, :$
 - LEN=6) $0,0,0,0,0,0, :$
 - LEN=7) $0,0,0,0,0,0,0, :$
 - LEN=8) $0,0,0,0,0,0,0,0, :$
 - LEN=9) $0,0,0,0,0,0,0,0,0, :$
 - LEN=10) $0,0,0,0,0,0,0,0,0,0, :$
 - LEN=11) $0,0,0,0,0,0,0,0,0,0,0, :$
- Number new nodes in level n is given by : 1,2,2,1,1,1,1,1,1,1,1,

-----Class
1697-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[012][021][101][102][110][120][210]]$

--
Rules of $T[L]$:

- R1) $0, -->0,0, --0,1, --$
- R2) $0,0, -->0,0,0, --0,1, --0,1, --$
- R3) $0,1, -->0,1,0, --0,1,0, --$
- R4) $0,0,0, -->0,0,0,0, --0,1, --0,1, --0,1, --$
- R5) $0,1,0, -->0,1,0, --$
- R6) $0,0,0,0, -->0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --$
- R7) $0,0,0,0,0, -->0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --$

R8) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R9) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R10) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R11) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R12) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, : 0,1,0, :
LEN=4) 0,0,0,0, :
LEN=5) 0,0,0,0,0, :
LEN=6) 0,0,0,0,0,0, :
LEN=7) 0,0,0,0,0,0,0, :
LEN=8) 0,0,0,0,0,0,0,0, :
LEN=9) 0,0,0,0,0,0,0,0,0, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :
Number new nodes in level n is given by : 1,2,2,1,1,1,1,1,1,1,1,

-----Class

1698-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[012][021][101][102][110][201][210]]$

--
Rules of T[L]:

R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,1,--0,1,--
R3) 0,1,-->0,1,0,--0,1,0,--
R4) 0,0,0,-->0,0,0,0,--0,1,--0,1,--0,1,--
R5) 0,1,0,-->0,1,0,--
R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
R7) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
R8) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R9) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R10) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R11) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R12) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
0,1,--0,1,--0,1,--0,1,--

List of different nodes in T[L]

LEN=1) 0, :
 LEN=2) 0,0, : 0,1, :
 LEN=3) 0,0,0, : 0,1,0, :
 LEN=4) 0,0,0,0, :
 LEN=5) 0,0,0,0,0, :
 LEN=6) 0,0,0,0,0,0, :
 LEN=7) 0,0,0,0,0,0,0, :
 LEN=8) 0,0,0,0,0,0,0,0, :
 LEN=9) 0,0,0,0,0,0,0,0,0, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :
 Number new nodes in level n is given by : 1,2,2,1,1,1,1,1,1,1,1,

-----Class

1699-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[012][021][101][102][120][201][210]]$

--

Rules of T[L]:

- R1) 0, -->0,0, --0,1, --
- R2) 0,0, -->0,0,0, --0,1, --0,1, --
- R3) 0,1, -->0,1,0, --0,1, --
- R4) 0,0,0, -->0,0,0,0, --0,1, --0,1, --0,1, --
- R5) 0,1,0, -->0,1,0, --
- R6) 0,0,0,0, -->0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --
- R7) 0,0,0,0,0, -->0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --
- R8) 0,0,0,0,0,0, -->0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --
- R9) 0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --
- R10) 0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --
- R11) 0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --
- R12) 0,0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,0,0, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --

List of different nodes in T[L]

LEN=1) 0, :
 LEN=2) 0,0, : 0,1, :
 LEN=3) 0,0,0, : 0,1,0, :
 LEN=4) 0,0,0,0, :
 LEN=5) 0,0,0,0,0, :
 LEN=6) 0,0,0,0,0,0, :
 LEN=7) 0,0,0,0,0,0,0, :
 LEN=8) 0,0,0,0,0,0,0,0, :
 LEN=9) 0,0,0,0,0,0,0,0,0, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :
 Number new nodes in level n is given by : 1,2,2,1,1,1,1,1,1,1,1,

-----Class

1700-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[012][021][101][110][120][201][210]]$

--

Rules of $T[L]$:

- R1) $0, -->0,0,--0,1,--$
- R2) $0,0, -->0,0,0,--0,1,--0,1,--$
- R3) $0,1, -->0,1,0,--0,1,0,--$
- R4) $0,0,0, -->0,0,0,0,--0,1,--0,1,--0,1,--$
- R5) $0,1,0, -->0,1,0,--$
- R6) $0,0,0,0, -->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--$
- R7) $0,0,0,0,0, -->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--$
- R8) $0,0,0,0,0,0, -->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--$
- R9) $0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--$
- R10) $0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--$
- R11) $0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--$
- R12) $0,0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--$

List of different nodes in $T[L]$

- LEN=1) $0, :$
 - LEN=2) $0,0, : 0,1, :$
 - LEN=3) $0,0,0, : 0,1,0, :$
 - LEN=4) $0,0,0,0, :$
 - LEN=5) $0,0,0,0,0, :$
 - LEN=6) $0,0,0,0,0,0, :$
 - LEN=7) $0,0,0,0,0,0,0, :$
 - LEN=8) $0,0,0,0,0,0,0,0, :$
 - LEN=9) $0,0,0,0,0,0,0,0,0, :$
 - LEN=10) $0,0,0,0,0,0,0,0,0,0, :$
 - LEN=11) $0,0,0,0,0,0,0,0,0,0,0, :$
- Number new nodes in level n is given by : 1,2,2,1,1,1,1,1,1,1,1,

-----Class

1701-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[012][021][102][110][120][201][210]]$

--

Rules of $T[L]$:

- R1) $0, -->0,0,--0,1,--$
- R2) $0,0, -->0,0,0,--0,1,--0,1,--$
- R3) $0,1, -->0,1,--0,1,1,--$
- R4) $0,0,0, -->0,0,0,0,--0,1,--0,1,--0,1,--$
- R5) $0,1,1, -->0,1,1,--$

R6) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--
R7) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
R8) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--
R9) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R10) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R11) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R12) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, : 0,1,1, :
LEN=4) 0,0,0,0, :
LEN=5) 0,0,0,0,0, :
LEN=6) 0,0,0,0,0,0, :
LEN=7) 0,0,0,0,0,0,0, :
LEN=8) 0,0,0,0,0,0,0,0, :
LEN=9) 0,0,0,0,0,0,0,0,0, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, :
Number new nodes in level n is given by : 1,2,2,1,1,1,1,1,1,1,1,

-----Class

1702-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[012][100][101][102][110][120][201]]$

Rules of T[L]:

