

-----Class 1-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][010][011][012][021][100][101]]$   
-----

--  
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 2-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][010][011][012][021][100][102]]$   
-----

--  
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 3-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][010][011][012][021][100][110]]$   
-----

--  
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 4-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][010][011][012][021][100][120]]$   
-----

--  
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 5-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][010][011][012][021][100][201]]$

--

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 6-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][010][011][012][021][100][210]]$

--

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 7-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][010][011][012][021][101][102]]$

--

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 8-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][010][011][012][021][101][110]]$

--

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 9-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][010][011][012][021][101][120]]$

--  
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  
10-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][010][011][012][021][101][201]]$

--  
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  
11-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][010][011][012][021][101][210]]$

--  
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  
12-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][010][011][012][021][102][110]]$

```
--
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
13-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][012][021][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
14-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][012][021][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
15-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][012][021][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
16-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][012][021][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
17-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][012][021][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
18-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][012][021][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
19-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][012][021][120][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  
20-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][001][010][011][012][021][120][210]$

--  
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  
21-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][001][010][011][012][021][201][210]$

--  
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  
22-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][001][010][011][012][100][101][102]$

--  
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

23-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][010][011][012][100][101][110]]$   
 -----  
 --  
 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  
 24-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][010][011][012][100][101][120]]$   
 -----  
 --  
 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  
 25-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][010][011][012][100][101][201]]$   
 -----  
 --  
 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  
 26-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][010][011][012][100][101][210]]$   
 -----  
 --  
 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  
27-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][010][011][012][100][102][110]]$

--  
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  
28-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][010][011][012][100][102][120]]$

--  
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  
29-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][010][011][012][100][102][201]]$

--  
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  
30-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding



L=[[000][001][010][011][012][100][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

31-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[000][001][010][011][012][100][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

32-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[000][001][010][011][012][100][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

33-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[000][001][010][011][012][100][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  
34-----  
Inversion Sequences (I\_n=(n+1)!) avoiding  
L=[[000][001][010][011][012][100][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  
35-----  
Inversion Sequences (I\_n=(n+1)!) avoiding  
L=[[000][001][010][011][012][100][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  
36-----  
Inversion Sequences (I\_n=(n+1)!) avoiding  
L=[[000][001][010][011][012][100][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  
37-----  
Inversion Sequences (I\_n=(n+1)!) avoiding  
L=[[000][001][010][011][012][101][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
38-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][012][101][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
39-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][012][101][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
40-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][012][101][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
41-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][012][101][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
42-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][012][101][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
43-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][012][101][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
44-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][012][101][120][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  
45-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][001][010][011][012][101][120][210]$

--  
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  
46-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][001][010][011][012][101][201][210]$

--  
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  
47-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][001][010][011][012][102][110][120]$

--  
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

48-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][010][011][012][102][110][201]]$   
 -----  
 --  
 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  
 49-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][010][011][012][102][110][210]]$   
 -----  
 --  
 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  
 50-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][010][011][012][102][120][201]]$   
 -----  
 --  
 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  
 51-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][010][011][012][102][120][210]]$   
 -----  
 --  
 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  
52-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][010][011][012][102][201][210]]$

--  
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  
53-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][010][011][012][110][120][201]]$

--  
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  
54-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][010][011][012][110][120][210]]$

--  
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  
55-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[000][001][010][011][012][110][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

56-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[000][001][010][011][012][120][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

57-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[000][001][010][011][021][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

58-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[000][001][010][011][021][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  
59-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][011][021][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  
60-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][011][021][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  
61-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][011][021][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
62-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][021][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
63-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][021][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
64-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][021][100][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
65-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][021][100][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
66-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][021][100][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
67-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][021][100][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
68-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][021][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  
69-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][011][021][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  
70-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][011][021][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  
71-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][011][021][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
72-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][021][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
73-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][021][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
74-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][021][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
75-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][021][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
76-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][021][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
77-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][021][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
78-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][021][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  
79-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][011][021][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  
80-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][011][021][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  
81-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][011][021][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
82-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][021][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
83-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][021][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
84-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][021][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
85-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][021][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
86-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][021][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
87-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][021][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
88-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][021][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  
89-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][011][021][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  
90-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][011][021][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  
91-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][011][021][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
92-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][100][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
93-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][100][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
94-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][100][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
95-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][100][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
96-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][100][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
97-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][100][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
98-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][100][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  
99-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][011][100][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  
100-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][011][100][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  
101-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][011][100][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
102-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][100][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
103-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][100][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
104-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][100][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
105-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][100][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
106-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][100][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
107-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][100][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
108-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][100][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  
109-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][011][100][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  
110-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][011][100][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  
111-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][011][100][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
112-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][101][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
113-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][101][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
114-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][101][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
115-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][101][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
116-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][101][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
117-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][101][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
118-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][101][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  
119-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][011][101][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  
120-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][011][101][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  
121-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][011][101][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
122-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][102][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
123-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][102][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
124-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][102][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
125-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][102][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
126-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][011][110][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
127-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][021][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
128-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][021][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  
129-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][012][021][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  
130-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][012][021][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  
131-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][012][021][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
132-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][021][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
133-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][021][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
134-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][021][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
135-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][021][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
136-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][021][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
137-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][021][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
138-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][021][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  
139-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][012][021][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  
140-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][012][021][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  
141-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][012][021][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
142-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][021][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
143-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][021][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
144-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][021][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
145-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][021][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
146-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][021][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
147-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][021][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
148-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][021][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  
149-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][012][021][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  
150-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][012][021][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  
151-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][012][021][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
152-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][021][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
153-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][021][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
154-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][021][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
155-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][021][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
156-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][021][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
157-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][021][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
158-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][021][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  
159-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][012][021][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  
160-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][012][021][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  
161-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][012][021][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
162-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][100][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
163-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][100][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
164-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][100][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
165-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][100][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
166-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][100][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
167-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][100][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
168-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][100][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  
169-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][012][100][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  
170-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][012][100][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  
171-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][012][100][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
172-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][100][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
173-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][100][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
174-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][100][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
175-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][100][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
176-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][100][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
177-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][100][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
178-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][100][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  
179-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][012][100][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  
180-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][012][100][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  
181-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][012][100][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
182-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][101][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
183-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][101][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
184-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][101][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
185-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][101][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
186-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][101][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
187-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][101][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
188-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][101][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  
189-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][012][101][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  
190-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][012][101][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  
191-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][012][101][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
192-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][102][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
193-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][102][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
194-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][102][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
195-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][102][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
196-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][012][110][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
197-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][021][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
198-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][021][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  
199-----  
Inversion Sequences (I\_n=(n+1)!) avoiding  
L=[[000][001][010][021][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  
200-----  
Inversion Sequences (I\_n=(n+1)!) avoiding  
L=[[000][001][010][021][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  
201-----  
Inversion Sequences (I\_n=(n+1)!) avoiding  
L=[[000][001][010][021][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  
202-----  
Inversion Sequences (I\_n=(n+1)!) avoiding  
L=[[000][001][010][021][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
203-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][021][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
204-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][021][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
205-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][021][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
206-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][021][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
207-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][021][100][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
208-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][021][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
209-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][021][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  
210-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][021][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  
211-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][021][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  
212-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][021][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

213-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][010][021][100][110][120][201]]$   
 -----  
 --  
 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  
 214-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][010][021][100][110][120][210]]$   
 -----  
 --  
 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  
 215-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][010][021][100][110][201][210]]$   
 -----  
 --  
 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  
 216-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][010][021][100][120][201][210]]$   
 -----  
 --  
 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  
217-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][010][021][101][102][110][120]]$

--  
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  
218-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][010][021][101][102][110][201]]$

--  
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  
219-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][010][021][101][102][110][210]]$

--  
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  
220-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding



L=[[000][001][010][021][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

221-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[000][001][010][021][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

222-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[000][001][010][021][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

223-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[000][001][010][021][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  
224-----  
Inversion Sequences (I\_n=(n+1)!) avoiding  
L=[[000][001][010][021][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  
225-----  
Inversion Sequences (I\_n=(n+1)!) avoiding  
L=[[000][001][010][021][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  
226-----  
Inversion Sequences (I\_n=(n+1)!) avoiding  
L=[[000][001][010][021][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  
227-----  
Inversion Sequences (I\_n=(n+1)!) avoiding  
L=[[000][001][010][021][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
228-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][021][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
229-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][021][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
230-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][021][102][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
231-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][021][110][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
232-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][100][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
233-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][100][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
234-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][010][100][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  
235-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][100][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  
236-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][100][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  
237-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][100][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

238-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][010][100][101][110][120][201]]$   
 -----  
 --  
 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  
 239-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][010][100][101][110][120][210]]$   
 -----  
 --  
 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  
 240-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][010][100][101][110][201][210]]$   
 -----  
 --  
 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  
 241-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][010][100][101][120][201][210]]$   
 -----  
 --  
 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  
242-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][100][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  
243-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][100][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  
244-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][010][100][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  
245-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[000][001][010][100][102][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

246-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[000][001][010][100][110][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

247-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[000][001][010][101][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

248-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[000][001][010][101][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  
249-----  
Inversion Sequences (I\_n=(n+1)!) avoiding  
L=[[000][001][010][101][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  
250-----  
Inversion Sequences (I\_n=(n+1)!) avoiding  
L=[[000][001][010][101][102][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  
251-----  
Inversion Sequences (I\_n=(n+1)!) avoiding  
L=[[000][001][010][101][110][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  
252-----  
Inversion Sequences (I\_n=(n+1)!) avoiding  
L=[[000][001][010][102][110][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
253-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][011][012][021][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
254-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][011][012][021][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
255-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][011][012][021][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  
256-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][011][012][021][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  
257-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][011][012][021][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  
258-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][011][012][021][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

```
259-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][001][011][012][021][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
260-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][001][011][012][021][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
261-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][001][011][012][021][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
262-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][001][011][012][021][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  
263-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][011][012][021][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  
264-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][011][012][021][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  
265-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][011][012][021][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  
266-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][011][012][021][100][120][210]]$

--  
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  
267-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][011][012][021][100][201][210]]$

--  
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  
268-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][011][012][021][101][102][110]]$

--  
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

269-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][011][012][021][101][102][120]]$   
 -----  
 --  
 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  
 270-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][011][012][021][101][102][201]]$   
 -----  
 --  
 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  
 271-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][011][012][021][101][102][210]]$   
 -----  
 --  
 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  
 272-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][011][012][021][101][110][120]]$   
 -----  
 --

Rules of T[L]:

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

R2)  $0, 0, \rightarrow$

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

List of different nodes in T[L]

LEN=1)  $0, :$

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

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

-----Class

273-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[000][001][011][012][021][101][110][201]]$

--

Rules of T[L]:

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

R2)  $0, 0, \rightarrow$

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

List of different nodes in T[L]

LEN=1)  $0, :$

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

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

-----Class

274-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[000][001][011][012][021][101][110][210]]$

--

Rules of T[L]:

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

R2)  $0, 0, \rightarrow$

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

List of different nodes in T[L]

LEN=1)  $0, :$

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

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

-----Class

275-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[000][001][011][012][021][101][120][201]]$

--

Rules of T[L]:

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

R2)  $0, 0, \rightarrow$

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

List of different nodes in T[L]



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

-----Class  
276-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][011][012][021][101][120][210]]$

--  
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  
277-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][011][012][021][101][201][210]]$

--  
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  
278-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][011][012][021][102][110][120]]$

--  
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

279-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][011][012][021][102][110][201]]$   
 -----  
 --  
 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  
 280-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][011][012][021][102][110][210]]$   
 -----  
 --  
 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  
 281-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][011][012][021][102][120][201]]$   
 -----  
 --  
 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  
 282-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][011][012][021][102][120][210]]$   
 -----  
 --

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

-----Class  
283-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][001][011][012][021][102][201][210]$

--  
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  
284-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][001][011][012][021][110][120][201]$

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

-----Class  
285-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][001][011][012][021][110][120][210]$

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

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

-----Class  
286-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][011][012][021][110][201][210]]$

--  
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  
287-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][011][012][021][120][201][210]]$

--  
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  
288-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][011][012][100][101][102][110]]$

--  
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

289-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][011][012][100][101][102][120]]$   
 -----  
 --  
 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  
 290-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][011][012][100][101][102][201]]$   
 -----  
 --  
 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  
 291-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][011][012][100][101][102][210]]$   
 -----  
 --  
 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  
 292-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][011][012][100][101][110][120]]$   
 -----  
 --

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  
293-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][011][012][100][101][110][201]]$

--  
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  
294-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][011][012][100][101][110][210]]$

--  
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  
295-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][011][012][100][101][120][201]]$

--  
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  
296-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][011][012][100][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  
297-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][011][012][100][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  
298-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][011][012][100][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

```

299-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][001][011][012][100][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
300-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][001][011][012][100][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
301-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][001][011][012][100][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
302-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][001][011][012][100][102][120][210]]
-----
--

```



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

-----Class  
303-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][001][011][012][100][102][201][210]$

--  
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  
304-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][001][011][012][100][110][120][201]$

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

-----Class  
305-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][001][011][012][100][110][120][210]$

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

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

-----Class  
306-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][011][012][100][110][201][210]]$

--  
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  
307-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][011][012][100][120][201][210]]$

--  
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  
308-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][011][012][101][102][110][120]]$

--  
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

```

309-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][001][011][012][101][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
310-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][001][011][012][101][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
311-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][001][011][012][101][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
312-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][001][011][012][101][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  
313-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][011][012][101][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  
314-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][011][012][101][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  
315-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][011][012][101][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  
316-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][011][012][101][110][201][210]]$

--  
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  
317-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][011][012][101][120][201][210]]$

--  
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  
318-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][011][012][102][110][120][201]]$

--  
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

```

319-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][001][011][012][102][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
320-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][001][011][012][102][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
321-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][001][011][012][102][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
322-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][001][011][012][110][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

323-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[000][001][011][021][100][101][102][110]]$

--

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

324-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[000][001][011][021][100][101][102][120]]$

--

Rules of T[L]:

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

R2) 0,0,-->

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

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

325-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[000][001][011][021][100][101][102][201]]$

--

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  
326-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][001][011][021][100][101][102][210]$

--  
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  
327-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][001][011][021][100][101][110][120]$

--  
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  
328-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][001][011][021][100][101][110][201]$

--  
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



329-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][001][011][021][100][101][110][210]$   
 -----  
 --  
 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  
 330-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][001][011][021][100][101][120][201]$   
 -----  
 --  
 Rules of T[L]:  
 R1)  $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$   
 R2)  $0, 0, \rightarrow$   
 R3)  $0, 1, \rightarrow 0, 0, \rightarrow 0, 1, 2, \rightarrow$   
 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  
 331-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][001][011][021][100][101][120][210]$   
 -----  
 --  
 Rules of T[L]:  
 R1)  $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$   
 R2)  $0, 0, \rightarrow$   
 R3)  $0, 1, \rightarrow 0, 0, \rightarrow 0, 1, 2, \rightarrow$   
 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  
 332-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[000][001][011][021][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

333-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[000][001][011][021][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

334-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[000][001][011][021][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

335-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[000][001][011][021][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  
336-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][011][021][100][102][120][201]]$

--  
Rules of T[L]:  
R1) 0,-->0,0,--0,1,--  
R2) 0,0,-->  
R3) 0,1,-->0,0,--0,1,2,--  
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  
 $L=[[000][001][011][021][100][102][120][210]]$

--  
Rules of T[L]:  
R1) 0,-->0,0,--0,1,--  
R2) 0,0,-->  
R3) 0,1,-->0,0,--0,1,2,--  
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  
338-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][011][021][100][102][201][210]]$

--  
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  
339-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][011][021][100][110][120][201]]$

--  
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  
340-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][011][021][100][110][120][210]]$