R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
R3) 0,1,-->0,1,0,--0,1,1,--
R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
R5) 0,0,2,-->0,1,0,--0,0,2,1,--0,1,1,--
R6) 0,1,0,-->
R7) 0,1,1,-->0,1,1,--
R8) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
R9) 0,0,0,3,-->0,1,0,--0,0,2,1,--0,0,0,3,2,--0,1,1,--
R10) 0,0,2,1,-->0,1,0,--
R11) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
R12) 0,0,0,0,4,-->0,1,0,--0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,1,1,--
R13) 0,0,0,3,2,-->0,1,0,--0,0,2,1,--
R14) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--
R15)

Number new nodes in level n is given by : 1,2,4,3,3,3,3,3,3,3,3,

-----Class

1703-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[012][100][101][102][110][120][210]]$

--

Rules of $T[L]$:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
- R3) 0,1,-->0,1,0,--0,1,1,--
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
- R5) 0,0,2,-->0,0,2,0,--0,1,0,--0,1,1,--
- R6) 0,1,0,-->
- R7) 0,1,1,-->0,1,1,--
- R8) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
- R9) 0,0,0,3,-->0,0,0,3,0,--0,1,0,--0,1,0,--0,1,1,--
- R10) 0,0,2,0,-->0,1,0,--
- R11) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,5,--
- R12) 0,0,0,0,4,-->0,0,0,0,4,0,--0,1,0,--0,1,0,--0,1,0,--0,1,1,--
- R13) 0,0,0,3,0,-->0,1,0,--0,1,0,--
- R14) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--
- R15) 0,0,0,0,0,5,-->0,0,0,0,0,5,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,1,--
- R16) 0,0,0,0,4,0,-->0,1,0,--0,1,0,--0,1,0,--
- R17) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--
- R18) 0,0,0,0,0,0,6,-->0,0,0,0,0,0,6,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,1,--
- R19) 0,0,0,0,0,5,0,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--
- R20) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--
- R21) 0,0,0,0,0,0,0,7,-->0,0,0,0,0,0,0,7,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,1,--
- R22) 0,0,0,0,0,0,6,0,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--
- R23) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--
- R24) 0,0,0,0,0,0,0,0,8,-->0,0,0,0,0,0,0,0,8,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,1,--
- R25) 0,0,0,0,0,0,0,7,0,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--
- R26) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0

,0,9,--0,0,0,0,0,0,0,0,0,0,10,--
R27)
0,0,0,0,0,0,0,0,0,9,-->0,0,0,0,0,0,0,0,0,9,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,
0,--0,1,0,--0,1,0,--0,1,0,--0,1,1,--
R28)
0,0,0,0,0,0,0,0,8,0,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, : 0,0,2, : 0,1,0, : 0,1,1, :
LEN=4) 0,0,0,0, : 0,0,0,3, : 0,0,2,0, :
LEN=5) 0,0,0,0,0, : 0,0,0,0,4, : 0,0,0,3,0, :
LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,5, : 0,0,0,0,4,0, :
LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,6, : 0,0,0,0,0,5,0, :
LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,6,0, :
LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,8, : 0,0,0,0,0,0,0,7,0, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,9, : 0,0,0,0,0,0,0,0,8,0, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,10, : 0,0,0,0,0,0,0,0,0,9,0, :
Number new nodes in level n is given by : 1,2,4,3,3,3,3,3,3,3,3,

-----Class

1704-----
Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[012][100][101][102][110][201][210]]$

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
R3) 0,1,-->0,1,0,--0,1,1,--
R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
R5) 0,0,2,-->0,1,0,--0,1,0,--0,1,1,--
R6) 0,1,0,-->
R7) 0,1,1,-->0,1,1,--
R8) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
R9) 0,0,0,3,-->0,1,0,--0,1,0,--0,1,0,--0,1,1,--
R10) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
R11) 0,0,0,0,4,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,1,--
R12)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,
0,0,0,0,0,6,--
R13) 0,0,0,0,0,5,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,1,--
R14)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,
--0,0,0,0,0,6,--0,0,0,0,0,0,7,--
R15) 0,0,0,0,0,0,6,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,1,--
R16)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,
0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--
R17)
0,0,0,0,0,0,0,7,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,1,--

R18)
 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,
 0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--0,0,0,0,0,0,0,9
 ,--
 R19)
 0,0,0,0,0,0,0,0,8,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,
 --0,1,1,--
 R20)
 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
 0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--0,0,0,0,0,0,0,
 ,0,9,--0,0,0,0,0,0,0,0,0,10,--
 R21)
 0,0,0,0,0,0,0,0,9,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,
 0,--0,1,0,--0,1,1,--

List of different nodes in T[L]

LEN=1) 0, :
 LEN=2) 0,0, : 0,1, :
 LEN=3) 0,0,0, : 0,0,2, : 0,1,0, : 0,1,1, :
 LEN=4) 0,0,0,0, : 0,0,0,3, :
 LEN=5) 0,0,0,0,0, : 0,0,0,0,4, :
 LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,5, :
 LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,6, :
 LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,7, :
 LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,8, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,9, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,10, :
 Number new nodes in level n is given by : 1,2,4,2,2,2,2,2,2,2,2,

-----Class

1705-----
 Inversion Sequences (I_n=(n+1)!) avoiding L=[[012][100][101][102][120][201][210]]

Rules of T[L]:

R1) 0,-->0,0,--0,1,--
 R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
 R3) 0,1,-->0,1,0,--0,1,--
 R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
 R5) 0,0,2,-->0,1,0,--0,1,0,--0,0,2,--
 R6) 0,1,0,-->
 R7) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
 R8) 0,0,0,3,-->0,1,0,--0,1,0,--0,1,0,--0,0,0,3,--
 R9) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
 R10) 0,0,0,0,4,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,0,0,4,--
 R11)
 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,
 0,0,0,0,0,6,--
 R12) 0,0,0,0,0,5,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,0,0,0,5,--
 R13)
 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,

```

--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--
R14)
0,0,0,0,0,0,6,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,0,0,0,0,6,--
R15)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,
0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--
R16)
0,0,0,0,0,0,0,7,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,0,0,
0,0,0,7,--
R17)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,
0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--0,0,0,0,0,0,9
,--
R18)
0,0,0,0,0,0,0,8,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,
--0,0,0,0,0,0,8,--
R19)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--0,0,0,0,0,0,0,
,0,9,--0,0,0,0,0,0,0,0,10,--
R20)
0,0,0,0,0,0,0,0,9,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,
0,--0,1,0,--0,0,0,0,0,0,9,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,0,: 0,0,2,: 0,1,0,:
LEN=4) 0,0,0,0,: 0,0,0,3,:
LEN=5) 0,0,0,0,0,: 0,0,0,0,4,:
LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,5,:
LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,6,:
LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,7,:
LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,8,:
LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,9,:
LEN=11) 0,0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,10,:
Number new nodes in level n is given by : 1,2,3,2,2,2,2,2,2,2,2,

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-----Class

1706-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[012][100][101][110][120][201][210]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
- R3) 0,1,-->0,1,0,--0,1,1,--
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
- R5) 0,0,2,-->0,1,0,--0,1,0,--0,1,1,--
- R6) 0,1,0,-->
- R7) 0,1,1,-->0,1,1,--

R8) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
 R9) 0,0,0,3,-->0,1,0,--0,1,0,--0,1,0,--0,1,1,--
 R10) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
 R11) 0,0,0,0,4,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,1,--
 R12) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,
 0,0,0,0,0,6,--
 R13) 0,0,0,0,0,5,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,1,--
 R14) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,
 --0,0,0,0,0,6,--0,0,0,0,0,0,7,--
 R15) 0,0,0,0,0,0,6,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,1,--
 R16) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,
 0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--
 R17) 0,0,0,0,0,0,0,7,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,1,--
 R18) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,
 0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--0,0,0,0,0,0,0,9,
 ,--
 R19) 0,0,0,0,0,0,0,0,8,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,
 --0,1,1,--
 R20) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
 0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--0,0,0,0,0,0,9,
 ,0,9,--0,0,0,0,0,0,0,10,--
 R21) 0,0,0,0,0,0,0,0,0,9,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,
 0,--0,1,0,--0,1,1,--

List of different nodes in T[L]

LEN=1) 0, :
 LEN=2) 0,0, : 0,1, :
 LEN=3) 0,0,0, : 0,0,2, : 0,1,0, : 0,1,1, :
 LEN=4) 0,0,0,0, : 0,0,0,3, :
 LEN=5) 0,0,0,0,0, : 0,0,0,0,4, :
 LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,5, :
 LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,6, :
 LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,7, :
 LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,8, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,9, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,10, :

Number new nodes in level n is given by : 1,2,4,2,2,2,2,2,2,2,2,

-----Class

1707-----

Inversion Sequences (I_n=(n+1)!) avoiding L=[[012][100][102][110][120][201][210]]

 --

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
- R3) 0,1,-->0,1,0,--0,1,0,--
- R4) 0,0,0,-->0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--
- R5) 0,0,2,-->0,1,0,--0,0,2,1,--0,1,0,--
- R6) 0,1,0,-->0,1,0,--
- R7) 0,0,0,0,-->0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--
- R8) 0,0,0,3,-->0,1,0,--0,0,2,1,--0,0,2,1,--0,1,0,--
- R9) 0,0,2,1,-->
- R10) 0,0,0,0,0,-->0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--
- R11) 0,0,0,0,4,-->0,1,0,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,1,0,--
- R12) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--
- R13) 0,0,0,0,0,5,-->0,1,0,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,1,0,--
- R14) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--
- R15) 0,0,0,0,0,0,6,-->0,1,0,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,1,0,--
- R16) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--
- R17) 0,0,0,0,0,0,0,7,-->0,1,0,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,1,0,--
- R18) 0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--0,0,0,0,0,0,9,--
- R19) 0,0,0,0,0,0,0,0,8,-->0,1,0,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,1,0,--
- R20) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--0,0,0,0,0,0,9,--0,0,0,0,0,0,10,--
- R21) 0,0,0,0,0,0,0,0,9,-->0,1,0,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,1,0,--

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, : 0,1, :
- LEN=3) 0,0,0, : 0,0,2, : 0,1,0, :
- LEN=4) 0,0,0,0, : 0,0,0,3, : 0,0,2,1, :
- LEN=5) 0,0,0,0,0, : 0,0,0,0,4, :
- LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,5, :
- LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,6, :
- LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,7, :

LEN=9) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,8, :