--  
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  
341-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][011][021][100][110][201][210]]$

--  
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

342-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[000][001][011][021][100][120][201][210]$

-----

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

343-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[000][001][011][021][101][102][110][120]$

-----

Rules of  $T[L]$ :

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

R2)  $0,0, \rightarrow$

R3)  $0,1, \rightarrow 0,0, \rightarrow 0,1,2, \rightarrow$

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

344-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[000][001][011][021][101][102][110][201]$

-----

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
345-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][011][021][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
346-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][011][021][101][102][120][201]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,2,--
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
347-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][011][021][101][102][120][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,2,--
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
348-----

```

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][011][021][101][102][201][210]]$

-----  
--  
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

349-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[000][001][011][021][101][110][120][201]]$

-----  
--  
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

350-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[000][001][011][021][101][110][120][210]]$

-----  
--  
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

351-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[000][001][011][021][101][110][201][210]]$

-----  
--  
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  
352-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][011][021][101][120][201][210]]

-----  
--  
Rules of T[L]:  
R1) 0,-->0,0,--0,1,--  
R2) 0,0,-->  
R3) 0,1,-->0,0,--0,1,2,--  
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  
353-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][011][021][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  
354-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][011][021][102][110][120][210]]

-----  
--



Rules of T[L]:

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

R2)  $0, 0, \rightarrow$

R3)  $0, 1, \rightarrow 0, 0, \rightarrow 0, 1, 2, \rightarrow$

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

355-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[000][001][011][021][102][110][201][210]$

--

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

356-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[000][001][011][021][102][120][201][210]$

--

Rules of T[L]:

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

R2)  $0, 0, \rightarrow$

R3)  $0, 1, \rightarrow 0, 0, \rightarrow 0, 1, 2, \rightarrow$

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

357-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[000][001][011][021][110][120][201][210]$

--

Rules of T[L]:

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

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  
358-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][011][100][101][102][110][120]]$

--  
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  
359-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][011][100][101][102][110][201]]$

--  
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  
360-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][011][100][101][102][110][210]]$

--  
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  
361-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][011][100][101][102][120][201]]

--  
Rules of T[L]:  
R1) 0,-->0,0,--0,1,--  
R2) 0,0,-->  
R3) 0,1,-->0,0,--0,1,2,--  
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  
362-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][011][100][101][102][120][210]]

--  
Rules of T[L]:  
R1) 0,-->0,0,--0,1,--  
R2) 0,0,-->  
R3) 0,1,-->0,0,--0,1,2,--  
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  
363-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][011][100][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

364-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[000][001][011][100][101][110][120][201]$

-----

Rules of  $T[L]$ :

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

R2)  $0,0, \rightarrow$

R3)  $0,1, \rightarrow 0,0, \rightarrow 0,1,2, \rightarrow$

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

365-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[000][001][011][100][101][110][120][210]$

-----

Rules of  $T[L]$ :

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

R2)  $0,0, \rightarrow$

R3)  $0,1, \rightarrow 0,0, \rightarrow 0,1,2, \rightarrow$

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

366-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[000][001][011][100][101][110][201][210]$

-----

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
367-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][001][011][100][101][120][201][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->
R3) 0,1,-->0,0,--0,1,2,--
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
368-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][001][011][100][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
369-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][001][011][100][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
370-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][001][011][100][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
371-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][001][011][100][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
372-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][001][011][100][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

```

```

373-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][001][011][101][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
374-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][001][011][101][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
375-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][001][011][101][102][110][201][210]]
-----
--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
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
376-----
Inversion Sequences (I_n=(n+1)!) avoiding

```

L=[[000][001][011][101][102][120][201][210]]

--

Rules of T[L]:

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

R2) 0,0,-->

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

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

377-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[000][001][011][101][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

378-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[000][001][011][102][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

379-----



Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][012][021][100][101][102][110]]$

-----  
--  
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  
380-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][012][021][100][101][102][120]]$

-----  
--  
Rules of T[L]:  
R1)  $0,-->0,0,--0,1,--$   
R2)  $0,0,-->$   
R3)  $0,1,-->0,0,--0,1,1,--$   
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  
381-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][012][021][100][101][102][201]]$

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

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

383-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[000][001][012][021][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

384-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[000][001][012][021][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

-----Class

385-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[000][001][012][021][100][101][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  
386-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][012][021][100][101][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  
387-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][012][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,--  
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][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,--
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
389-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][012][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,--
List of different nodes in 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][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,--
List of different nodes in 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][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,--

```

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

-----Class  
392-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][012][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,--  
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  
393-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][012][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,--  
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  
394-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][012][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,--  
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  
395-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][012][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, --  
List of different nodes in T[L]  
LEN=1) 0, :  
LEN=2) 0,0, : 0,1, :  
Number new nodes in level n is given by : 1,2, DONE

-----Class  
396-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][012][021][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  
397-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][012][021][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  
398-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][012][021][100][120][201][210]]$

-----  
--  
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  
399-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][012][021][101][102][110][120]]$

-----  
--  
Rules of T[L]:  
R1)  $0,-->0,0,--0,1,--$   
R2)  $0,0,-->$   
R3)  $0,1,-->0,0,--0,0,--$   
List of different nodes in 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  
 $L=[[000][001][012][021][101][102][110][201]]$

-----  
--  
Rules of T[L]:  
R1)  $0,-->0,0,--0,1,--$   
R2)  $0,0,-->$   
R3)  $0,1,-->0,0,--0,0,--$   
List of different nodes in 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  
 $L=[[000][001][012][021][101][102][110][210]]$

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

-----Class  
402-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][012][021][101][102][120][201]]$

-----  
--  
Rules of T[L]:  
R1)  $0,-->0,0,--0,1,--$   
R2)  $0,0,-->$   
R3)  $0,1,-->0,0,--0,1,1,--$   
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  
403-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][001][012][021][101][102][120][210]]$

-----  
--  
Rules of T[L]:  
R1)  $0,-->0,0,--0,1,--$   
R2)  $0,0,-->$   
R3)  $0,1,-->0,0,--0,1,1,--$   
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  
404-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding



L=[[000][001][012][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,--

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

405-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[000][001][012][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,--

List of different nodes in T[L]

LEN=1) 0,:

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

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

-----Class

406-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[000][001][012][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,--

List of different nodes in 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][012][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,--  
List of different nodes in 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][012][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,--  
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  
409-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][012][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,--  
List of different nodes in T[L]  
LEN=1) 0,:  
LEN=2) 0,0,: 0,1,:  
Number new nodes in level n is given by : 1,2, DONE

-----Class  
410-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][012][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,--  
List of different nodes in T[L]  
LEN=1) 0, :  
LEN=2) 0,0, : 0,1, :  
Number new nodes in level n is given by : 1,2, DONE

-----Class  
411-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][012][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,--  
List of different nodes in T[L]  
LEN=1) 0, :  
LEN=2) 0,0, : 0,1, :  
Number new nodes in level n is given by : 1,2, DONE

-----Class  
412-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][012][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,--  
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  
413-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][012][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,--  
List of different nodes in 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][012][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,--  
List of different nodes in T[L]  
LEN=1) 0,:  
LEN=2) 0,0,: 0,1,:  
Number new nodes in level n is given by : 1,2, DONE

-----Class  
415-----  
Inversion Sequences (I\_n=(n+1)!) avoiding  
L=[[000][001][012][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,--  
List of different nodes in T[L]  
LEN=1) 0,:  
LEN=2) 0,0,: 0,1,:  
Number new nodes in level n is given by : 1,2, DONE

-----Class  
416-----  
Inversion Sequences (I\_n=(n+1)!) avoiding  
L=[[000][001][012][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,--  
List of different nodes in T[L]  
LEN=1) 0,:  
LEN=2) 0,0,: 0,1,:  
Number new nodes in level n is given by : 1,2, DONE

-----Class  
417-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][012][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,--  
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  
418-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][012][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,--  
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  
419-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][012][100][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

```

420-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][001][012][100][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
421-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][001][012][100][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
422-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][001][012][100][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
423-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][001][012][100][101][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

424-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[000][001][012][100][102][110][120][201]]$

--

Rules of T[L]:

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

R2)  $0, 0, \rightarrow$

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

List of different nodes in T[L]

LEN=1)  $0, :$

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

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

-----Class

425-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[000][001][012][100][102][110][120][210]]$

--

Rules of T[L]:

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

R2)  $0, 0, \rightarrow$

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

List of different nodes in 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

$L=[[000][001][012][100][102][110][201][210]]$

--

Rules of T[L]:

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

R2)  $0, 0, \rightarrow$

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  
427-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][012][100][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,--  
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  
428-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][012][100][110][120][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  
429-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][012][101][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  
430-----  
Inversion Sequences (I\_n=(n+1)!) avoiding  
L=[[000][001][012][101][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  
431-----  
Inversion Sequences (I\_n=(n+1)!) avoiding  
L=[[000][001][012][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,--  
List of different nodes in T[L]  
LEN=1) 0,:  
LEN=2) 0,0,: 0,1,:  
Number new nodes in level n is given by : 1,2, DONE

-----Class  
432-----  
Inversion Sequences (I\_n=(n+1)!) avoiding  
L=[[000][001][012][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,--  
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][012][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,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

```

-----Class
434-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][012][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,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

```

-----Class
435-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][001][021][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,--0,1,2,--
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
436-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

```

L=[[000][001][021][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,--

List of different nodes in T[L]

LEN=1) 0,:

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

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

-----Class

437-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[000][001][021][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,--

List of different nodes in T[L]

LEN=1) 0,:

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

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

-----Class

438-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[000][001][021][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,--0,1,2,--

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

439-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[000][001][021][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,--0,1,2,--
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
440-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][001][021][100][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
441-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][001][021][100][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
442-----
Inversion Sequences (I_n=(n+1)!) avoiding

```

L=[[000][001][021][100][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

443-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[000][001][021][100][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

444-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[000][001][021][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,--0,1,2,--

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

445-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[000][001][021][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,--0,1,2,--

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

446-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[000][001][021][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,--0,1,2,--

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

447-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[000][001][021][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,--

List of different nodes in T[L]

LEN=1) 0,:

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

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

-----Class

448-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[000][001][021][100][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
449-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][001][021][100][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
450-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][001][021][101][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
451-----

```

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][021][101][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  
452-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][021][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,--  
List of different nodes in 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][021][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,--0,1,2,--  
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  
454-----



Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][021][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,--0,1,2,--  
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  
455-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][021][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,--0,1,2,--  
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  
456-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][100][101][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  
457-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[000][001][100][101][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

458-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[000][001][100][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,--0,1,2,3,4,5,6,7,8,--

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,--

R12)

0,1,2,3,4,5,6,7,8,9,10,-->0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,0,--0,1,2,3,4,5,6,7,8,9,10,11,--

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, :  
LEN=12) 0,1,2,3,4,5,6,7,8,9,10,11, :  
Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,1,

-----Class  
459-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][100][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  
460-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][100][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  
461-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][001][100][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
462-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][001][101][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][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
464-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][010][011][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,-->
List of different nodes in 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][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  
466-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][010][011][012][021][100][101][201]]$

-----  
--  
Rules of T[L]:  
R1) 0,-->0,0,--0,1,--  
R2) 0,0,-->0,1,--0,1,--  
R3) 0,1,-->  
List of different nodes in 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  
 $L=[[000][010][011][012][021][100][101][210]]$

-----  
--  
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  
468-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][010][011][012][021][100][102][110]]$

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

R3) 0,1,-->  
List of different nodes in 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][100][102][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  
470-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][010][011][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,-->  
List of different nodes in 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][100][102][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
472-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][010][011][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,-->
List of different nodes in 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][100][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
474-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][010][011][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,-->
List of different nodes in 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][100][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

476-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[000][010][011][012][021][100][120][210]]$

-----  
--  
Rules of T[L]:

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

R2) 0,0,-->0,1,--0,1,--

R3) 0,1,-->

List of different nodes in 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

$L=[[000][010][011][012][021][100][201][210]]$

-----  
--  
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

478-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[000][010][011][012][021][101][102][110]]$

-----  
--  
Rules of T[L]:

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

R2) 0,0,-->0,1,--0,1,--



R3) 0,1,-->  
List of different nodes in 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][101][102][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  
480-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][010][011][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,-->  
List of different nodes in 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][101][102][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
482-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][010][011][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,-->
List of different nodes in 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][101][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
484-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][010][011][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,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

```

-----Class
485-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][010][011][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,-->

List of different nodes in T[L]

LEN=1) 0,:

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

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

-----Class

486-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[000][010][011][012][021][101][120][210]]$

-----  
--  
Rules of T[L]:

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

R2) 0,0,-->0,1,--0,1,--

R3) 0,1,-->

List of different nodes in T[L]

LEN=1) 0,:

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

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

-----Class

487-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[000][010][011][012][021][101][201][210]]$

-----  
--  
Rules of T[L]:

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

R2) 0,0,-->0,1,--0,1,--

R3) 0,1,-->

List of different nodes in T[L]

LEN=1) 0,:

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

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

-----Class

488-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[000][010][011][012][021][102][110][120]]$

-----  
--  
Rules of T[L]:

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

R2) 0,0,-->0,1,--0,1,--

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

-----Class  
489-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][010][011][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,-->  
List of different nodes in T[L]  
LEN=1) 0, :  
LEN=2) 0,0, : 0,1, :  
Number new nodes in level n is given by : 1,2, DONE

-----Class  
490-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][010][011][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,-->  
List of different nodes in T[L]  
LEN=1) 0, :  
LEN=2) 0,0, : 0,1, :  
Number new nodes in level n is given by : 1,2, DONE

-----Class  
491-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][010][011][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,-->  
List of different nodes in T[L]  
LEN=1) 0, :  
LEN=2) 0,0, : 0,1, :  
Number new nodes in level n is given by : 1,2, DONE

```

-----Class
492-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][010][011][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,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

```

-----Class
493-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][010][011][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,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

```

-----Class
494-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][010][011][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,-->
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
Number new nodes in level n is given by : 1,2,  DONE

```

```

-----Class
495-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][010][011][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,-->

List of different nodes in T[L]

LEN=1) 0,:

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

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

-----Class

496-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[000][010][011][012][021][110][201][210]]$

-----  
--  
Rules of T[L]:

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

R2) 0,0,-->0,1,--0,1,--

R3) 0,1,-->

List of different nodes in T[L]

LEN=1) 0,:

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

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

-----Class

497-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[000][010][011][012][021][120][201][210]]$

-----  
--  
Rules of T[L]:

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

R2) 0,0,-->0,1,--0,1,--

R3) 0,1,-->

List of different nodes in T[L]

LEN=1) 0,:

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

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

-----Class

498-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[000][010][011][012][100][101][102][110]]$

-----  
--  
Rules of T[L]:

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

R2) 0,0,-->0,1,--0,0,2,--

R3) 0,1,-->  
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  
499-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][010][011][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,-->  
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  
500-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][010][011][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,-->  
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  
501-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][010][011][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,-->  
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][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,-->  
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][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,-->  
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][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,-->  
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  
505-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][010][011][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,-->  
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  
506-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][010][011][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,-->  
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  
507-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][010][011][012][100][101][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

508-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[000][010][011][012][100][102][110][120]]$

--

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

509-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[000][010][011][012][100][102][110][201]]$

--

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

510-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[000][010][011][012][100][102][110][210]]$

```

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

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][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,-->

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][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,-->

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  
 $L=[[000][010][011][012][101][102][110][201]]$

-----  
--  
Rules of T[L]:  
R1)  $0, -->0,0, --0,1, --$   
R2)  $0,0, -->0,1, --0,0,2, --$   
R3)  $0,1, -->$   
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  
520-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][010][011][012][101][102][110][210]]$