 LEN=10) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,9, :
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,0,10, :
 Number new nodes in level n is given by : 1,2,3,3,2,2,2,2,2,2,2,

-----Class

1708-----
 Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[012][101][102][110][120][201][210]]$

--
 Rules of T[L]:

- R1) 0, -->0,0, --0,1, --
- R2) 0,0, -->0,0,0, --0,1, --0,0,2, --
- R3) 0,1, -->0,1,0, --0,1,0, --
- R4) 0,0,0, -->0,0,0,0, --0,1, --0,0,2, --0,0,0,3, --
- R5) 0,0,2, -->0,1,0, --0,1,0, --0,1,0, --
- R6) 0,1,0, -->0,1,0, --
- R7) 0,0,0,0, -->0,0,0,0,0, --0,1, --0,0,2, --0,0,0,3, --0,0,0,0,4, --
- R8) 0,0,0,3, -->0,1,0, --0,1,0, --0,1,0, --0,1,0, --
- R9) 0,0,0,0,0, -->0,0,0,0,0,0, --0,1, --0,0,2, --0,0,0,3, --0,0,0,0,4, --0,0,0,0,0,5, --
- R10) 0,0,0,0,4, -->0,1,0, --0,1,0, --0,1,0, --0,1,0, --0,1,0, --
- R11)
 0,0,0,0,0,0, -->0,0,0,0,0,0,0, --0,1, --0,0,2, --0,0,0,3, --0,0,0,0,4, --0,0,0,0,0,5, --0,
 0,0,0,0,0,6, --
- R12) 0,0,0,0,0,5, -->0,1,0, --0,1,0, --0,1,0, --0,1,0, --0,1,0, --0,1,0, --
- R13)
 0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0, --0,1, --0,0,2, --0,0,0,3, --0,0,0,0,4, --0,0,0,0,0,5,
 --0,0,0,0,0,6, --0,0,0,0,0,0,7, --
- R14) 0,0,0,0,0,0,6, -->0,1,0, --0,1,0, --0,1,0, --0,1,0, --0,1,0, --0,1,0, --0,1,0, --
- R15)
 0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0, --0,1, --0,0,2, --0,0,0,3, --0,0,0,0,4, --0,0,0,0,
 0,5, --0,0,0,0,0,6, --0,0,0,0,0,0,7, --0,0,0,0,0,0,8, --
- R16)
 0,0,0,0,0,0,0,7, -->0,1,0, --0,1,0, --0,1,0, --0,1,0, --0,1,0, --0,1,0, --0,1,0, --0,1,0, --
- R17)
 0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0, --0,1, --0,0,2, --0,0,0,3, --0,0,0,0,4, --0,0,
 0,0,0,5, --0,0,0,0,0,6, --0,0,0,0,0,0,7, --0,0,0,0,0,0,8, --0,0,0,0,0,0,0,9
 , --
- R18)
 0,0,0,0,0,0,0,8, -->0,1,0, --0,1,0, --0,1,0, --0,1,0, --0,1,0, --0,1,0, --0,1,0, --0,1,0, --
- R19)
 0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,0, --0,1, --0,0,2, --0,0,0,3, --0,0,0,0,4, --
 0,0,0,0,5, --0,0,0,0,0,6, --0,0,0,0,0,0,7, --0,0,0,0,0,0,8, --0,0,0,0,0,0,0,
 ,0,9, --0,0,0,0,0,0,0,10, --
- R20)
 0,0,0,0,0,0,0,0,9, -->0,1,0, --0,1,0, --0,1,0, --0,1,0, --0,1,0, --0,1,0, --0,1,0, --0,1,
 0, --0,1,0, --0,1,0, --

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0,: 0,1,:
 LEN=3) 0,0,0,: 0,0,2,: 0,1,0,:
 LEN=4) 0,0,0,0,: 0,0,0,3,:
 LEN=5) 0,0,0,0,0,: 0,0,0,0,4,:
 LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,5,:
 LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,6,:
 LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,7,:
 LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,8,:
 LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,9,:
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,10,:
 Number new nodes in level n is given by : 1,2,3,2,2,2,2,2,2,2,2,

-----Class

1709-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[021][100][101][102][110][120][201]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
- R3) 0,1,-->0,1,0,--0,1,1,--0,1,2,--
- R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
- R5) 0,0,1,-->0,1,0,--0,0,1,1,--0,1,1,--0,1,2,--
- R6) 0,1,0,-->
- R7) 0,1,1,-->0,0,1,1,--0,1,1,--0,1,2,--
- R8) 0,1,2,-->0,1,1,--0,1,2,--
- R9) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R10) 0,0,0,1,-->0,1,0,--0,0,0,1,1,--0,0,1,1,--0,1,1,--0,1,2,--
- R11) 0,0,1,1,-->0,0,0,1,1,--0,0,1,1,--0,1,1,--0,1,2,--
- R12) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,1,--
- R13) 0,0,0,0,1,-->0,1,0,--0,0,0,0,1,1,--0,0,0,1,1,--0,0,1,1,--0,1,2,--
- R14) 0,0,0,1,1,-->0,0,0,0,1,1,--0,0,0,1,1,--0,0,1,1,--0,1,2,--
- R15) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R16) 0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,1,1,--0,0,0,0,0,1,1,--0,0,0,1,1,--0,0,1,1,--0,1,1,--0,1,2,--
- R17) 0,0,0,0,1,1,-->0,0,0,0,0,0,1,1,--0,0,0,0,1,1,--0,0,0,1,1,--0,0,1,1,--0,1,1,--0,1,2,--
- R18) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--
- R19) 0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,1,1,--0,0,0,0,0,1,1,--0,0,0,0,1,1,--0,0,0,1,1,--0,0,1,1,--0,1,2,--
- R20) 0,0,0,0,0,1,1,-->0,0,0,0,0,0,1,1,--0,0,0,0,0,1,1,--0,0,0,0,1,1,--0,0,0,1,1,--0,0,1,1,--0,1,2,--
- R21) 0,0,0,0,0,1,1,-->0,0,0,0,0,0,1,1,--0,0,0,0,0,1,1,--0,0,0,0,1,1,--0,0,0,1,1,--0,0,1,1,--0,1,2,--

R1) 0, -->0,0, --0,1, --
R2) 0,0, -->0,0,0, --0,0,1, --0,1, --
R3) 0,1, -->0,1,0, --0,1,1, --0,1,2, --
R4) 0,0,0, -->0,0,0,0, --0,0,0,1, --0,0,1, --0,1, --
R5) 0,0,1, -->0,1,0, --0,0,1,1, --0,1,1, --0,1,2, --
R6) 0,1,0, -->
R7) 0,1,1, -->0,0,1,1, --0,1,1, --0,1,2, --
R8) 0,1,2, -->0,1,1, --0,1,2, --
R9) 0,0,0,0, -->0,0,0,0,0, --0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --
R10) 0,0,0,1, -->0,1,0, --0,0,0,1,1, --0,0,1,1, --0,1,1, --0,1,2, --
R11) 0,0,1,1, -->0,0,0,1,1, --0,0,1,1, --0,1,1, --0,1,2, --
R12) 0,0,0,0,0, -->0,0,0,0,0,0, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --
R13) 0,0,0,0,1, -->0,1,0, --0,0,0,0,1,1, --0,0,0,1,1, --0,0,1,1, --0,1,1, --0,1,2, --
R14) 0,0,0,1,1, -->0,0,0,0,1,1, --0,0,0,1,1, --0,0,1,1, --0,1,1, --0,1,2, --
R15)
0,0,0,0,0,0, -->0,0,0,0,0,0,0, --0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --
R16)
0,0,0,0,0,1, -->0,1,0, --0,0,0,0,0,1,1, --0,0,0,0,1,1, --0,0,0,1,1, --0,0,1,1, --0,1,1, --0,1,1, --0,1,2, --
R17)
0,0,0,0,1,1, -->0,0,0,0,0,1,1, --0,0,0,0,1,1, --0,0,0,1,1, --0,0,1,1, --0,1,1, --0,1,2, --
R18)
0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,1, --0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,1, --
R19)
0,0,0,0,0,0,1, -->0,1,0, --0,0,0,0,0,0,1,1, --0,0,0,0,0,1,1, --0,0,0,0,1,1, --0,0,0,1,1, --0,0,0,1,1, --0,0,1,1, --0,1,1, --0,1,2, --
R20)
0,0,0,0,0,1,1, -->0,0,0,0,0,0,1,1, --0,0,0,0,0,1,1, --0,0,0,0,1,1, --0,0,0,1,1, --0,0,1,1, --0,1,1, --0,1,2, --
R21)
0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,1, --0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,1, --0,1, --
R22)
0,0,0,0,0,0,0,1, -->0,1,0, --0,0,0,0,0,0,0,1,1, --0,0,0,0,0,0,1,1, --0,0,0,0,0,1,1, --0,0,0,0,0,1,1, --0,0,0,0,1,1, --0,0,0,1,1, --0,0,1,1, --0,1,1, --0,1,2, --
R23)
0,0,0,0,0,0,1,1, -->0,0,0,0,0,0,0,1,1, --0,0,0,0,0,0,1,1, --0,0,0,0,0,1,1, --0,0,0,0,1,1, --0,0,0,0,1,1, --0,0,0,1,1, --0,0,1,1, --0,1,1, --0,1,2, --