-----  
--  
Rules of T[L]:  
R1)  $0, -->0,0, --0,1, --$   
R2)  $0,0, -->0,1, --0,0,2, --$   
R3)  $0,1, -->$   
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  
521-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][010][011][012][101][102][120][201]]$

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

522-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][010][011][012][101][102][120][210]]$   
 -----  
 --  
 Rules of T[L]:  
 R1)  $0,-->0,0,--0,1,--$   
 R2)  $0,0,-->0,1,--0,0,2,--$   
 R3)  $0,1,-->$   
 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  
 523-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][010][011][012][101][102][201][210]]$   
 -----  
 --  
 Rules of T[L]:  
 R1)  $0,-->0,0,--0,1,--$   
 R2)  $0,0,-->0,1,--0,0,2,--$   
 R3)  $0,1,-->$   
 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  
 524-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][010][011][012][101][110][120][201]]$   
 -----  
 --  
 Rules of T[L]:  
 R1)  $0,-->0,0,--0,1,--$   
 R2)  $0,0,-->0,1,--0,0,2,--$   
 R3)  $0,1,-->$   
 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
525-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][010][011][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,-->
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
526-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][010][011][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,-->
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
527-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][010][011][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,-->
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  
528-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][010][011][012][102][110][120][201]$

-----  
--  
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  
529-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][010][011][012][102][110][120][210]$

-----  
--  
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  
530-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][010][011][012][102][110][201][210]$

-----  
--  
Rules of  $T[L]$ :  
R1)  $0, \rightarrow 0,0, \rightarrow 0,1, \rightarrow$   
R2)  $0,0, \rightarrow 0,1, \rightarrow 0,0,2, \rightarrow$   
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

531-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[000][010][011][012][102][120][201][210]]$

-----

--  
Rules of  $T[L]$ :

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

R2)  $0,0,-->0,1,--0,0,2,--$

R3)  $0,1,-->$

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

532-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[000][010][011][012][110][120][201][210]]$

-----

--  
Rules of  $T[L]$ :

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

R2)  $0,0,-->0,1,--0,0,2,--$

R3)  $0,1,-->$

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

533-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[000][010][011][021][100][101][102][110]]$

-----

--  
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
534-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][010][011][021][100][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
535-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][010][011][021][100][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
536-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][010][011][021][100][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
537-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][010][011][021][100][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  
538-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][010][011][021][100][101][110][201]]$

--  
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  
539-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][010][011][021][100][101][110][210]]$

--  
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  
540-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][010][011][021][100][101][120][201]]$

--  
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  
541-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][010][011][021][100][101][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  
542-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][010][011][021][100][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  
543-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][010][011][021][100][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  
544-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][010][011][021][100][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  
545-----  
Inversion Sequences (I\_n=(n+1)!) avoiding  
L=[[000][010][011][021][100][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  
546-----  
Inversion Sequences (I\_n=(n+1)!) avoiding  
L=[[000][010][011][021][100][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  
547-----  
Inversion Sequences (I\_n=(n+1)!) avoiding  
L=[[000][010][011][021][100][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  
548-----  
Inversion Sequences (I\_n=(n+1)!) avoiding  
L=[[000][010][011][021][100][102][201][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  
549-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][010][011][021][100][110][120][201]]$

-----

--  
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  
550-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][010][011][021][100][110][120][210]]$

-----

--  
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  
551-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][010][011][021][100][110][201][210]]$

-----

--  
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

552-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[000][010][011][021][100][120][201][210]]$

-----

--

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

553-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[000][010][011][021][101][102][110][120]]$

-----

--

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

554-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[000][010][011][021][101][102][110][201]]$

-----

--

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

555-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[000][010][011][021][101][102][110][210]]$

-----

--



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  
556-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][010][011][021][101][102][120][201]$

--  
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  
557-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][010][011][021][101][102][120][210]$

--  
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  
558-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][010][011][021][101][102][201][210]$

--  
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
559-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][010][011][021][101][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
560-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][010][011][021][101][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
561-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][010][011][021][101][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
562-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][010][011][021][101][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  
563-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][010][011][021][102][110][120][201]]$

--  
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  
564-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][010][011][021][102][110][120][210]]$

--  
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  
565-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][010][011][021][102][110][201][210]]$

--  
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  
566-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][010][011][021][102][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  
567-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][010][011][021][110][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  
568-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][010][011][100][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  
569-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][010][011][100][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
570-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][010][011][100][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
571-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][010][011][100][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

572-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[000][010][011][100][101][102][120][210]]$

-----

--

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

573-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[000][010][011][100][101][102][201][210]]$

-----

--

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

574-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[000][010][011][100][101][110][120][201]]$

-----

--

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  
575-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][010][011][100][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  
576-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][010][011][100][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  
577-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][010][011][100][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
578-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][010][011][100][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
579-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][010][011][100][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
580-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][010][011][100][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  
581-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][010][011][100][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  
582-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][010][011][100][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  
583-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][010][011][101][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

584-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][010][011][101][102][110][120][210]]$

--

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

585-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][010][011][101][102][110][201][210]]$

--

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

586-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][010][011][101][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  
587-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][010][011][101][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  
588-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][010][011][102][110][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  
589-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][010][012][021][100][101][102][110]$

-----  
--  
Rules of T[L]:  
R1)  $0, -- \rightarrow 0, 0, -- 0, 1, --$   
R2)  $0, 0, -- \rightarrow 0, 1, -- 0, 1, --$   
R3)  $0, 1, -- \rightarrow 0, 1, 1, --$   
R4)  $0, 1, 1, -- \rightarrow$   
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  
590-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][010][012][021][100][101][102][120]$

-----  
--  
Rules of T[L]:  
R1)  $0, -- \rightarrow 0, 0, -- 0, 1, --$   
R2)  $0, 0, -- \rightarrow 0, 1, -- 0, 1, --$   
R3)  $0, 1, -- \rightarrow 0, 1, 1, --$   
R4)  $0, 1, 1, -- \rightarrow$   
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  
591-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][010][012][021][100][101][102][201]$

-----  
--  
Rules of T[L]:  
R1)  $0, -- \rightarrow 0, 0, -- 0, 1, --$   
R2)  $0, 0, -- \rightarrow 0, 1, -- 0, 1, --$   
R3)  $0, 1, -- \rightarrow 0, 1, 1, --$   
R4)  $0, 1, 1, -- \rightarrow$   
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

592-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[000][010][012][021][100][101][102][210]]$

-----

--  
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

593-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[000][010][012][021][100][101][110][120]]$

-----

--  
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

594-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[000][010][012][021][100][101][110][201]]$

-----

--  
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  
595-----  
Inversion Sequences (I\_n=(n+1)!) avoiding  
L=[[000][010][012][021][100][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  
596-----  
Inversion Sequences (I\_n=(n+1)!) avoiding  
L=[[000][010][012][021][100][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  
597-----  
Inversion Sequences (I\_n=(n+1)!) avoiding  
L=[[000][010][012][021][100][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  
598-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][010][012][021][100][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  
599-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][010][012][021][100][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  
600-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][010][012][021][100][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  
601-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][010][012][021][100][102][110][210]]$

--  
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  
602-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][010][012][021][100][102][120][201]]$

--  
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  
603-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][010][012][021][100][102][120][210]]$

--  
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  
604-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][010][012][021][100][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  
605-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][010][012][021][100][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  
606-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][010][012][021][100][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  
607-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][010][012][021][100][110][201][210]]$

--  
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  
608-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][010][012][021][100][120][201][210]]$

--  
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  
609-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][010][012][021][101][102][110][120]]$

--  
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  
610-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][010][012][021][101][102][110][201]$

--  
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  
611-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][010][012][021][101][102][110][210]$

--  
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  
612-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][010][012][021][101][102][120][201]$

--  
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  
613-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][010][012][021][101][102][120][210]]$

--  
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  
614-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][010][012][021][101][102][201][210]]$

--  
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  
615-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][010][012][021][101][110][120][201]]$

--  
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  
616-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][010][012][021][101][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  
617-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][010][012][021][101][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  
618-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][010][012][021][101][120][201][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)  $0, 1, \rightarrow 0, 1, 1, \rightarrow$

R4)  $0, 1, 1, \rightarrow$

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

619-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[000][010][012][021][102][110][120][201]$

--

Rules of T[L]:

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

R2)  $0, 0, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$

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

R4)  $0, 1, 1, \rightarrow$

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

620-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[000][010][012][021][102][110][120][210]$

--

Rules of T[L]:

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

R2)  $0, 0, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$

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

R4)  $0, 1, 1, \rightarrow$

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

621-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[000][010][012][021][102][110][201][210]$

```

--
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
622-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][010][012][021][102][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
623-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][010][012][021][110][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][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
625-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][010][012][100][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,-->0,1,1,--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
626-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][010][012][100][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,-->0,1,1,--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

627-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][010][012][100][101][102][120][201]$

-----

--

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)  $0, 1, \rightarrow 0, 1, 1, \rightarrow$
- R4)  $0, 0, 2, \rightarrow 0, 1, 1, \rightarrow 0, 1, \rightarrow$
- R5)  $0, 1, 1, \rightarrow$

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  
 $L=[000][010][012][100][101][102][120][210]$

-----

--

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)  $0, 1, \rightarrow 0, 1, 1, \rightarrow$
- R4)  $0, 0, 2, \rightarrow 0, 1, 1, \rightarrow 0, 1, \rightarrow$
- R5)  $0, 1, 1, \rightarrow$

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  
 $L=[000][010][012][100][101][102][201][210]$

-----

--

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)  $0, 1, \rightarrow 0, 1, 1, \rightarrow$
- R4)  $0, 0, 2, \rightarrow 0, 1, 1, \rightarrow 0, 1, \rightarrow$
- R5)  $0, 1, 1, \rightarrow$

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  
 $L=[[000][010][012][100][101][110][120][201]]$

--  
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  
631-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][010][012][100][101][110][120][210]]$

--  
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,-->0,1,1,--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  
632-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][010][012][100][101][110][201][210]]$

--  
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,-->0,1,1,--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
633-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][010][012][100][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,-->0,1,1,--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][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
635-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][010][012][100][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,-->0,1,1,--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][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

637-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][010][012][100][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,-->0,1,1,--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][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,-->0,1,1,--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

639-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][010][012][101][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

640-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][010][012][101][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

641-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[000][010][012][101][102][110][201][210]]$

-----

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

R4)  $0,0,2, \rightarrow 0,1, \rightarrow 0,1,1, \rightarrow$

R5)  $0,1,1, \rightarrow$

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

$L=[[000][010][012][101][102][120][201][210]]$

-----

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

R4)  $0,0,2, \rightarrow 0,1, \rightarrow 0,0,2,2, \rightarrow$

R5)  $0,1,1, \rightarrow$

R6)  $0,0,2,2, \rightarrow 0,1, \rightarrow$

List of different nodes in  $T[L]$

LEN=1)  $0, :$

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

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

LEN=4)  $0,0,2,2, :$

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

-----Class

643-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[000][010][012][101][110][120][201][210]]$

-----

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

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  
644-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][010][012][102][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  
645-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][010][021][100][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,--  
R11)  
0,0,1,1,2,2,3,3,4,4,5,-->0,0,1,1,2,2,3,3,4,4,5,5,--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, :

LEN=12) 0,0,1,1,2,2,3,3,4,4,5,5, :

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

-----Class

646-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[000][010][021][100][101][102][110][201]$

-----

--  
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, --

R11)

0,0,1,1,2,2,3,3,4,4,5, -->0,0,1,1,2,2,3,3,4,4,5,5, --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, :  
LEN=12) 0,0,1,1,2,2,3,3,4,4,5,5, :  
Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,1,

-----Class  
647-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][010][021][100][101][102][110][210]$

-----  
--  
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,--  
R11)  
0,0,1,1,2,2,3,3,4,4,5, -->0,0,1,1,2,2,3,3,4,4,5,5,--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, :  
LEN=12) 0,0,1,1,2,2,3,3,4,4,5,5, :  
Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,1,

-----Class  
648-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][010][021][100][101][102][120][201]$

-----  
--  
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,--
- R11) 0,0,1,1,2,2,3,3,4,4,5,-->0,0,1,1,2,2,3,3,4,4,5,5,--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, :
- LEN=12) 0,0,1,1,2,2,3,3,4,4,5,5, :

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

-----Class  
649-----

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

R11)  
 0,0,1,1,2,2,3,3,4,4,5,-->0,0,1,1,2,2,3,3,4,4,5,5,--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, :
- LEN=12) 0,0,1,1,2,2,3,3,4,4,5,5, :

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

-----Class

650-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[000][010][021][100][101][102][201][210]$

--

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,--
- R11)  
 0,0,1,1,2,2,3,3,4,4,5,-->0,0,1,1,2,2,3,3,4,4,5,5,--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,:  
 LEN=12) 0,0,1,1,2,2,3,3,4,4,5,5,:  
 Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,1,

-----Class

651-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][010][021][100][101][110][120][201]]$

-----

--

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,--
- R11) 0,0,1,1,2,2,3,3,4,4,5,-->0,0,1,1,2,2,3,3,4,4,5,5,--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,:  
 LEN=12) 0,0,1,1,2,2,3,3,4,4,5,5,:  
 Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,1,

-----Class

652-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][010][021][100][101][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,--
- R11) 0,0,1,1,2,2,3,3,4,4,5,-->0,0,1,1,2,2,3,3,4,4,5,5,--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, :
  - LEN=12) 0,0,1,1,2,2,3,3,4,4,5,5, :
- Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,1,

-----Class

653-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][010][021][100][101][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,--  
 R11)  
 0,0,1,1,2,2,3,3,4,4,5,-->0,0,1,1,2,2,3,3,4,4,5,5,--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, :  
 LEN=12) 0,0,1,1,2,2,3,3,4,4,5,5, :  
 Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,1,

-----Class

654-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][010][021][100][101][120][201][210]]$

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--

Rules of T[L]:

R1) 0,-->0,0,--0,--  
 R2) 0,0,-->0,0,1,--0,--  
 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,--  
 R11)  
 0,0,1,1,2,2,3,3,4,4,5,-->0,0,1,1,2,2,3,3,4,4,5,5,--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, :

LEN=12) 0,0,1,1,2,2,3,3,4,4,5,5, :

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

-----Class

655-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[000][010][021][100][102][110][120][201]$

--

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,--

R11)

0,0,1,1,2,2,3,3,4,4,5,-->0,0,1,1,2,2,3,3,4,4,5,5,--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,--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, :  
 LEN=12) 0,0,1,1,2,2,3,3,4,4,5,5, :  
 Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,1,

-----Class  
 656-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][010][021][100][102][110][120][210]$

--  
 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,--  
 R11) 0,0,1,1,2,2,3,3,4,4,5,-->0,0,1,1,2,2,3,3,4,4,5,5,--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, :  
 LEN=12) 0,0,1,1,2,2,3,3,4,4,5,5, :  
 Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,1,

-----Class  
 657-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][010][021][100][102][110][201][210]$

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Rules of T[L]:

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

R2)  $0, 0, \rightarrow 0, 0, 1, \rightarrow 0, \rightarrow$

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)

$0, 0, 1, 1, 2, 2, 3, 3, 4, 4, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, 4, 5, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, \rightarrow 0, 0, 1, 1, 2, 2, 3, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, \rightarrow$

R11)

$0, 0, 1, 1, 2, 2, 3, 3, 4, 4, 5, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, 4, 5, 5, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, 4, 5, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, \rightarrow 0, 0, 1, 1, 2, 2, 3, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, \rightarrow$

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, :

LEN=12) 0, 0, 1, 1, 2, 2, 3, 3, 4, 4, 5, 5, :

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

-----Class

658-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[000][010][021][100][102][120][201][210]$

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--

Rules of T[L]:

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

R2)  $0, 0, \rightarrow 0, 0, 1, \rightarrow 0, \rightarrow$

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,--  
R11)  
0,0,1,1,2,2,3,3,4,4,5,-->0,0,1,1,2,2,3,3,4,4,5,5,--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, :  
LEN=12) 0,0,1,1,2,2,3,3,4,4,5,5, :  
Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,1,

-----Class  
659-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][010][021][100][110][120][201][210]]

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--  
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,--  
R11)  
0,0,1,1,2,2,3,3,4,4,5,-->0,0,1,1,2,2,3,3,4,4,5,5,--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, :  
 LEN=12) 0,0,1,1,2,2,3,3,4,4,5,5, :  
 Number new nodes in level n is given by : 1,1,1,1,1,1,1,1,1,1,1,1,

-----Class

660-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][010][021][101][102][110][120][201]$

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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,--
- R11) 0,0,1,1,2,2,3,3,4,4,5,-->0,0,1,1,2,2,3,3,4,4,5,5,--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,--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, :
- LEN=12) 0,0,1,1,2,2,3,3,4,4,5,5, :

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

-----Class  
 661-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][010][021][101][102][110][120][210]$

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)  $0,0,1,1,2,2,3,3,4,4, \rightarrow 0,0,1,1,2,2,3,3,4,4,5, \rightarrow 0,0,1,1,2,2,3,3,4, \rightarrow 0,0,1,1,2,2,3, \rightarrow 0,0,1,1,2, \rightarrow 0,0,1, \rightarrow 0, \rightarrow$
- R11)  $0,0,1,1,2,2,3,3,4,4,5, \rightarrow 0,0,1,1,2,2,3,3,4,4,5,5, \rightarrow 0,0,1,1,2,2,3,3,4,4,5, \rightarrow 0,0,1,1,2,2,3,3,4, \rightarrow 0,0,1,1,2,2,3, \rightarrow 0,0,1,1,2, \rightarrow 0,0,1, \rightarrow 0, \rightarrow$

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)  $0,0,1,1,2,2,3,3,4,4,5, :$
  - LEN=12)  $0,0,1,1,2,2,3,3,4,4,5,5, :$
- Number new nodes in level n is given by :  $1,1,1,1,1,1,1,1,1,1,1,1,1,$

-----Class  
 662-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][010][021][101][102][110][201][210]$

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,-->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,--  
 R11) 0,0,1,1,2,2,3,3,4,4,5,-->0,0,1,1,2,2,3,3,4,4,5,5,--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,--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, :  
 LEN=12) 0,0,1,1,2,2,3,3,4,4,5,5, :

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

-----Class

663-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][010][021][101][102][120][201][210]$

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Rules of T[L]:

R1) 0,-->0,0,--0,--  
 R2) 0,0,-->0,0,1,--0,--  
 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,--  
 R11) 0,0,1,1,2,2,3,3,4,4,5,-->0,0,1,1,2,2,3,3,4,4,5,5,--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,--0,0,1,--0,--

0,0,1,1,2,2,3,3,4,4,5,-->0,0,1,1,2,2,3,3,4,4,5,5,--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, :
- LEN=12) 0,0,1,1,2,2,3,3,4,4,5,5, :

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

-----Class

664-----

Inversion Sequences (I<sub>n</sub>=(n+1)!) avoiding

L=[[000][010][021][101][110][120][201][210]]

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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,--
- R11) 0,0,1,1,2,2,3,3,4,4,5,-->0,0,1,1,2,2,3,3,4,4,5,5,--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, :  
 LEN=12) 0,0,1,1,2,2,3,3,4,4,5,5, :  
 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  
 $L=[[000][010][021][102][110][120][201][210]]$

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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,--  
 R11)  
 0,0,1,1,2,2,3,3,4,4,5, -->0,0,1,1,2,2,3,3,4,4,5,5,--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, :  
 LEN=12) 0,0,1,1,2,2,3,3,4,4,5,5, :  
 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  
 $L=[[000][010][100][101][102][110][120][201]]$

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Rules of  $T[L]$ :

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

R2)  $0, 0, -- \rightarrow 0, 0, 1, -- 0, 0, 2, --$

R3)  $0, 0, 1, -- \rightarrow 0, 0, 1, 1, -- 0, 0, 1, -- 0, 0, 2, --$

R4)  $0, 0, 2, -- \rightarrow 0, 0, 2, 1, -- 0, 0, -- 0, --$

R5)  $0, 0, 1, 1, -- \rightarrow 0, 0, 1, 1, 2, -- 0, 0, 1, 1, 3, -- 0, 0, 1, 1, 4, --$

R6)  $0, 0, 2, 1, -- \rightarrow$

R7)  $0, 0, 1, 1, 2, -- \rightarrow 0, 0, 1, 1, 2, 2, -- 0, 0, 1, 1, 2, -- 0, 0, 1, 1, 3, -- 0, 0, 1, 1, 4, --$

R8)  $0, 0, 1, 1, 3, -- \rightarrow 0, 0, 2, 1, -- 0, 0, 1, 1, -- 0, 0, 1, -- 0, 0, 2, --$

R9)  $0, 0, 1, 1, 4, -- \rightarrow 0, 0, 2, 1, -- 0, 0, 1, 1, 4, 3, -- 0, 0, -- 0, --$

R10)

$0, 0, 1, 1, 2, 2, -- \rightarrow 0, 0, 1, 1, 2, 2, 3, -- 0, 0, 1, 1, 2, 2, 4, -- 0, 0, 1, 1, 2, 2, 5, -- 0, 0, 1, 1, 2, 2, 6, --$

R11)  $0, 0, 1, 1, 4, 3, -- \rightarrow 0, 0, 2, 1, --$

R12)

$0, 0, 1, 1, 2, 2, 3, -- \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, -- 0, 0, 1, 1, 2, 2, 3, -- 0, 0, 1, 1, 2, 2, 4, -- 0, 0, 1, 1, 2, 2, 5, --$   
 $0, 0, 1, 1, 2, 2, 6, --$

R13)  $0, 0, 1, 1, 2, 2, 4, -- \rightarrow 0, 0, 2, 1, -- 0, 0, 1, 1, 2, 2, -- 0, 0, 1, 1, 2, -- 0, 0, 1, 1, 3, -- 0, 0, 1, 1, 4, --$

R14)  $0, 0, 1, 1, 2, 2, 5, -- \rightarrow 0, 0, 2, 1, -- 0, 0, 1, 1, 4, 3, -- 0, 0, 1, 1, -- 0, 0, 1, -- 0, 0, 2, --$

R15)  $0, 0, 1, 1, 2, 2, 6, -- \rightarrow 0, 0, 2, 1, -- 0, 0, 1, 1, 4, 3, -- 0, 0, 1, 1, 2, 2, 6, 5, -- 0, 0, -- 0, --$

R16)

$0, 0, 1, 1, 2, 2, 3, 3, -- \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, -- 0, 0, 1, 1, 2, 2, 3, 3, 5, -- 0, 0, 1, 1, 2, 2, 3, 3, 6, -- 0, 0,$   
 $1, 1, 2, 2, 3, 3, 7, -- 0, 0, 1, 1, 2, 2, 3, 3, 8, --$

R17)  $0, 0, 1, 1, 2, 2, 6, 5, -- \rightarrow 0, 0, 2, 1, -- 0, 0, 1, 1, 4, 3, --$

R18)

$0, 0, 1, 1, 2, 2, 3, 3, 4, -- \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, 4, -- 0, 0, 1, 1, 2, 2, 3, 3, 4, -- 0, 0, 1, 1, 2, 2, 3, 3, 5, --$   
 $0, 0, 1, 1, 2, 2, 3, 3, 6, -- 0, 0, 1, 1, 2, 2, 3, 3, 7, -- 0, 0, 1, 1, 2, 2, 3, 3, 8, --$

R19)

$0, 0, 1, 1, 2, 2, 3, 3, 5, -- \rightarrow 0, 0, 2, 1, -- 0, 0, 1, 1, 2, 2, 3, 3, -- 0, 0, 1, 1, 2, 2, 3, -- 0, 0, 1, 1, 2, 2, 4, -- 0,$   
 $0, 1, 1, 2, 2, 5, -- 0, 0, 1, 1, 2, 2, 6, --$

R20)

$0, 0, 1, 1, 2, 2, 3, 3, 6, -- \rightarrow 0, 0, 2, 1, -- 0, 0, 1, 1, 4, 3, -- 0, 0, 1, 1, 2, 2, -- 0, 0, 1, 1, 2, -- 0, 0, 1, 1, 3, --$   
 $0, 0, 1, 1, 4, --$

R21)

$0, 0, 1, 1, 2, 2, 3, 3, 7, -- \rightarrow 0, 0, 2, 1, -- 0, 0, 1, 1, 4, 3, -- 0, 0, 1, 1, 2, 2, 6, 5, -- 0, 0, 1, 1, -- 0, 0, 1, -- 0,$   
 $0, 2, --$

R22)

$0, 0, 1, 1, 2, 2, 3, 3, 8, -- \rightarrow 0, 0, 2, 1, -- 0, 0, 1, 1, 4, 3, -- 0, 0, 1, 1, 2, 2, 6, 5, -- 0, 0, 1, 1, 2, 2, 3, 3, 8, 7,$   
 $-- 0, 0, -- 0, --$

R23)

$0, 0, 1, 1, 2, 2, 3, 3, 4, 4, -- \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, 4, 5, -- 0, 0, 1, 1, 2, 2, 3, 3, 4, 4, 6, -- 0, 0, 1, 1, 2, 2,$   
 $3, 3, 4, 4, 7, -- 0, 0, 1, 1, 2, 2, 3, 3, 4, 4, 8, -- 0, 0, 1, 1, 2, 2, 3, 3, 4, 4, 9, -- 0, 0, 1, 1, 2, 2, 3, 3, 4, 4, 10,$   
 $--$

--

R24)  $0, 0, 1, 1, 2, 2, 3, 3, 8, 7, -- \rightarrow 0, 0, 2, 1, -- 0, 0, 1, 1, 4, 3, -- 0, 0, 1, 1, 2, 2, 6, 5, --$

R25)

$0, 0, 1, 1, 2, 2, 3, 3, 4, 4, 5, -- \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, 4, 5, 5, -- 0, 0, 1, 1, 2, 2, 3, 3, 4, 4, 5, -- 0, 0, 1, 1,$   
 $2, 2, 3, 3, 4, 4, 6, -- 0, 0, 1, 1, 2, 2, 3, 3, 4, 4, 7, -- 0, 0, 1, 1, 2, 2, 3, 3, 4, 4, 8, -- 0, 0, 1, 1, 2, 2, 3, 3, 4, 4,$   
 $, 9, -- 0, 0, 1, 1, 2, 2, 3, 3, 4, 4, 10, --$

R26)

$0, 0, 1, 1, 2, 2, 3, 3, 4, 4, 6, -- \rightarrow 0, 0, 2, 1, -- 0, 0, 1, 1, 2, 2, 3, 3, 4, 4, -- 0, 0, 1, 1, 2, 2, 3, 3, 4, -- 0, 0, 1,$



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,--  
 R27)  
 0,0,1,1,2,2,3,3,4,4,7,-->0,0,2,1,--0,0,1,1,4,3,--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,--  
 R28)  
 0,0,1,1,2,2,3,3,4,4,8,-->0,0,2,1,--0,0,1,1,4,3,--0,0,1,1,2,2,6,5,--0,0,1,1,2,2,--0,  
 0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--  
 R29)  
 0,0,1,1,2,2,3,3,4,4,9,-->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,--0,0,1,--0,0,2,--  
 R30)  
 0,0,1,1,2,2,3,3,4,4,10,-->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,--0,0,1,1,2,2,3,3,4,4,10,9,--0,0,--0,--  
 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, :  
 LEN=12) 0,0,1,1,2,2,3,3,4,4,5,5, : 0,0,1,1,2,2,3,3,4,4,10,9, :  
 Number new nodes in level n is given by : 1,1,2,2,3,2,4,2,5,2,6,2,

-----Class

667-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][010][100][101][102][110][120][210]$

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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,--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,--0,0,2,1,--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)

$0,0,1,1,2,2,3, \rightarrow 0,0,1,1,2,2,3,3, \rightarrow 0,0,1,1,2,2,3, \rightarrow 0,0,1,1,2,2,4, \rightarrow 0,0,1,1,2,2,5, \rightarrow 0,0,1,1,2,2,6, \rightarrow$   
R13)  $0,0,1,1,2,2,4, \rightarrow 0,0,2,1, \rightarrow 0,0,1,1,2,2, \rightarrow 0,0,1,1,2, \rightarrow 0,0,1,1,3, \rightarrow 0,0,1,1,4, \rightarrow$   
R14)  $0,0,1,1,2,2,5, \rightarrow 0,0,1,1,4,2, \rightarrow 0,0,2,1, \rightarrow 0,0,1,1, \rightarrow 0,0,1, \rightarrow 0,0,2, \rightarrow$   
R15)  $0,0,1,1,2,2,6, \rightarrow 0,0,1,1,2,2,6,3, \rightarrow 0,0,1,1,4,2, \rightarrow 0,0,2,1, \rightarrow 0,0, \rightarrow 0, \rightarrow$   
R16)  
 $0,0,1,1,2,2,3,3, \rightarrow 0,0,1,1,2,2,3,3,4, \rightarrow 0,0,1,1,2,2,3,3,5, \rightarrow 0,0,1,1,2,2,3,3,6, \rightarrow 0,0,1,1,2,2,3,3,7, \rightarrow 0,0,1,1,2,2,3,3,8, \rightarrow$   
R17)  $0,0,1,1,2,2,6,3, \rightarrow 0,0,1,1,4,2, \rightarrow 0,0,2,1, \rightarrow$   
R18)  
 $0,0,1,1,2,2,3,3,4, \rightarrow 0,0,1,1,2,2,3,3,4,4, \rightarrow 0,0,1,1,2,2,3,3,4, \rightarrow 0,0,1,1,2,2,3,3,5, \rightarrow 0,0,1,1,2,2,3,3,6, \rightarrow 0,0,1,1,2,2,3,3,7, \rightarrow 0,0,1,1,2,2,3,3,8, \rightarrow$   