R24)
0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,1, --0,1, --
R25)
0,0,0,0,0,0,0,0,1, -->0,1,0, --0,0,0,0,0,0,0,0,1,1, --0,0,0,0,0,0,0,1,1, --0,0,0,0,0,0,1,1, --0,0,0,0,0,1,1, --0,0,0,0,1,1, --0,0,0,1,1, --0,0,1,1, --0,1,1, --0,1,2, --
R26)
0,0,0,0,0,0,0,1,1, -->0,0,0,0,0,0,0,0,1,1, --0,0,0,0,0,0,0,1,1, --0,0,0,0,0,0,1,1, --0,0,0,0,1,1, --0,0,0,0,1,1, --0,0,0,1,1, --0,0,1,1, --0,1,1, --0,1,2, --

0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,1,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--
0,1,--

R17)

0,0,0,0,1,1,-->0,0,0,0,0,1,1,--0,0,0,0,1,1,--0,0,0,1,1,--0,0,1,1,--0,1,1,--0,1,1,3,
--

R18)

0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--
0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R19)

0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,1,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,
--0,0,0,1,--0,0,1,--0,1,--

R20)

0,0,0,0,0,1,1,-->0,0,0,0,0,0,1,1,--0,0,0,0,0,1,1,--0,0,0,0,1,1,--0,0,0,1,1,--0,0,1,
1,--0,1,1,--0,1,1,3,--

R21)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,
0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R22)

0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,
0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R23)

0,0,0,0,0,0,1,1,-->0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,1,1,--0,0,0,0,0,1,1,--0,0,0,0,1,
1,--0,0,0,1,1,--0,0,1,1,--0,1,1,--0,1,1,3,--

R24)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,
--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--0,1,
,--

R25)

0,0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,
0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R26)

0,0,0,0,0,0,0,1,1,-->0,0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,1,1,--0,
0,0,0,0,1,1,--0,0,0,0,1,1,--0,0,0,1,1,--0,0,1,1,--0,1,1,--0,1,1,3,--

R27)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,
0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,
,0,1,--0,0,0,1,--0,0,1,--0,1,--

R28)

0,0,0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,
0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,-
-0,0,1,--0,1,--

R29)

0,0,0,0,0,0,0,0,1,1,-->0,0,0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,
1,1,--0,0,0,0,0,0,1,1,--0,0,0,0,0,1,1,--0,0,0,0,1,1,--0,0,0,1,1,--0,0,1,1,--0,1,1,-
-0,1,1,3,--

List of different nodes in T[L]

LEN=1) 0, :

LEN=2) 0,0, : 0,1, :

LEN=3) 0,0,0, : 0,0,1, : 0,1,0, : 0,1,1, :

LEN=4) 0,0,0,0, : 0,0,0,1, : 0,0,1,1, : 0,1,1,3, :

LEN=5) 0,0,0,0,0,: 0,0,0,0,1,: 0,0,0,1,1,:
 LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,1,: 0,0,0,0,1,1,:
 LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,1,: 0,0,0,0,0,1,1,:
 LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,1,1,:
 LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,1,1,:
 LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,0,1,1,:
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,0,0,1,1,:
 Number new nodes in level n is given by : 1,2,4,4,3,3,3,3,3,3,3,

-----Class

1712-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[021][100][101][102][120][201][210]]$

--
 Rules of $T[L]$:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
- R3) 0,1,-->0,1,0,--0,0,1,--0,1,2,--
- R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
- R5) 0,0,1,-->0,1,0,--0,0,0,1,--0,0,1,2,--0,1,2,--
- R6) 0,1,0,-->
- R7) 0,1,2,-->0,0,1,2,--0,1,2,--
- R8) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R9) 0,0,0,1,-->0,1,0,--0,0,0,0,1,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
- R10) 0,0,1,2,-->0,0,0,1,2,--0,0,1,2,--0,1,2,--
- R11) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R12) 0,0,0,0,1,-->0,1,0,--0,0,0,0,0,1,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
- R13) 0,0,0,1,2,-->0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
- R14) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--
- R15) 0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
- R16) 0,0,0,0,1,2,-->0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
- R17) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--
- R18) 0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
- R19) 0,0,0,0,0,1,2,-->0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
- R20) 0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R21) 0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--

--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R22)
0,0,0,0,0,0,1,2,-->0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,
2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R23)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,
--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,
,--
R24)
0,0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,
0,0,1,2,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,
,2,--
R25)
0,0,0,0,0,0,0,1,2,-->0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,2,--0,
0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R26)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,
0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,
,0,1,--0,0,0,1,--0,0,1,--0,1,--
R27)
0,0,0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,2,--0,0,
0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,
,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R28)
0,0,0,0,0,0,0,0,1,2,-->0,0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,
1,2,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,-
-

List of different nodes in T[L]

LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, : 0,0,1, : 0,1,0, : 0,1,2, :
LEN=4) 0,0,0,0, : 0,0,0,1, : 0,0,1,2, :
LEN=5) 0,0,0,0,0, : 0,0,0,0,1, : 0,0,0,1,2, :
LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, : 0,0,0,0,1,2, :
LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, : 0,0,0,0,0,1,2, :
LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,1,2, :
LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,1,2, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,1,2, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,0,1,2, :
Number new nodes in level n is given by : 1,2,4,3,3,3,3,3,3,3,3,

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1713-----
Inversion Sequences (I_n=(n+1)!) avoiding L=[[021][100][101][110][120][201][210]]