R19)  
 $0,0,1,1,2,2,3,3,5, \rightarrow 0,0,2,1, \rightarrow 0,0,1,1,2,2,3,3, \rightarrow 0,0,1,1,2,2,3, \rightarrow 0,0,1,1,2,2,4, \rightarrow 0,0,1,1,2,2,5, \rightarrow 0,0,1,1,2,2,6, \rightarrow$   
R20)  
 $0,0,1,1,2,2,3,3,6, \rightarrow 0,0,1,1,4,2, \rightarrow 0,0,2,1, \rightarrow 0,0,1,1,2,2, \rightarrow 0,0,1,1,2, \rightarrow 0,0,1,1,3, \rightarrow 0,0,1,1,4, \rightarrow$   
R21)  
 $0,0,1,1,2,2,3,3,7, \rightarrow 0,0,1,1,2,2,6,3, \rightarrow 0,0,1,1,4,2, \rightarrow 0,0,2,1, \rightarrow 0,0,1,1, \rightarrow 0,0,1, \rightarrow 0,0,1, \rightarrow 0,0,2, \rightarrow$   
R22)  
 $0,0,1,1,2,2,3,3,8, \rightarrow 0,0,1,1,2,2,3,3,8,4, \rightarrow 0,0,1,1,2,2,6,3, \rightarrow 0,0,1,1,4,2, \rightarrow 0,0,2,1, \rightarrow 0,0, \rightarrow 0, \rightarrow 0, \rightarrow$   
R23)  
 $0,0,1,1,2,2,3,3,4,4, \rightarrow 0,0,1,1,2,2,3,3,4,4,5, \rightarrow 0,0,1,1,2,2,3,3,4,4,6, \rightarrow 0,0,1,1,2,2,3,3,4,4,7, \rightarrow 0,0,1,1,2,2,3,3,4,4,8, \rightarrow 0,0,1,1,2,2,3,3,4,4,9, \rightarrow 0,0,1,1,2,2,3,3,4,4,10, \rightarrow$   
R24)  $0,0,1,1,2,2,3,3,8,4, \rightarrow 0,0,1,1,2,2,6,3, \rightarrow 0,0,1,1,4,2, \rightarrow 0,0,2,1, \rightarrow$   
R25)  
 $0,0,1,1,2,2,3,3,4,4,5, \rightarrow 0,0,1,1,2,2,3,3,4,4,5,5, \rightarrow 0,0,1,1,2,2,3,3,4,4,5, \rightarrow 0,0,1,1,2,2,3,3,4,4,6, \rightarrow 0,0,1,1,2,2,3,3,4,4,7, \rightarrow 0,0,1,1,2,2,3,3,4,4,8, \rightarrow 0,0,1,1,2,2,3,3,4,4,9, \rightarrow 0,0,1,1,2,2,3,3,4,4,10, \rightarrow$   
R26)  
 $0,0,1,1,2,2,3,3,4,4,6, \rightarrow 0,0,2,1, \rightarrow 0,0,1,1,2,2,3,3,4,4, \rightarrow 0,0,1,1,2,2,3,3,4, \rightarrow 0,0,1,1,2,2,3,3,5, \rightarrow 0,0,1,1,2,2,3,3,6, \rightarrow 0,0,1,1,2,2,3,3,7, \rightarrow 0,0,1,1,2,2,3,3,8, \rightarrow$   
R27)  
 $0,0,1,1,2,2,3,3,4,4,7, \rightarrow 0,0,1,1,4,2, \rightarrow 0,0,2,1, \rightarrow 0,0,1,1,2,2,3,3, \rightarrow 0,0,1,1,2,2,3, \rightarrow 0,0,1,1,2,2,4, \rightarrow 0,0,1,1,2,2,5, \rightarrow 0,0,1,1,2,2,6, \rightarrow$   
R28)  
 $0,0,1,1,2,2,3,3,4,4,8, \rightarrow 0,0,1,1,2,2,6,3, \rightarrow 0,0,1,1,4,2, \rightarrow 0,0,2,1, \rightarrow 0,0,1,1,2,2, \rightarrow 0,0,1,1,2, \rightarrow 0,0,1,1,3, \rightarrow 0,0,1,1,4, \rightarrow$   
R29)  
 $0,0,1,1,2,2,3,3,4,4,9, \rightarrow 0,0,1,1,2,2,3,3,8,4, \rightarrow 0,0,1,1,2,2,6,3, \rightarrow 0,0,1,1,4,2, \rightarrow 0,0,2,1, \rightarrow 0,0,1,1, \rightarrow 0,0,1, \rightarrow 0,0,2, \rightarrow$   
R30)  
 $0,0,1,1,2,2,3,3,4,4,10, \rightarrow 0,0,1,1,2,2,3,3,4,4,10,5, \rightarrow 0,0,1,1,2,2,3,3,8,4, \rightarrow 0,0,1,1,2,2,6,3, \rightarrow 0,0,1,1,4,2, \rightarrow 0,0,2,1, \rightarrow 0,0, \rightarrow 0, \rightarrow$

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,:  
 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,:  
 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,:  
 LEN=12) 0,0,1,1,2,2,3,3,4,4,5,5,: 0,0,1,1,2,2,3,3,4,4,10,5,:  
 Number new nodes in level n is given by : 1,1,2,2,3,2,4,2,5,2,6,2,

-----Class

668-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][010][100][101][102][110][201][210]$

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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,--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,--0,0,2,1,--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) 0,0,1,1,2,2,3,-->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,-->0,0,2,1,--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,--
- R13) 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,--
- R14) 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,--
- 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) 0,0,1,1,2,2,3,3,4,-->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,-->0,0,2,1,--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,--

R18)

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,--

R19)

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,--

R20)

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,--

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)

0,0,1,1,2,2,3,3,4,4,5,-->0,0,1,1,2,2,3,3,4,4,5,5,--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,--

R23)

0,0,1,1,2,2,3,3,4,4,6,-->0,0,2,1,--0,0,1,1,2,2,3,3,4,4,--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)

0,0,1,1,2,2,3,3,4,4,7,-->0,0,2,1,--0,0,2,1,--0,0,1,1,2,2,3,3,--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)

0,0,1,1,2,2,3,3,4,4,8,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,1,1,2,2,--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,--

R26)

0,0,1,1,2,2,3,3,4,4,9,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,1,1,--0,0,1,1,2,2,3,3,4,4,9,--0,0,1,1,2,2,3,3,4,4,10,--

R27)

0,0,1,1,2,2,3,3,4,4,10,-->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,--0,0,1,1,2,2,3,3,4,4,10,--

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, :

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, :

LEN=12) 0,0,1,1,2,2,3,3,4,4,5,5, :

Number new nodes in level n is given by : 1,1,2,2,3,1,4,1,5,1,6,1,

-----Class

669-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][010][100][101][102][120][201][210]]$

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Rules of  $T[L]$ :

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

R2)  $0, 0, -- \rightarrow 0, 0, 1, -- 0, 0, 2, --$

R3)  $0, 0, 1, -- \rightarrow 0, 0, 1, 1, -- 0, 0, 1, -- 0, 0, 2, --$

R4)  $0, 0, 2, -- \rightarrow 0, 0, 2, 1, -- 0, 0, 2, 2, -- 0, --$

R5)  $0, 0, 1, 1, -- \rightarrow 0, 0, 1, 1, 2, -- 0, 0, 1, 1, 3, -- 0, 0, 1, 1, 4, --$

R6)  $0, 0, 2, 1, -- \rightarrow$

R7)  $0, 0, 2, 2, -- \rightarrow 0, 0, 2, 1, -- 0, 0, 1, -- 0, 0, 2, --$

R8)  $0, 0, 1, 1, 2, -- \rightarrow 0, 0, 1, 1, 2, 2, -- 0, 0, 1, 1, 2, -- 0, 0, 1, 1, 3, -- 0, 0, 1, 1, 4, --$

R9)  $0, 0, 1, 1, 3, -- \rightarrow 0, 0, 2, 1, -- 0, 0, 1, 1, 3, 3, -- 0, 0, 1, -- 0, 0, 2, --$

R10)  $0, 0, 1, 1, 4, -- \rightarrow 0, 0, 2, 1, -- 0, 0, 2, 1, -- 0, 0, 1, 1, 4, 4, -- 0, --$

R11)

$0, 0, 1, 1, 2, 2, -- \rightarrow 0, 0, 1, 1, 2, 2, 3, -- 0, 0, 1, 1, 2, 2, 4, -- 0, 0, 1, 1, 2, 2, 5, -- 0, 0, 1, 1, 2, 2, 6, --$

R12)  $0, 0, 1, 1, 3, 3, -- \rightarrow 0, 0, 2, 1, -- 0, 0, 1, 1, 2, -- 0, 0, 1, 1, 3, -- 0, 0, 1, 1, 4, --$

R13)  $0, 0, 1, 1, 4, 4, -- \rightarrow 0, 0, 2, 1, -- 0, 0, 2, 1, -- 0, 0, 1, -- 0, 0, 2, --$

R14)

$0, 0, 1, 1, 2, 2, 3, -- \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, -- 0, 0, 1, 1, 2, 2, 3, -- 0, 0, 1, 1, 2, 2, 4, -- 0, 0, 1, 1, 2, 2, 5, --$

$0, 0, 1, 1, 2, 2, 6, --$

R15)

$0, 0, 1, 1, 2, 2, 4, -- \rightarrow 0, 0, 2, 1, -- 0, 0, 1, 1, 2, 2, 4, 4, -- 0, 0, 1, 1, 2, -- 0, 0, 1, 1, 3, -- 0, 0, 1, 1, 4, --$

R16)  $0, 0, 1, 1, 2, 2, 5, -- \rightarrow 0, 0, 2, 1, -- 0, 0, 2, 1, -- 0, 0, 1, 1, 2, 2, 5, 5, -- 0, 0, 1, -- 0, 0, 2, --$

R17)  $0, 0, 1, 1, 2, 2, 6, -- \rightarrow 0, 0, 2, 1, -- 0, 0, 2, 1, -- 0, 0, 2, 1, -- 0, 0, 1, 1, 2, 2, 6, 6, -- 0, --$

R18)

$0, 0, 1, 1, 2, 2, 3, 3, -- \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, -- 0, 0, 1, 1, 2, 2, 3, 3, 5, -- 0, 0, 1, 1, 2, 2, 3, 3, 6, -- 0, 0,$

$1, 1, 2, 2, 3, 3, 7, -- 0, 0, 1, 1, 2, 2, 3, 3, 8, --$

R19)

$0, 0, 1, 1, 2, 2, 4, 4, -- \rightarrow 0, 0, 2, 1, -- 0, 0, 1, 1, 2, 2, 3, -- 0, 0, 1, 1, 2, 2, 4, -- 0, 0, 1, 1, 2, 2, 5, -- 0, 0, 1,$

$1, 2, 2, 6, --$

R20)  $0, 0, 1, 1, 2, 2, 5, 5, -- \rightarrow 0, 0, 2, 1, -- 0, 0, 2, 1, -- 0, 0, 1, 1, 2, -- 0, 0, 1, 1, 3, -- 0, 0, 1, 1, 4, --$

R21)  $0, 0, 1, 1, 2, 2, 6, 6, -- \rightarrow 0, 0, 2, 1, -- 0, 0, 2, 1, -- 0, 0, 2, 1, -- 0, 0, 1, -- 0, 0, 2, --$

R22)

$0, 0, 1, 1, 2, 2, 3, 3, 4, -- \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, 4, -- 0, 0, 1, 1, 2, 2, 3, 3, 4, -- 0, 0, 1, 1, 2, 2, 3, 3, 5, --$

$0, 0, 1, 1, 2, 2, 3, 3, 6, -- 0, 0, 1, 1, 2, 2, 3, 3, 7, -- 0, 0, 1, 1, 2, 2, 3, 3, 8, --$

R23)

$0, 0, 1, 1, 2, 2, 3, 3, 5, -- \rightarrow 0, 0, 2, 1, -- 0, 0, 1, 1, 2, 2, 3, 3, 5, 5, -- 0, 0, 1, 1, 2, 2, 3, -- 0, 0, 1, 1, 2, 2, 4,$

$-- 0, 0, 1, 1, 2, 2, 5, -- 0, 0, 1, 1, 2, 2, 6, --$

R24)

$0, 0, 1, 1, 2, 2, 3, 3, 6, -- \rightarrow 0, 0, 2, 1, -- 0, 0, 2, 1, -- 0, 0, 1, 1, 2, 2, 3, 3, 6, 6, -- 0, 0, 1, 1, 2, -- 0, 0, 1, 1,$

$3, -- 0, 0, 1, 1, 4, --$

R25)

$0, 0, 1, 1, 2, 2, 3, 3, 7, -- \rightarrow 0, 0, 2, 1, -- 0, 0, 2, 1, -- 0, 0, 2, 1, -- 0, 0, 1, 1, 2, 2, 3, 3, 7, 7, -- 0, 0, 1, -- 0,$

$0, 2, --$

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,--

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,--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,--

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,--0,0,1,1,2,2,4,--0,0,1,1,  
2,2,5,--0,0,1,1,2,2,6,--

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,--0,0,1,1,3,--0,0,1,  
1,4,--

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,--0,0,2,--

R32)

0,0,1,1,2,2,3,3,4,4,5,-->0,0,1,1,2,2,3,3,4,4,5,5,--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)

0,0,1,1,2,2,3,3,4,4,6,-->0,0,2,1,--0,0,1,1,2,2,3,3,4,4,6,6,--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,--

R34)

0,0,1,1,2,2,3,3,4,4,7,-->0,0,2,1,--0,0,2,1,--0,0,1,1,2,2,3,3,4,4,7,7,--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,--

R35)

0,0,1,1,2,2,3,3,4,4,8,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,1,1,2,2,3,3,4,4,8,8,--0,  
0,1,1,2,--0,0,1,1,3,--0,0,1,1,4,--

R36)

0,0,1,1,2,2,3,3,4,4,9,-->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,  
4,9,9,--0,0,1,--0,0,2,--

R37)

0,0,1,1,2,2,3,3,4,4,10,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,1,1,  
,2,2,3,3,4,4,10,10,--0,--

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,:  
 LEN=12) 0,0,1,1,2,2,3,3,4,4,5,5,: 0,0,1,1,2,2,3,3,4,4,6,6,:  
 0,0,1,1,2,2,3,3,4,4,7,7,: 0,0,1,1,2,2,3,3,4,4,8,8,: 0,0,1,1,2,2,3,3,4,4,9,9,:  
 0,0,1,1,2,2,3,3,4,4,10,10,:

Number new nodes in level n is given by : 1,1,2,3,3,3,4,4,5,5,6,6,

-----Class

670-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[000][010][100][101][110][120][201][210]]$

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--  
 Rules of T[L]:

- R1) 0,-->0,0,--0,--
- R2) 0,0,-->0,0,1,--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,--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,--0,0,1,1,--0,0,1,--0,0,2,--
- R13) 0,0,1,1,2,2,6,-->0,0,--0,0,--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) 0,0,1,1,2,2,3,3,4,-->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,--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,--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,--
- 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,--0,0,2,--
- R19) 0,0,1,1,2,2,3,3,8,-->0,0,--0,0,--0,0,--0,0,--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,
- 
- R21) 0,0,1,1,2,2,3,3,4,4,5,-->0,0,1,1,2,2,3,3,4,4,5,5,--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)  
0,0,1,1,2,2,3,3,4,4,6,-->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,--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)  
0,0,1,1,2,2,3,3,4,4,7,-->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,--0,0,1,1,2,2,4,--0,0,1,1,2,2,5,--0,0,1,1,2,2,6,--  
R24)  
0,0,1,1,2,2,3,3,4,4,8,-->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,--0,0,1,1,3,--0,0,1,1,4,--  
R25)  
0,0,1,1,2,2,3,3,4,4,9,-->0,0,1,1,--0,0,1,1,--0,0,1,1,--0,0,1,1,--0,0,1,1,--0,0,1,1,--0,0,1,1,--  
0,0,2,--  
R26) 0,0,1,1,2,2,3,3,4,4,10,-->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) 0,0,1, : 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, :  
LEN=12) 0,0,1,1,2,2,3,3,4,4,5,5, :  
Number new nodes in level n is given by : 1,1,2,1,3,1,4,1,5,1,6,1,
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-----Class

671-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[\ [000][010][100][102][110][120][201][210]]$

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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,--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,--0,0,2,1,--0,0,--0,--  
R10) 0,0,2,1,2,-->  
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)  
 $0,0,1,1,2,2,3, \rightarrow 0,0,1,1,2,2,3,3, \rightarrow 0,0,1,1,2,2,3, \rightarrow 0,0,1,1,2,2,4, \rightarrow 0,0,1,1,2,2,5, \rightarrow$   
 $0,0,1,1,2,2,6, \rightarrow$   
R13)  $0,0,1,1,2,2,4, \rightarrow 0,0,2,1, \rightarrow 0,0,1,1,2,2, \rightarrow 0,0,1,1,2, \rightarrow 0,0,1,1,3, \rightarrow 0,0,1,1,4, \rightarrow$   
R14)  $0,0,1,1,2,2,5, \rightarrow 0,0,2,1, \rightarrow 0,0,2,1, \rightarrow 0,0,1,1, \rightarrow 0,0,1, \rightarrow 0,0,2, \rightarrow$   
R15)  $0,0,1,1,2,2,6, \rightarrow 0,0,2,1, \rightarrow 0,0,2,1, \rightarrow 0,0,2,1, \rightarrow 0,0, \rightarrow 0, \rightarrow$   
R16)  
 $0,0,1,1,2,2,3,3, \rightarrow 0,0,1,1,2,2,3,3,4, \rightarrow 0,0,1,1,2,2,3,3,5, \rightarrow 0,0,1,1,2,2,3,3,6, \rightarrow 0,0,$   
 $1,1,2,2,3,3,7, \rightarrow 0,0,1,1,2,2,3,3,8, \rightarrow$   
R17)  
 $0,0,1,1,2,2,3,3,4, \rightarrow 0,0,1,1,2,2,3,3,4,4, \rightarrow 0,0,1,1,2,2,3,3,4, \rightarrow 0,0,1,1,2,2,3,3,5, \rightarrow$   
 $0,0,1,1,2,2,3,3,6, \rightarrow 0,0,1,1,2,2,3,3,7, \rightarrow 0,0,1,1,2,2,3,3,8, \rightarrow$   
R18)  
 $0,0,1,1,2,2,3,3,5, \rightarrow 0,0,2,1, \rightarrow 0,0,1,1,2,2,3,3, \rightarrow 0,0,1,1,2,2,3, \rightarrow 0,0,1,1,2,2,4, \rightarrow 0,$   
 $0,1,1,2,2,5, \rightarrow 0,0,1,1,2,2,6, \rightarrow$   
R19)  
 $0,0,1,1,2,2,3,3,6, \rightarrow 0,0,2,1, \rightarrow 0,0,2,1, \rightarrow 0,0,1,1,2,2, \rightarrow 0,0,1,1,2, \rightarrow 0,0,1,1,3, \rightarrow 0,0,$   
 $1,1,4, \rightarrow$   
R20)  $0,0,1,1,2,2,3,3,7, \rightarrow 0,0,2,1, \rightarrow 0,0,2,1, \rightarrow 0,0,2,1, \rightarrow 0,0,1,1, \rightarrow 0,0,1, \rightarrow 0,0,2, \rightarrow$   
R21)  $0,0,1,1,2,2,3,3,8, \rightarrow 0,0,2,1, \rightarrow 0,0,2,1, \rightarrow 0,0,2,1, \rightarrow 0,0,2,1, \rightarrow 0,0, \rightarrow 0, \rightarrow$   
R22)  
 $0,0,1,1,2,2,3,3,4,4, \rightarrow 0,0,1,1,2,2,3,3,4,4,5, \rightarrow 0,0,1,1,2,2,3,3,4,4,6, \rightarrow 0,0,1,1,2,2,$   
 $3,3,4,4,7, \rightarrow 0,0,1,1,2,2,3,3,4,4,8, \rightarrow 0,0,1,1,2,2,3,3,4,4,9, \rightarrow 0,0,1,1,2,2,3,3,4,4,10,$   
 $\rightarrow$   
R23)  
 $0,0,1,1,2,2,3,3,4,4,5, \rightarrow 0,0,1,1,2,2,3,3,4,4,5,5, \rightarrow 0,0,1,1,2,2,3,3,4,4,5, \rightarrow 0,0,1,1,$   
 $2,2,3,3,4,4,6, \rightarrow 0,0,1,1,2,2,3,3,4,4,7, \rightarrow 0,0,1,1,2,2,3,3,4,4,8, \rightarrow 0,0,1,1,2,2,3,3,4,4,$   
 $9, \rightarrow 0,0,1,1,2,2,3,3,4,4,10, \rightarrow$   
R24)  
 $0,0,1,1,2,2,3,3,4,4,6, \rightarrow 0,0,2,1, \rightarrow 0,0,1,1,2,2,3,3,4,4, \rightarrow 0,0,1,1,2,2,3,3,4, \rightarrow 0,0,1,$   
 $1,2,2,3,3,5, \rightarrow 0,0,1,1,2,2,3,3,6, \rightarrow 0,0,1,1,2,2,3,3,7, \rightarrow 0,0,1,1,2,2,3,3,8, \rightarrow$   
R25)  
 $0,0,1,1,2,2,3,3,4,4,7, \rightarrow 0,0,2,1, \rightarrow 0,0,2,1, \rightarrow 0,0,1,1,2,2,3,3, \rightarrow 0,0,1,1,2,2,3, \rightarrow 0,0,$   
 $1,1,2,2,4, \rightarrow 0,0,1,1,2,2,5, \rightarrow 0,0,1,1,2,2,6, \rightarrow$   
R26)  
 $0,0,1,1,2,2,3,3,4,4,8, \rightarrow 0,0,2,1, \rightarrow 0,0,2,1, \rightarrow 0,0,2,1, \rightarrow 0,0,1,1,2,2, \rightarrow 0,0,1,1,2, \rightarrow 0,$   
 $0,1,1,3, \rightarrow 0,0,1,1,4, \rightarrow$   
R27)  
 $0,0,1,1,2,2,3,3,4,4,9, \rightarrow 0,0,2,1, \rightarrow 0,0,2,1, \rightarrow 0,0,2,1, \rightarrow 0,0,2,1, \rightarrow 0,0,1,1, \rightarrow 0,0,1, \rightarrow$   
 $0,0,2, \rightarrow$   
R28)  
 $0,0,1,1,2,2,3,3,4,4,10, \rightarrow 0,0,2,1, \rightarrow 0,0,2,1, \rightarrow 0,0,2,1, \rightarrow 0,0,2,1, \rightarrow 0,0,2,1, \rightarrow 0,0, \rightarrow 0,$   
 $\rightarrow$

List of different nodes in  $T[L]$

LEN=1)  $0, :$

LEN=2)  $0,0, :$

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

LEN=4)  $0,0,1,1, : 0,0,2,1, :$

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,:  
 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,:  
 LEN=12) 0,0,1,1,2,2,3,3,4,4,5,5,:  
 Number new nodes in level n is given by : 1,1,2,2,4,1,4,1,5,1,6,1,

-----Class

672-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][010][101][102][110][120][201][210]$

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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,--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,-->0,0,2,1,--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)  
 0,0,1,1,2,2,3,-->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,-->0,0,2,1,--0,0,2,1,--0,0,1,1,--0,0,1,--0,0,2,--  
 R15) 0,0,1,1,2,2,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--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)  
 0,0,1,1,2,2,3,3,4,-->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,--0,0,1,1,2,2,4,--0,  
 0,1,1,2,2,5,--0,0,1,1,2,2,6,--  
 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,--0,0,1,1,3,--0,0,  
 1,1,4,--  
 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,--0,0,2,--  
 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,--

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,  
--

R23)  
0,0,1,1,2,2,3,3,4,4,5,-->0,0,1,1,2,2,3,3,4,4,5,5,--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)  
0,0,1,1,2,2,3,3,4,4,6,-->0,0,2,1,--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)  
0,0,1,1,2,2,3,3,4,4,7,-->0,0,2,1,--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,--

R26)  
0,0,1,1,2,2,3,3,4,4,8,-->0,0,2,1,--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,--

R27)  
0,0,1,1,2,2,3,3,4,4,9,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,1,1,--0,0,1,--  
0,0,2,--

R28)  
0,0,1,1,2,2,3,3,4,4,10,-->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) 0,0,1, : 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, :

LEN=12) 0,0,1,1,2,2,3,3,4,4,5,5, :

Number new nodes in level n is given by : 1,1,2,2,4,1,4,1,5,1,6,1,

-----Class

673-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[000][011][012][021][100][101][102][110]$

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--

Rules of T[L]:

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

R2) 0,0,-->0,0,1,--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  
674-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][011][012][021][100][101][102][120]]$

-----  
--  
Rules of T[L]:  
R1) 0,-->0,0,--0,1,--  
R2) 0,0,-->0,0,1,--0,0,1,--  
R3) 0,1,-->0,0,1,--  
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  
675-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][011][012][021][100][101][102][201]]$

-----  
--  
Rules of T[L]:  
R1) 0,-->0,0,--0,1,--  
R2) 0,0,-->0,0,1,--0,0,1,--  
R3) 0,1,-->0,0,1,--  
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  
676-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][011][012][021][100][101][102][210]]$

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

R3) 0,1,-->0,0,1,--  
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  
677-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][011][012][021][100][101][110][120]]$

--  
Rules of T[L]:  
R1) 0,-->0,0,--0,1,--  
R2) 0,0,-->0,0,1,--0,0,1,--  
R3) 0,1,-->0,0,1,--  
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  
678-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][011][012][021][100][101][110][201]]$

--  
Rules of T[L]:  
R1) 0,-->0,0,--0,1,--  
R2) 0,0,-->0,0,1,--0,0,1,--  
R3) 0,1,-->0,0,1,--  
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  
679-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][011][012][021][100][101][110][210]]$

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

R2) 0,0,-->0,0,1,--0,0,1,--  
R3) 0,1,-->0,0,1,--  
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  
680-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][011][012][021][100][101][120][201]]$

--  
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  
681-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][011][012][021][100][101][120][210]]$

--  
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  
682-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][011][012][021][100][101][201][210]]$

--  
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  
683-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][011][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,--  
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  
684-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][011][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,--  
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  
685-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][011][012][021][100][102][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

686-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[000][011][012][021][100][102][120][201]$

--

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

687-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[000][011][012][021][100][102][120][210]$

--

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

688-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[000][011][012][021][100][102][201][210]$



```

--
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
689-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][011][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,--
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
690-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][011][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,--
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
691-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][011][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,--
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
692-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][011][012][021][100][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
693-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][011][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,-->0,0,1,--
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
694-----
Inversion Sequences (I_n=(n+1)!) avoiding

```

L=[[000][011][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,-->0,0,1,--
- 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

695-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[000][011][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,-->0,0,1,--
- 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

696-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[000][011][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,-->0,0,1,--
- 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

697-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][011][012][021][101][102][120][210]]$

-----  
--  
Rules of T[L]:  
R1) 0,-->0,0,--0,1,--  
R2) 0,0,-->0,0,1,--0,0,1,--  
R3) 0,1,-->0,0,1,--  
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  
698-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][011][012][021][101][102][201][210]]$

-----  
--  
Rules of T[L]:  
R1) 0,-->0,0,--0,1,--  
R2) 0,0,-->0,0,1,--0,0,1,--  
R3) 0,1,-->0,0,1,--  
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  
699-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][011][012][021][101][110][120][201]]$

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

```

700-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][011][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,-->0,0,1,--
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
701-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][011][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,-->0,0,1,--
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
702-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][011][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,-->0,0,1,--
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
703-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][011][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,--
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
704-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][011][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,--
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
705-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][011][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,--
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  
706-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][011][012][021][102][120][201][210]$

--  
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  
707-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][011][012][021][110][120][201][210]$

--  
Rules of  $T[L]$ :  
R1)  $0,-->0,0,--0,1,--$   
R2)  $0,0,-->0,0,1,--0,0,1,--$   
R3)  $0,1,-->0,0,1,--$   
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  
708-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][011][012][100][101][102][110][120]$

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

709-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[000][011][012][100][101][102][110][201]]$

-----

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

710-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[000][011][012][100][101][102][110][210]]$

-----

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

711-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[000][011][012][100][101][102][120][201]]$

-----

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  
712-----  
Inversion Sequences (I<sub>n</sub>=(n+1)!) avoiding  
L=[[000][011][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,-->0,0,1,--  
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  
713-----  
Inversion Sequences (I<sub>n</sub>=(n+1)!) avoiding  
L=[[000][011][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,-->0,0,1,--  
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  
714-----  
Inversion Sequences (I<sub>n</sub>=(n+1)!) avoiding  
L=[[000][011][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,-->0,0,1,--  
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  
715-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][011][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,-->0,0,1,--  
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][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,-->0,0,1,--  
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][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,-->0,0,1,--  
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  
 $L=[000][011][012][100][102][110][120][201]$

--  
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  
719-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][011][012][100][102][110][120][210]$

--  
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  
720-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][011][012][100][102][110][201][210]$

--  
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  
721-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][011][012][100][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  
722-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][011][012][100][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  
723-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][011][012][101][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  
724-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][011][012][101][102][110][120][210]]$

--  
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  
725-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][011][012][101][102][110][201][210]]$

--  
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  
726-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][011][012][101][102][120][201][210]]$

--  
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  
727-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][011][012][101][110][120][201][210]]$

--  
Rules of T[L]:  
R1) 0,-->0,0,--0,1,--  
R2) 0,0,-->0,0,1,--0,1,--  
R3) 0,1,-->0,0,1,--  
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  
728-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][011][012][102][110][120][201][210]]$

--  
Rules of T[L]:  
R1) 0,-->0,0,--0,1,--  
R2) 0,0,-->0,0,1,--0,1,--  
R3) 0,1,-->0,0,1,--  
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  
729-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][011][021][100][101][102][110][120]]$

--  
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
730-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][011][021][100][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
731-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][011][021][100][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
732-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][011][021][100][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
733-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][011][021][100][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
734-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][011][021][100][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
735-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][011][021][100][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
736-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][011][021][100][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
737-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][011][021][100][101][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
738-----

```

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][011][021][100][101][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  
739-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][011][021][100][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,-->0,1,0,--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  
740-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][011][021][100][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
741-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][011][021][100][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
742-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][011][021][100][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
743-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][011][021][100][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

744-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[000][011][021][101][102][110][120][201]]$

-----

--  
Rules of  $T[L]$ :

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

R2)  $0,0, \rightarrow 0,0, \rightarrow 0,0,2, \rightarrow$

R3)  $0,1, \rightarrow 0,1,0, \rightarrow 0,0,2, \rightarrow$

R4)  $0,0,2, \rightarrow 0,0,2, \rightarrow$

R5)  $0,1,0, \rightarrow$

List of different nodes in  $T[L]$

LEN=1)  $0, :$

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

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

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

-----Class

745-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[000][011][021][101][102][110][120][210]]$

-----

--  
Rules of  $T[L]$ :

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

R2)  $0,0, \rightarrow 0,0, \rightarrow 0,0,2, \rightarrow$

R3)  $0,1, \rightarrow 0,1,0, \rightarrow 0,0,2, \rightarrow$

R4)  $0,0,2, \rightarrow 0,0,2, \rightarrow$

R5)  $0,1,0, \rightarrow$

List of different nodes in  $T[L]$

LEN=1)  $0, :$

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

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

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

-----Class

746-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[000][011][021][101][102][110][201][210]]$

-----

--  
Rules of  $T[L]$ :

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

R2)  $0,0, \rightarrow 0,0, \rightarrow 0,0,2, \rightarrow$

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

R4)  $0,0,2, \rightarrow 0,0,2, \rightarrow$

R5)  $0,1,0, \rightarrow$

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

-----Class  
747-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][011][021][101][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  
748-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][011][021][101][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  
749-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][011][021][102][110][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  
750-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][011][100][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  
751-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][011][100][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  
752-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][011][100][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  
753-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][011][100][101][102][120][201][210]]$

--  
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  
754-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][011][100][101][110][120][201][210]]$

--  
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  
755-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][011][100][102][110][120][201][210]]$

--  
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  
756-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][011][101][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  
757-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][012][021][100][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  
758-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[000][012][021][100][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
759-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][012][021][100][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
760-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[000][012][021][100][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
761-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

```

L=[[000][012][021][100][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

762-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[000][012][021][100][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

763-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[000][012][021][100][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

764-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[000][012][021][100][101][110][120][210]]$

-----

--

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

765-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[000][012][021][100][101][110][201][210]]$

-----

--

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

766-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[000][012][021][100][101][120][201][210]]$

-----

--

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  
767-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][012][021][100][102][110][120][201]]$