Rules of T[L]:

R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
R3) 0,1,-->0,1,0,--0,1,1,--0,1,0,--

R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
R5) 0,0,1,-->0,1,1,--0,0,1,1,--0,1,1,--0,1,0,--
R6) 0,1,0,-->0,1,1,--0,1,0,--
R7) 0,1,1,-->0,0,1,1,--0,1,1,--0,1,0,--
R8) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R9) 0,0,0,1,-->0,0,1,1,--0,0,0,1,1,--0,0,1,1,--0,1,1,--0,1,0,--
R10) 0,0,1,1,-->0,0,0,1,1,--0,0,1,1,--0,1,1,--0,1,0,--
R11) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R12) 0,0,0,0,1,-->0,0,0,1,1,--0,0,0,0,1,1,--0,0,0,1,1,--0,0,1,1,--0,1,1,--0,1,0,--
R13) 0,0,0,1,1,-->0,0,0,0,1,1,--0,0,0,1,1,--0,0,1,1,--0,1,1,--0,1,0,--
R14)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
0,0,1,--0,1,--
R15)
0,0,0,0,0,1,-->0,0,0,0,1,1,--0,0,0,0,0,1,1,--0,0,0,0,1,1,--0,0,0,1,1,--0,0,1,1,--0,
1,1,--0,1,0,--
R16)
0,0,0,0,1,1,-->0,0,0,0,0,1,1,--0,0,0,0,1,1,--0,0,0,1,1,--0,0,1,1,--0,1,1,--0,1,0,--
R17)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--
0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R18)
0,0,0,0,0,0,1,-->0,0,0,0,0,1,1,--0,0,0,0,0,0,1,1,--0,0,0,0,0,1,1,--0,0,0,0,1,1,--0,
0,0,1,1,--0,0,1,1,--0,1,1,--0,1,0,--
R19)
0,0,0,0,0,1,1,-->0,0,0,0,0,0,1,1,--0,0,0,0,0,1,1,--0,0,0,0,1,1,--0,0,0,1,1,--0,0,1,
1,--0,1,1,--0,1,0,--
R20)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,
0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R21)
0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,1,--0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,1,1,--0,0,0,0,
0,1,1,--0,0,0,0,1,1,--0,0,0,1,1,--0,0,1,1,--0,1,1,--0,1,0,--
R22)
0,0,0,0,0,0,1,1,-->0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,1,1,--0,0,0,0,0,1,1,--0,0,0,0,1,
1,--0,0,0,1,1,--0,0,1,1,--0,1,1,--0,1,0,--
R23)
0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,
--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--0,1,
,--
R24)
0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,0,1,1,--
0,0,0,0,0,0,1,1,--0,0,0,0,0,1,1,--0,0,0,0,1,1,--0,0,0,1,1,--0,0,1,1,--0,1,1,--0,1,0,
,--
R25)
0,0,0,0,0,0,0,1,1,-->0,0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,1,1,--0,
0,0,0,0,1,1,--0,0,0,0,1,1,--0,0,0,1,1,--0,0,1,1,--0,1,1,--0,1,0,--
R26)
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,
0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0

,0,1,--0,0,0,1,--0,0,1,--0,1,--
R27)
0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,0,
0,1,1,--0,0,0,0,0,0,1,1,--0,0,0,0,0,1,1,--0,0,0,0,1,1,--0,0,0,1,1,--0,0,0,1,
,1,--0,0,1,1,--0,1,1,--0,1,0,--
R28)
0,0,0,0,0,0,0,0,1,1,-->0,0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,0,
1,1,--0,0,0,0,0,0,1,1,--0,0,0,0,0,1,1,--0,0,0,0,1,1,--0,0,0,1,1,--0,0,1,1,--
-0,1,0,--
List of different nodes in T[L]
LEN=1) 0, :
LEN=2) 0,0, : 0,1, :
LEN=3) 0,0,0, : 0,0,1, : 0,1,0, : 0,1,1, :
LEN=4) 0,0,0,0, : 0,0,0,1, : 0,0,1,1, :
LEN=5) 0,0,0,0,0, : 0,0,0,0,1, : 0,0,0,1,1, :
LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, : 0,0,0,0,1,1, :
LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, : 0,0,0,0,0,1,1, :
LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,1,1, :
LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,1,1, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,1,1, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,0,1,1, :
Number new nodes in level n is given by : 1,2,4,3,3,3,3,3,3,3,3,

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1714-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[021][100][102][110][120][201][210]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
- R3) 0,1,-->0,1,0,--0,1,1,--0,1,2,--
- R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
- R5) 0,0,1,-->0,1,0,--0,0,1,1,--0,1,1,--0,1,2,--
- R6) 0,1,0,-->0,1,0,--
- R7) 0,1,1,-->0,0,1,1,--0,1,1,--0,1,2,--
- R8) 0,1,2,-->0,1,1,--0,1,2,--
- R9) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R10) 0,0,0,1,-->0,1,0,--0,0,0,1,1,--0,0,1,1,--0,1,1,--0,1,2,--
- R11) 0,0,1,1,-->0,0,0,1,1,--0,0,1,1,--0,1,1,--0,1,2,--
- R12) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R13) 0,0,0,0,1,-->0,1,0,--0,0,0,0,1,1,--0,0,0,1,1,--0,0,1,1,--0,1,1,--0,1,2,--
- R14) 0,0,0,1,1,-->0,0,0,0,1,1,--0,0,0,1,1,--0,0,1,1,--0,1,1,--0,1,2,--
- R15)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
0,0,1,--0,1,--
- R16)
0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,1,1,--0,0,0,0,1,1,--0,0,0,1,1,--0,0,1,1,--0,1,1,--
0,1,2,--
- R17)

0,0,0,0,1,1,-->0,0,0,0,0,1,1,--0,0,0,0,1,1,--0,0,0,1,1,--0,0,1,1,--0,1,1,--0,1,2,--
R18)

0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--
0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R19)

0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,1,1,--0,0,0,0,0,1,1,--0,0,0,0,1,1,--0,0,0,1,1,
--0,0,1,1,--0,1,1,--0,1,2,--
R20)

0,0,0,0,0,1,1,-->0,0,0,0,0,0,1,1,--0,0,0,0,0,1,1,--0,0,0,0,1,1,--0,0,0,1,1,--0,0,1,
1,--0,1,1,--0,1,2,--
R21)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,
0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R22)

0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,1,1,--0,0,0,0,0,1,1,--0,
0,0,0,1,1,--0,0,0,1,1,--0,0,1,1,--0,1,1,--0,1,2,--
R23)

0,0,0,0,0,0,1,1,-->0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,1,1,--0,0,0,0,0,1,1,--0,0,0,0,1,
1,--0,0,0,1,1,--0,0,1,1,--0,1,1,--0,1,2,--
R24)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,
--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--0,1,
--
R25)

0,0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,
1,1,--0,0,0,0,0,1,1,--0,0,0,0,1,1,--0,0,0,1,1,--0,0,1,1,--0,1,1,--0,1,2,--
R26)

0,0,0,0,0,0,0,1,1,-->0,0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,1,1,--0,
0,0,0,0,1,1,--0,0,0,0,1,1,--0,0,0,1,1,--0,0,1,1,--0,1,1,--0,1,2,--
R27)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,
0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,
,0,1,--0,0,0,1,--0,0,1,--0,1,--
R28)

0,0,0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,0,0,1,1,--0,0,0,
0,0,0,0,1,1,--0,0,0,0,0,0,0,1,1,--0,0,0,0,0,1,1,--0,0,0,0,1,1,--0,0,0,1,1,--0,0,1,1,--
-0,1,1,--0,1,2,--
R29)

0,0,0,0,0,0,0,0,1,1,-->0,0,0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,0,
1,1,--0,0,0,0,0,0,1,1,--0,0,0,0,0,1,1,--0,0,0,0,1,1,--0,0,0,1,1,--0,0,1,1,--0,1,1,--
-0,1,2,--

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, : 0,1, :
- LEN=3) 0,0,0, : 0,0,1, : 0,1,0, : 0,1,1, : 0,1,2, :
- LEN=4) 0,0,0,0, : 0,0,0,1, : 0,0,1,1, :
- LEN=5) 0,0,0,0,0, : 0,0,0,0,1, : 0,0,0,1,1, :
- LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, : 0,0,0,0,1,1, :
- LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, : 0,0,0,0,0,1,1, :
- LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,1,1, :

LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,1,1,:
LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,0,1,1,:
LEN=11) 0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,0,0,1,1,:
Number new nodes in level n is given by : 1,2,5,3,3,3,3,3,3,3,3,3,

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1715-----

Inversion Sequences ($I_n=(n+1)!$) avoiding $L=[[021][101][102][110][120][201][210]]$

--

Rules of T[L]:

- R1) 0, -->0,0,--0,1,--
- R2) 0,0, -->0,0,0,--0,0,1,--0,1,--
- R3) 0,1, -->0,1,0,--0,1,1,--0,1,2,--
- R4) 0,0,0, -->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
- R5) 0,0,1, -->0,1,0,--0,0,1,1,--0,1,1,--0,1,2,--
- R6) 0,1,0, -->0,1,0,--
- R7) 0,1,1, -->0,0,1,1,--0,1,1,--0,1,2,--
- R8) 0,1,2, -->0,1,1,--0,1,2,--
- R9) 0,0,0,0, -->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R10) 0,0,0,1, -->0,1,0,--0,0,0,1,1,--0,0,1,1,--0,1,1,--0,1,2,--
- R11) 0,0,1,1, -->0,0,0,1,1,--0,0,1,1,--0,1,1,--0,1,2,--
- R12) 0,0,0,0,0, -->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R13) 0,0,0,0,1, -->0,1,0,--0,0,0,0,1,1,--0,0,0,1,1,--0,0,1,1,--0,1,1,--0,1,2,--
- R14) 0,0,0,1,1, -->0,0,0,0,1,1,--0,0,0,1,1,--0,0,1,1,--0,1,1,--0,1,2,--
- R15)
0,0,0,0,0,0, -->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
- R16)
0,0,0,0,0,1, -->0,1,0,--0,0,0,0,0,1,1,--0,0,0,0,1,1,--0,0,0,1,1,--0,0,1,1,--0,1,1,--0,1,1,--
- R17)
0,0,0,0,1,1, -->0,0,0,0,0,1,1,--0,0,0,0,1,1,--0,0,0,1,1,--0,0,1,1,--0,1,1,--0,1,2,--
- R18)
0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--
- R19)
0,0,0,0,0,1, -->0,1,0,--0,0,0,0,0,0,1,1,--0,0,0,0,0,1,1,--0,0,0,0,1,1,--0,0,0,1,1,--0,0,1,1,--0,1,1,--0,1,2,--
- R20)
0,0,0,0,0,1,1, -->0,0,0,0,0,0,1,1,--0,0,0,0,0,1,1,--0,0,0,0,1,1,--0,0,0,1,1,--0,0,0,1,1,--0,0,1,1,--0,1,1,--0,1,2,--
- R21)
0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--
- R22)
0,0,0,0,0,0,1, -->0,1,0,--0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,1,1,--0,0,0,0,0,1,1,--0,0,0,0,0,1,1,--0,0,0,0,1,1,--0,0,1,1,--0,1,1,--0,1,2,--
- R23)
0,0,0,0,0,0,1,1, -->0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,1,1,--0,0,0,0,0,1,1,--0,0,0,0,0,1,1,--0,0,0,0,0,1,1,--0,0,0,0,0,1,1,--0,0,0,0,0,1,1,--

1,--0,0,0,1,1,--0,0,1,1,--0,1,1,--0,1,2,--
R24)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,
--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,
,--
R25)

0,0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,
1,1,--0,0,0,0,0,0,1,1,--0,0,0,0,0,1,1,--0,0,0,1,1,--0,0,1,1,--0,1,1,--0,1,2,--
R26)

0,0,0,0,0,0,0,1,1,-->0,0,0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,1,1,--0,
0,0,0,0,1,1,--0,0,0,0,1,1,--0,0,0,1,1,--0,0,1,1,--0,1,1,--0,1,2,--
R27)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,
0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,
,0,1,--0,0,0,1,--0,0,1,--0,1,--
R28)

0,0,0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,0,0,0,1,1,--0,0,0,
0,0,0,0,1,1,--0,0,0,0,0,0,1,1,--0,0,0,0,0,1,1,--0,0,0,0,1,1,--0,0,0,1,1,--0,0,1,1,-
-0,1,1,--0,1,2,--
R29)

0,0,0,0,0,0,0,0,1,1,-->0,0,0,0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,0,
1,1,--0,0,0,0,0,0,0,1,1,--0,0,0,0,0,1,1,--0,0,0,0,1,1,--0,0,0,1,1,--0,0,1,1,--0,1,1,-
-0,1,2,--

List of different nodes in T[L]

- LEN=1) 0,:
 - LEN=2) 0,0,: 0,1,:
 - LEN=3) 0,0,0,: 0,0,1,: 0,1,0,: 0,1,1,: 0,1,2,:
 - LEN=4) 0,0,0,0,: 0,0,0,1,: 0,0,1,1,:
 - LEN=5) 0,0,0,0,0,: 0,0,0,0,1,: 0,0,0,1,1,:
 - LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,1,: 0,0,0,0,1,1,:
 - LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,1,: 0,0,0,0,0,1,1,:
 - LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,1,1,:
 - LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,1,1,:
 - LEN=10) 0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,0,1,1,:
 - LEN=11) 0,0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,0,0,1,1,:
- Number new nodes in level n is given by : 1,2,5,3,3,3,3,3,3,3,3,3,

-----Class

1716-----

Inversion Sequences ($I_n=(n+1)!$) avoiding L=[[100][101][102][110][120][201][210]]

--
Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,0,1,--0,0,2,--
- R3) 0,1,-->0,1,0,--0,0,--0,1,--
- R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
- R5) 0,0,1,-->0,1,0,--0,0,0,--0,0,1,--0,0,2,--
- R6) 0,0,2,-->0,1,0,--0,1,0,--0,0,--0,1,--
- R7) 0,1,0,-->

R8) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
R9) 0,0,0,1,-->0,1,0,--0,0,0,0,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
R10) 0,0,0,2,-->0,1,0,--0,1,0,--0,0,0,--0,0,1,--0,0,2,--
R11) 0,0,0,3,-->0,1,0,--0,1,0,--0,1,0,--0,0,--0,1,--
R12)
0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--
0,0,0,0,0,5,--
R13)
0,0,0,0,1,-->0,1,0,--0,0,0,0,0,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--
R14) 0,0,0,0,2,-->0,1,0,--0,1,0,--0,0,0,0,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
R15) 0,0,0,0,3,-->0,1,0,--0,1,0,--0,1,0,--0,0,0,--0,0,1,--0,0,2,--
R16) 0,0,0,0,4,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,--0,1,--
R17)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,
0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--
R18)
0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,
0,0,0,4,--0,0,0,0,0,5,--
R19)
0,0,0,0,0,2,-->0,1,0,--0,1,0,--0,0,0,0,0,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,
0,0,4,--
R20)
0,0,0,0,0,3,-->0,1,0,--0,1,0,--0,1,0,--0,0,0,0,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
R21) 0,0,0,0,0,4,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,0,--0,0,1,--0,0,2,--
R22) 0,0,0,0,0,5,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,--0,1,--
R23)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,0,0,0,0,0,
0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--0,0,0,0,0,0,7,--
R24)
0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,