--  
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  
768-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][012][021][100][102][110][120][210]]$

--  
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  
769-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][012][021][100][102][110][201][210]]$

--  
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
770-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][012][021][100][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
771-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][012][021][100][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
772-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][012][021][101][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,-->0,1,0,--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
773-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][012][021][101][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,-->0,1,0,--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
774-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][012][021][101][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,-->0,1,0,--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

```

775-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][012][021][101][102][120][201][210]]$

-----  
--

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

776-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][012][021][101][110][120][201][210]]$

-----  
--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,1,--0,0,1,--
- R3) 0,1,-->0,1,0,--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

777-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[000][012][021][102][110][120][201][210]]$

-----  
--

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  
778-----  
Inversion Sequences (I<sub>n</sub>=(n+1)!) avoiding  
L=[[000][012][100][101][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,-->0,1,0,--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  
779-----  
Inversion Sequences (I<sub>n</sub>=(n+1)!) avoiding  
L=[[000][012][100][101][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,-->0,1,0,--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  
780-----  
Inversion Sequences (I<sub>n</sub>=(n+1)!) avoiding  
L=[[000][012][100][101][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,-->0,1,0,--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  
781-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][012][100][101][102][120][201][210]$

--  
Rules of T[L]:  
R1) 0,-->0,0,--0,1,--  
R2) 0,0,-->0,0,1,--0,1,--  
R3) 0,1,-->0,1,0,--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  
782-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][012][100][101][110][120][201][210]$

--  
Rules of T[L]:  
R1) 0,-->0,0,--0,1,--  
R2) 0,0,-->0,0,1,--0,1,--  
R3) 0,1,-->0,1,0,--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  
783-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][012][100][102][110][120][201][210]$

--  
Rules of T[L]:

```

R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,1,--0,0,2,--
R3) 0,1,-->0,0,1,--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
784-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][012][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,--0,1,0,--
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
785-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[000][021][100][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,--  
R14)

0,0,1,1,2,2,3,3,4,4,5,-->0,0,1,1,2,2,3,3,4,4,5,5,--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, :

LEN=12) 0,0,1,1,2,2,3,3,4,4,5,5, :

Number new nodes in level n is given by : 1,2,3,1,1,1,1,1,1,1,1,1,

-----Class

786-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[000][021][100][101][102][110][120][210]$

-----

--

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,--

0,0,1,1,2,--0,0,1,--0,0,2,--  
R14)  
0,0,1,1,2,2,3,3,4,4,5,-->0,0,1,1,2,2,3,3,4,4,5,5,--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, :  
LEN=12) 0,0,1,1,2,2,3,3,4,4,5,5, :  
Number new nodes in level n is given by : 1,2,3,1,1,1,1,1,1,1,1,1,

-----Class  
787-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[ [000][021][100][101][102][110][201][210] ]$

--  
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,--0,0,--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,--  
R14)  
0,0,1,1,2,2,3,3,4,4,5,-->0,0,1,1,2,2,3,3,4,4,5,5,--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:  
 LEN=12) 0,0,1,1,2,2,3,3,4,4,5,5:  
 Number new nodes in level n is given by : 1,2,3,1,1,1,1,1,1,1,1,1,

-----Class

788-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][021][100][101][102][120][201][210]$

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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,--
- R15) 0,0,1,1,2,2,3,3,4,4,5,-->0,0,1,1,2,2,3,3,4,4,5,5,--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, :  
 LEN=12) 0,0,1,1,2,2,3,3,4,4,5,5, :  
 Number new nodes in level n is given by : 1,2,4,1,1,1,1,1,1,1,1,1,

-----Class  
 789-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[000][021][100][101][110][120][201][210]$

Rules of T[L]:  
 R1) 0, -->0,0,--0,1,--  
 R2) 0,0, -->0,0,1,--0,0,2,--  
 R3) 0,1, -->0,0,--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) 0,0,1,1, -->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,--  
 R13) 0,0,1,1,2,2,3,3,4,4,5, -->0,0,1,1,2,2,3,3,4,4,5,5,--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,--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, :  
 LEN=12) 0,0,1,1,2,2,3,3,4,4,5,5, :  
 Number new nodes in level n is given by : 1,2,2,1,1,1,1,1,1,1,1,1,

-----Class

790-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[000][021][100][102][110][120][201][210]$

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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)  $0, 0, 1, 1, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, 0, 2, \rightarrow$

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)

$0, 0, 1, 1, 2, 2, 3, 3, 4, 4, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, 4, 5, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, \rightarrow 0, 0, 1, 1, 2, 2, 3, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, 0, 2, \rightarrow$

R15)

$0, 0, 1, 1, 2, 2, 3, 3, 4, 4, 5, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, 4, 5, 5, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, 4, 5, \rightarrow 0, 0, 1, 1, 2, 2, 3, 3, 4, \rightarrow 0, 0, 1, 1, 2, 2, 3, \rightarrow 0, 0, 1, 1, 2, \rightarrow 0, 0, 1, \rightarrow 0, 0, 2, \rightarrow$

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)  $0, 0, 1, 1, 2, 2, 3, 3, 4, 4, 5, :$

LEN=12)  $0, 0, 1, 1, 2, 2, 3, 3, 4, 4, 5, 5, :$

Number new nodes in level n is given by : 1,2,3,2,1,1,1,1,1,1,1,1,

-----Class

791-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[000][021][101][102][110][120][201][210]$

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Rules of T[L]:

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

R2) 0,0,-->0,0,1,--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,--

R14)

0,0,1,1,2,2,3,3,4,4,5,-->0,0,1,1,2,2,3,3,4,4,5,5,--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,:

LEN=12) 0,0,1,1,2,2,3,3,4,4,5,5,:

Number new nodes in level n is given by : 1,2,3,1,1,1,1,1,1,1,1,1,

-----Class

792-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[000][100][101][102][110][120][201][210]]$

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Rules of T[L]:

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

R2) 0,0,-->0,0,1,--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,--0,1,0,--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) 0,0,1,1,2,2,-->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,--  
R11)  
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,--  
R12) 0,0,1,1,2,4,-->0,1,0,--0,1,0,--0,0,1,1,--0,0,1,2,--0,0,1,3,--  
R13) 0,0,1,1,2,5,-->0,1,0,--0,1,0,--0,1,0,--0,0,--0,1,--  
R14)  
0,0,1,1,2,2,3,-->0,0,1,1,2,2,3,3,--0,0,1,1,2,2,3,4,--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)  
0,0,1,1,2,2,3,3,-->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,--  
R16)  
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,--  
R17)  
0,0,1,1,2,2,3,5,-->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,--  
R18) 0,0,1,1,2,2,3,6,-->0,1,0,--0,1,0,--0,1,0,--0,0,1,1,--0,0,1,2,--0,0,1,3,--  
R19) 0,0,1,1,2,2,3,7,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,--0,1,--  
R20)  
0,0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,4,--0,0,1,1,2,2,3,3,4,5,--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)  
0,0,1,1,2,2,3,3,4,4,-->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,--  
R22)  
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,--  
R23)  
0,0,1,1,2,2,3,3,4,6,-->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,--  
R24)  
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,--0,0,1,1,2,3,--0,0,1,1,  
2,4,--0,0,1,1,2,5,--  
R25)  
0,0,1,1,2,2,3,3,4,8,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,1,1,--0,0,1,2,--0,0,1,3,  
--  
R26) 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,--0,1,--  
R27)  
0,0,1,1,2,2,3,3,4,4,5,-->0,0,1,1,2,2,3,3,4,4,5,5,--0,0,1,1,2,2,3,3,4,4,5,6,--0,0,1,  
1,2,2,3,3,4,4,5,7,--0,0,1,1,2,2,3,3,4,4,5,8,--0,0,1,1,2,2,3,3,4,4,5,9,--0,0,1,1,2,2,  
,3,3,4,4,5,10,--0,0,1,1,2,2,3,3,4,4,5,11,--

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,:  
 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,:  
 LEN=12) 0,0,1,1,2,2,3,3,4,4,5,5,: 0,0,1,1,2,2,3,3,4,4,5,6,:  
 0,0,1,1,2,2,3,3,4,4,5,7,: 0,0,1,1,2,2,3,3,4,4,5,8,: 0,0,1,1,2,2,3,3,4,4,5,9,:  
 0,0,1,1,2,2,3,3,4,4,5,10,: 0,0,1,1,2,2,3,3,4,4,5,11,:  
 Number new nodes in level n is given by : 1,2,2,3,1,4,1,5,1,6,1,7,

-----Class

793-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][011][012][021][100][101][102]]$

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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

794-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][011][012][021][100][101][110]]$

--

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

795-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][011][012][021][100][101][120]]$

-----  
--  
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

796-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[001][010][011][012][021][100][101][201]]$

-----  
--  
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

797-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[001][010][011][012][021][100][101][210]]$

-----  
--  
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

798-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[001][010][011][012][021][100][102][110]]$

-----  
--  
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  
799-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][010][011][012][021][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  
800-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][010][011][012][021][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  
801-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][010][011][012][021][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
802-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[001][010][011][012][021][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
803-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[001][010][011][012][021][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
804-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[001][010][011][012][021][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
805-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[001][010][011][012][021][100][120][201]]

```

-----  
--  
Rules of T[L]:

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

R2)  $0, 0, \rightarrow 0, 0, \rightarrow$

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

806-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[001][010][011][012][021][100][120][210]]$

-----  
--  
Rules of T[L]:

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

R2)  $0, 0, \rightarrow 0, 0, \rightarrow$

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

807-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[001][010][011][012][021][100][201][210]]$

-----  
--  
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

808-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[001][010][011][012][021][101][102][110]]$

-----  
--  
Rules of T[L]:

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

R2)  $0, 0, \rightarrow 0, 0, \rightarrow$

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

-----Class  
809-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][010][011][012][021][101][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  
810-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][010][011][012][021][101][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  
811-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][010][011][012][021][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
812-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[001][010][011][012][021][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
813-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[001][010][011][012][021][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
814-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[001][010][011][012][021][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
815-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[001][010][011][012][021][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

816-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[001][010][011][012][021][101][120][210]]$

-----  
--  
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

817-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[001][010][011][012][021][101][201][210]]$

-----  
--  
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

818-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[001][010][011][012][021][102][110][120]]$

-----  
--  
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  
819-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][010][011][012][021][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  
820-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][010][011][012][021][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  
821-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][010][011][012][021][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
822-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[001][010][011][012][021][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
823-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[001][010][011][012][021][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
824-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[001][010][011][012][021][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
825-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[001][010][011][012][021][110][120][210]]

```

-----  
--  
Rules of T[L]:

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

R2)  $0, 0, \rightarrow 0, 0, \rightarrow$

R3)  $0, 1, \rightarrow$

List of different nodes in T[L]

LEN=1)  $0, :$

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

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

-----Class

826-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[001][010][011][012][021][110][201][210]]$

-----  
--  
Rules of T[L]:

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

R2)  $0, 0, \rightarrow 0, 0, \rightarrow$

R3)  $0, 1, \rightarrow$

List of different nodes in T[L]

LEN=1)  $0, :$

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

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

-----Class

827-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[001][010][011][012][021][120][201][210]]$

-----  
--  
Rules of T[L]:

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

R2)  $0, 0, \rightarrow 0, 0, \rightarrow$

R3)  $0, 1, \rightarrow$

List of different nodes in T[L]

LEN=1)  $0, :$

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

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

-----Class

828-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[001][010][011][012][100][101][102][110]]$

-----  
--  
Rules of T[L]:

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

R2)  $0, 0, \rightarrow 0, 0, \rightarrow$

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

-----Class

829-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][010][011][012][100][101][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

830-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][010][011][012][100][101][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

831-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][010][011][012][100][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
832-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][010][011][012][100][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
833-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][010][011][012][100][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
834-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][010][011][012][100][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
835-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][010][011][012][100][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

836-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[001][010][011][012][100][101][120][210]]$

-----  
--  
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

837-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[001][010][011][012][100][101][201][210]]$

-----  
--  
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

838-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[001][010][011][012][100][102][110][120]]$

-----  
--  
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

839-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[001][010][011][012][100][102][110][201]$

--  
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

840-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[001][010][011][012][100][102][110][210]$

--  
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

841-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[001][010][011][012][100][102][120][201]$

--  
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
842-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[001][010][011][012][100][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
843-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[001][010][011][012][100][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
844-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[001][010][011][012][100][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
845-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[001][010][011][012][100][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

846-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[001][010][011][012][100][110][201][210]]$

-----  
--  
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

847-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[001][010][011][012][100][120][201][210]]$

-----  
--  
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

848-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[001][010][011][012][101][102][110][120]]$

-----  
--  
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

849-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[001][010][011][012][101][102][110][201]$

--  
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

850-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[001][010][011][012][101][102][110][210]$

--  
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

851-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[001][010][011][012][101][102][120][201]$