0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--
R25)
0,0,0,0,0,0,2,-->0,1,0,--0,1,0,--0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,
0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--
R26)
0,0,0,0,0,0,3,-->0,1,0,--0,1,0,--0,1,0,--0,0,0,0,0,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,
0,3,--0,0,0,0,4,--
R27)
0,0,0,0,0,0,4,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,0,0,--0,0,0,1,--0,0,0,2,--0,0,
0,3,--
R28)
0,0,0,0,0,0,5,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,0,--0,0,1,--0,0,2,--
R29) 0,0,0,0,0,0,6,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,--0,1,--
R30)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--0,0,
0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,0,0,
0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--
R31)
0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,2,--0,
0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0

,7,--

R32)

0,0,0,0,0,0,0,2,-->0,1,0,--0,1,0,--0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--
0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,0,6,--

R33)

0,0,0,0,0,0,0,3,-->0,1,0,--0,1,0,--0,1,0,--0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,
--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--

R34)

0,0,0,0,0,0,0,4,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,
2,--0,0,0,0,0,3,--0,0,0,0,0,4,--

R35)

0,0,0,0,0,0,0,5,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,0,0,0,--0,0,0,0,1,--0,0,
0,2,--0,0,0,0,3,--

R36)

0,0,0,0,0,0,0,6,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,0,--0,0,1,--
0,0,2,--

R37)

0,0,0,0,0,0,0,7,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,--0,
1,--

R38)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,0,
2,--0,0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,
0,0,6,--0,0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,0,9,--

R39)

0,0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,
0,2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,6,
,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--

R40)

0,0,0,0,0,0,0,0,2,-->0,1,0,--0,1,0,--0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,
0,0,2,--0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,6,--0,0,
,0,0,0,0,0,0,7,--

R41)

0,0,0,0,0,0,0,0,3,-->0,1,0,--0,1,0,--0,1,0,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,
0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,0,0,0,0,6,--

R42)

0,0,0,0,0,0,0,0,4,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,
0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--

R43)

0,0,0,0,0,0,0,0,5,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,0,0,0,--0,0,0,0,1,
--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R44)

0,0,0,0,0,0,0,0,6,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,0,0,--0,0,
0,1,--0,0,0,2,--0,0,0,3,--

R45)

0,0,0,0,0,0,0,0,7,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,0,
--0,0,1,--0,0,2,--

R46)

0,0,0,0,0,0,0,0,8,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,
--0,0,--0,1,--

R47)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,
0,0,0,0,2,--0,0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,0,5,-
-0,0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,
0,0,0,0,9,--0,0,0,0,0,0,0,0,0,0,10,--

R48)

0,0,0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,
0,0,0,0,2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,5,--0,0,
,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,
--

R49)

0,0,0,0,0,0,0,0,2,-->0,1,0,--0,1,0,--0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,
0,0,0,0,2,--0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,5,--0,0,0,
,0,0,0,0,6,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--

R50)

0,0,0,0,0,0,0,3,-->0,1,0,--0,1,0,--0,1,0,--0,0,0,0,0,0,0,0,0,0,0,1,--
0,0,0,0,2,--0,0,0,0,0,0,3,--0,0,0,0,0,0,4,--0,0,0,0,0,0,5,--0,0,0,0,0,
,0,6,--0,0,0,0,0,0,7,--

R51)

0,0,0,0,0,0,0,4,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,0,0,0,0,0,0,0,0,0,
1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--0,0,0,0,0,6,-
-

R52)

0,0,0,0,0,0,0,5,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,0,0,0,0,0,0,0,0,
0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--0,0,0,0,5,--

R53)

0,0,0,0,0,0,0,6,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,0,0,0,--
0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R54)

0,0,0,0,0,0,0,7,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,
0,0,--0,0,0,1,--0,0,0,2,--0,0,0,3,--

R55)

0,0,0,0,0,0,0,8,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,
0,--0,0,0,--0,0,1,--0,0,2,--

R56)

0,0,0,0,0,0,0,9,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,
0,--0,1,0,--0,0,--0,1,--

List of different nodes in T[L]

LEN=1) 0,:

LEN=2) 0,0, : 0,1, :

LEN=3) 0,0,0, : 0,0,1, : 0,0,2, : 0,1,0, :

LEN=4) 0,0,0,0, : 0,0,0,1, : 0,0,0,2, : 0,0,0,3, :

LEN=5) 0,0,0,0,0, : 0,0,0,0,1, : 0,0,0,0,2, : 0,0,0,0,3, : 0,0,0,0,4, :

LEN=6) 0,0,0,0,0,0, : 0,0,0,0,0,1, : 0,0,0,0,0,2, : 0,0,0,0,0,3, : 0,0,0,0,0,4, :
0,0,0,0,0,5, :

LEN=7) 0,0,0,0,0,0,0, : 0,0,0,0,0,0,1, : 0,0,0,0,0,0,2, : 0,0,0,0,0,0,3, :

0,0,0,0,0,0,4, : 0,0,0,0,0,0,5, : 0,0,0,0,0,0,6, :

LEN=8) 0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,2, : 0,0,0,0,0,0,0,3, :

0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,7, :

LEN=9) 0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,2, :

0,0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,5, : 0,0,0,0,0,0,0,0,6, :

0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,8, :
LEN=10) 0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,0,0,2, :
0,0,0,0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,0,0,5, :
0,0,0,0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,0,0,8, :
0,0,0,0,0,0,0,0,0,0,9, :
LEN=11) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,0,1, : 0,0,0,0,0,0,0,0,0,0,0,2, :
0,0,0,0,0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,0,0,0,0,4, : 0,0,0,0,0,0,0,0,0,0,0,5, :
0,0,0,0,0,0,0,0,0,0,0,6, : 0,0,0,0,0,0,0,0,0,0,0,7, : 0,0,0,0,0,0,0,0,0,0,0,8, :
0,0,0,0,0,0,0,0,0,0,0,9, : 0,0,0,0,0,0,0,0,0,0,0,10, :
Number new nodes in level n is given by : 1,2,4,4,5,6,7,8,9,10,11,