--  
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
852-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[001][010][011][012][101][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
853-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[001][010][011][012][101][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
854-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[001][010][011][012][101][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
855-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[001][010][011][012][101][110][120][210]]

```

-----  
--  
Rules of T[L]:

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

R2)  $0, 0, \rightarrow 0, 0, \rightarrow$

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

856-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[001][010][011][012][101][110][201][210]]$

-----  
--  
Rules of T[L]:

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

R2)  $0, 0, \rightarrow 0, 0, \rightarrow$

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

857-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[001][010][011][012][101][120][201][210]]$

-----  
--  
Rules of T[L]:

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

R2)  $0, 0, \rightarrow 0, 0, \rightarrow$

R3)  $0, 1, \rightarrow$

List of different nodes in T[L]

LEN=1)  $0, :$

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

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

-----Class

858-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[001][010][011][012][102][110][120][201]]$

-----  
--  
Rules of T[L]:

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

R2)  $0, 0, \rightarrow 0, 0, \rightarrow$

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

-----Class  
859-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][010][011][012][102][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  
860-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][010][011][012][102][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  
861-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][010][011][012][102][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
862-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[001][010][011][012][110][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
863-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[001][010][011][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
864-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[001][010][011][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
865-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[001][010][011][021][100][101][102][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  
866-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[001][010][011][021][100][101][102][210]$

--  
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  
867-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[001][010][011][021][100][101][110][120]$

--  
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  
868-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[001][010][011][021][100][101][110][201]$

--  
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
869-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][010][011][021][100][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
870-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][010][011][021][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
871-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][010][011][021][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
872-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][010][011][021][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  
873-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][011][021][100][102][110][120]]$

--  
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  
874-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][011][021][100][102][110][201]]$

--  
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  
875-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][011][021][100][102][110][210]]$

--  
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  
876-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][010][011][021][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  
877-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][010][011][021][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  
878-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][010][011][021][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  
879-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][010][011][021][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  
880-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][011][021][100][110][120][210]]$

--  
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  
881-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][011][021][100][110][201][210]]$

--  
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  
882-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][011][021][100][120][201][210]]$

--  
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  
883-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][011][021][101][102][110][120]]$

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

-----Class  
884-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[\emptyset\emptyset 1][\emptyset 1\emptyset][\emptyset 11][\emptyset 21][1\emptyset 1][1\emptyset 2][11\emptyset][2\emptyset 1]]$

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

-----Class  
885-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[\emptyset\emptyset 1][\emptyset 1\emptyset][\emptyset 11][\emptyset 21][1\emptyset 1][1\emptyset 2][11\emptyset][21\emptyset]]$

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

-----Class  
886-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[\emptyset\emptyset 1][\emptyset 1\emptyset][\emptyset 11][\emptyset 21][1\emptyset 1][1\emptyset 2][12\emptyset][2\emptyset 1]]$

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

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

-----Class

887-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[001][010][011][021][101][102][120][210]]$

-----

--

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

888-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[001][010][011][021][101][102][201][210]]$

-----

--

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

889-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[001][010][011][021][101][110][120][201]]$

-----

--

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

890-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[001][010][011][021][101][110][120][210]]$

-----

--

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  
891-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][010][011][021][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  
892-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][010][011][021][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  
893-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][010][011][021][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
894-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][010][011][021][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
895-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][010][011][021][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
896-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][010][011][021][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
897-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][010][011][021][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  
898-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][010][011][100][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  
899-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][010][011][100][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  
900-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][010][011][100][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  
901-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][010][011][100][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  
902-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][010][011][100][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  
903-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][010][011][100][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  
904-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][010][011][100][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  
905-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][011][100][101][110][120][210]]$

--  
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  
906-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][011][100][101][110][201][210]]$

--  
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  
907-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][011][100][101][120][201][210]]$

--  
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  
908-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][011][100][102][110][120][201]]$

-----  
--  
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  
909-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][011][100][102][110][120][210]]$   
-----

--  
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  
910-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][011][100][102][110][201][210]]$   
-----

--  
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  
911-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][011][100][102][120][201][210]]$   
-----

--  
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

912-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[001][010][011][100][110][120][201][210]]$

-----

--

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

913-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[001][010][011][101][102][110][120][201]]$

-----

--

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

914-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[001][010][011][101][102][110][120][210]]$

-----

--

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

915-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[001][010][011][101][102][110][201][210]]$

-----

--

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  
916-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[001][010][011][101][102][120][201][210]$

--  
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  
917-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[001][010][011][101][110][120][201][210]$

--  
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  
918-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[001][010][011][102][110][120][201][210]$

--  
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
919-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][010][012][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
920-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][010][012][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
921-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][010][012][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
922-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][010][012][021][100][101][102][210]]
-----
--
Rules of T[L]:
R1) 0,-->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  
923-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][012][021][100][101][110][120]]$

--  
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  
924-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][012][021][100][101][110][201]]$

--  
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  
925-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][012][021][100][101][110][210]]$

--  
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  
926-----



Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][010][012][021][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  
927-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][010][012][021][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  
928-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][010][012][021][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  
929-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][010][012][021][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  
930-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][012][021][100][102][110][201]]$

--  
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  
931-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][012][021][100][102][110][210]]$

--  
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  
932-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][012][021][100][102][120][201]]$

--  
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  
933-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][012][021][100][102][120][210]]$

-----  
--  
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  
934-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][012][021][100][102][201][210]]$   
-----

--  
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  
935-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][012][021][100][110][120][201]]$   
-----

--  
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  
936-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][012][021][100][110][120][210]]$   
-----

--  
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

937-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[001][010][012][021][100][110][201][210]]$

-----

--

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

938-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[001][010][012][021][100][120][201][210]]$

-----

--

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

939-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[001][010][012][021][101][102][110][120]]$

-----

--

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

940-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[001][010][012][021][101][102][110][201]]$

-----

--

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  
941-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[001][010][012][021][101][102][110][210]$

--  
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  
942-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[001][010][012][021][101][102][120][201]$

--  
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  
943-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[001][010][012][021][101][102][120][210]$

--  
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
944-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][010][012][021][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
945-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][010][012][021][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
946-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][010][012][021][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
947-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][010][012][021][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  
948-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][012][021][101][120][201][210]]$

--  
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  
949-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][012][021][102][110][120][201]]$

--  
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  
950-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][012][021][102][110][120][210]]$

--  
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  
951-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][012][021][102][110][201][210]]$

-----  
--  
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  
952-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][012][021][102][120][201][210]]$

-----  
--  
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  
953-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][012][021][110][120][201][210]]$

-----  
--  
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  
954-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][012][100][101][102][110][120]]$

-----  
--  
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  
955-----  
Inversion Sequences (I\_n=(n+1)!) avoiding  
L=[[001][010][012][100][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  
956-----  
Inversion Sequences (I\_n=(n+1)!) avoiding  
L=[[001][010][012][100][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  
957-----  
Inversion Sequences (I\_n=(n+1)!) avoiding  
L=[[001][010][012][100][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  
958-----  
Inversion Sequences (I\_n=(n+1)!) avoiding  
L=[[001][010][012][100][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  
959-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][012][100][101][102][201][210]]$   
-----

--  
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  
960-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][012][100][101][110][120][201]]$   
-----

--  
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  
961-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][012][100][101][110][120][210]]$   
-----

--  
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  
962-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][012][100][101][110][201][210]]$

-----  
--  
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  
963-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][012][100][101][120][201][210]]$

-----  
--  
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  
964-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][012][100][102][110][120][201]]$

-----  
--  
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  
965-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][012][100][102][110][120][210]]$

-----  
--

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  
966-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[001][010][012][100][102][110][201][210]$

--  
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  
967-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[001][010][012][100][102][120][201][210]$

--  
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  
968-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[001][010][012][100][110][120][201][210]$

--  
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
969-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][010][012][101][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
970-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][010][012][101][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
971-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][010][012][101][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
972-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][010][012][101][102][120][201][210]]
-----
--
Rules of T[L]:
R1) 0,-->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  
973-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][012][101][110][120][201][210]]$

-----  
--  
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  
974-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][012][102][110][120][201][210]]$

-----  
--  
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  
975-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][021][100][101][102][110][120]]$

-----  
--  
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  
976-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][010][021][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  
977-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][010][021][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  
978-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][010][021][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  
979-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][010][021][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  
980-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][021][100][101][102][201][210]]$

--  
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  
981-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][021][100][101][110][120][201]]$

--  
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  
982-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][021][100][101][110][120][210]]$

--  
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  
983-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][021][100][101][110][201][210]]$



-----  
--  
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  
984-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][021][100][101][120][201][210]]$   
-----

--  
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  
985-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][021][100][102][110][120][201]]$   
-----

--  
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  
986-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][010][021][100][102][110][120][210]]$   
-----

--  
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

987-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[001][010][021][100][102][110][201][210]]$

-----

--

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

988-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[001][010][021][100][102][120][201][210]]$

-----

--

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

989-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[001][010][021][100][110][120][201][210]]$

-----

--

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

990-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[001][010][021][101][102][110][120][201]]$

-----

--

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  
991-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][010][021][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  
992-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][010][021][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  
993-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][010][021][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
994-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][010][021][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
995-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][010][021][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
996-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][010][100][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
997-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][010][100][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  
998-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][010][100][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  
999-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][010][100][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  
1000-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][010][100][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  
1001-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][010][100][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  
1002-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][010][101][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  
1003-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][011][012][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,--  
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  
1004-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][011][012][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,--  
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  
1005-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][011][012][021][100][101][102][201]]$

--  
Rules of T[L]:  
R1) 0,-->0,0,--0,1,--  
R2) 0,0,-->0,0,--  
R3) 0,1,-->0,1,0,--  
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  
1006-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][011][012][021][100][101][102][210]]$

--  
Rules of T[L]:  
R1) 0,-->0,0,--0,1,--  
R2) 0,0,-->0,0,--  
R3) 0,1,-->0,1,0,--  
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  
1007-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][011][012][021][100][101][110][120]]$

--

Rules of T[L]:

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

R2)  $0, 0, \rightarrow 0, 0, \rightarrow$

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

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

1008-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[001][011][012][021][100][101][110][201]$

--

Rules of T[L]:

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

R2)  $0, 0, \rightarrow 0, 0, \rightarrow$

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

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

1009-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[001][011][012][021][100][101][110][210]$

--

Rules of T[L]:

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

R2)  $0, 0, \rightarrow 0, 0, \rightarrow$

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

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

1010-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[001][011][012][021][100][101][120][201]$



```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--
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
1011-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][011][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,--
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
1012-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][011][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,--
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
1013-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][011][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,--
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
1014-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][011][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,--
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
1015-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][011][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,--
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
1016-----
Inversion Sequences (I_n=(n+1)!) avoiding

```

L=[[001][011][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,--

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

1017-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[001][011][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,--

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

1018-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[001][011][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,--

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

1019-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][011][012][021][100][110][120][201]]$

-----  
--  
Rules of T[L]:  
R1) 0,-->0,0,--0,1,--  
R2) 0,0,-->0,0,--  
R3) 0,1,-->0,1,0,--  
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  
1020-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][011][012][021][100][110][120][210]]$

-----  
--  
Rules of T[L]:  
R1) 0,-->0,0,--0,1,--  
R2) 0,0,-->0,0,--  
R3) 0,1,-->0,1,0,--  
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  
1021-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][011][012][021][100][110][201][210]]$

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

```

1022-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][011][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,--
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
1023-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][011][012][021][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
1024-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][011][012][021][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
1025-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][011][012][021][101][102][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  
1026-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[001][011][012][021][101][102][120][201]$

--  
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  
1027-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[001][011][012][021][101][102][120][210]$

--  
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  
1028-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[001][011][012][021][101][102][201][210]$

--  
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
1029-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][011][012][021][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
1030-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][011][012][021][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
1031-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][011][012][021][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
1032-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][011][012][021][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  
1033-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][011][012][021][102][110][120][201]]$

--  
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  
1034-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][011][012][021][102][110][120][210]]$

--  
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  
1035-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][011][012][021][102][110][201][210]]$

--  
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  
1036-----



Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][011][012][021][102][120][201][210]]$

-----  
--  
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  
1037-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][011][012][021][110][120][201][210]]$

-----  
--  
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  
1038-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][011][012][100][101][102][110][120]]$

-----  
--  
Rules of T[L]:  
R1)  $0,-->0,0,--0,1,--$   
R2)  $0,0,-->0,0,--$   
R3)  $0,1,-->0,1,0,--$   
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  
1039-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][011][012][100][101][102][110][201]]$

-----  
--  
Rules of T[L]:

R1) 0,-->0,0,--0,1,--  
 R2) 0,0,-->0,0,--  
 R3) 0,1,-->0,1,0,--  
 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  
 1040-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 L=[[001][011][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,--  
 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  
 1041-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 L=[[001][011][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,--  
 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  
 1042-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 L=[[001][011][012][100][101][102][120][210]]

--

Rules of T[L]:

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

R2)  $0, 0, \rightarrow 0, 0, \rightarrow$

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

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

1043-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[001][011][012][100][101][102][201][210]]$

--

Rules of T[L]:

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

R2)  $0, 0, \rightarrow 0, 0, \rightarrow$

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

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

1044-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[001][011][012][100][101][110][120][201]]$

--

Rules of T[L]:

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

R2)  $0, 0, \rightarrow 0, 0, \rightarrow$

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

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

1045-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[001][011][012][100][101][110][120][210]]$

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--
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
1046-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][011][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,--
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
1047-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][011][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,--
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
1048-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][011][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,--
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
1049-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][011][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,--
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
1050-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][011][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,--
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
1051-----
Inversion Sequences (I_n=(n+1)!) avoiding

```

L=[[001][011][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,--

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

1052-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[001][011][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,--

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

1053-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[001][011][012][101][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

1054-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[001][011][012][101][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
1055-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[001][011][012][101][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
1056-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[001][011][012][101][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
1057-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[001][011][012][101][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
1058-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[001][011][012][102][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
1059-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[001][011][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,--
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
1060-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[001][011][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,--0,1,--
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

```



```

1061-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][011][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,--0,1,--
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
1062-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][011][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,--0,0,--
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
1063-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][011][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,--0,0,--
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
1064-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[001][011][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,--
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
1065-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[001][011][021][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
1066-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[001][011][021][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
1067-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[001][011][021][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
1068-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[001][011][021][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
1069-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[001][011][021][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

1070-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[001][011][021][100][102][110][120][210]$

-----

--

Rules of  $T[L]$ :

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

R2)  $0,0, \rightarrow 0,0, \rightarrow$

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

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

1071-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[001][011][021][100][102][110][201][210]$

-----

--

Rules of  $T[L]$ :

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

R2)  $0,0, \rightarrow 0,0, \rightarrow$

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

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

1072-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[001][011][021][100][102][120][201][210]$

-----

--

Rules of  $T[L]$ :

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

R2)  $0,0, \rightarrow 0,0, \rightarrow$

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

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  
1073-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][011][021][100][110][120][201][210]]$

--  
Rules of  $T[L]$ :  
R1) 0,-->0,0,--0,1,--  
R2) 0,0,-->0,0,--  
R3) 0,1,-->0,1,0,--0,0,--  
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  
1074-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][011][021][101][102][110][120][201]]$

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

-----Class  
1075-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][011][021][101][102][110][120][210]]$

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

```

-----Class
1076-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[001][011][021][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
1077-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[001][011][021][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
1078-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[001][011][021][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
1079-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[001][011][021][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  
1080-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][011][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,--  
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  
1081-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][011][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,--  
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  
1082-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][011][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,--0,1,--  
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  
1083-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][011][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,--0,0,--  
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  
1084-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][011][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,--  
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  
1085-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][011][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,--

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

1086-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[001][011][101][102][110][120][201][210]]$

--

Rules of T[L]:

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

R2) 0,0,-->0,0,--

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

List of different nodes in T[L]

LEN=1) 0,:

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

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

-----Class

1087-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[001][012][021][100][101][102][110][120]]$

--

Rules of T[L]:

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

R2) 0,0,-->0,0,--

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

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

1088-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[001][012][021][100][101][102][110][201]]$

--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--  
R2) 0,0,-->0,0,--  
R3) 0,1,-->0,1,0,--0,0,--  
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  
1089-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][012][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,--  
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  
1090-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][012][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,--  
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  
1091-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][012][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,--

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

1092-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[001][012][021][100][101][102][201][210]]$

--

Rules of T[L]:

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

R2) 0,0,-->0,0,--

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

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

1093-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[001][012][021][100][101][110][120][201]]$

--

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

1094-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[001][012][021][100][101][110][120][210]]$

```

--
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
1095-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][012][021][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
1096-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][012][021][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
1097-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][012][021][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
1098-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][012][021][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
1099-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][012][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,--
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
1100-----
Inversion Sequences (I_n=(n+1)!) avoiding

```

L=[[001][012][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,--
- 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

1101-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[001][012][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,--
- 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

1102-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[001][012][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,--

List of different nodes in T[L]

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

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

-----Class

1103-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[001][012][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,--  
List of different nodes in T[L]  
LEN=1) 0,:  
LEN=2) 0,0,: 0,1,:  
Number new nodes in level n is given by : 1,2, DONE

-----Class  
1104-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][012][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,--  
List of different nodes in T[L]  
LEN=1) 0,:  
LEN=2) 0,0,: 0,1,:  
Number new nodes in level n is given by : 1,2, DONE

-----Class  
1105-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][012][021][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  
1106-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][012][021][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  
1107-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][012][021][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  
1108-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][012][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,--  
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  
1109-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][012][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,--  
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  
1110-----  
Inversion Sequences (I\_n=(n+1)!) avoiding  
L=[[001][012][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,--  
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  
1111-----  
Inversion Sequences (I\_n=(n+1)!) avoiding  
L=[[001][012][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,--  
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  
1112-----  
Inversion Sequences (I\_n=(n+1)!) avoiding  
L=[[001][012][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,--  
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  
1113-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][012][100][102][110][120][201][210]]$

--  
Rules of T[L]:  
R1) 0,-->0,0,--0,1,--  
R2) 0,0,-->0,0,--  
R3) 0,1,-->0,1,0,--0,0,--  
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  
1114-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][012][101][102][110][120][201][210]]$

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

-----Class  
1115-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][021][100][101][102][110][120][201]]$

--  
Rules of T[L]:  
R1) 0,-->0,0,--0,1,--  
R2) 0,0,-->0,0,--  
R3) 0,1,-->0,1,0,--0,0,--0,1,2,--  
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  
1116-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][021][100][101][102][110][120][210]]$

--  
Rules of T[L]:  
R1) 0, -->0,0, --0,1, --  
R2) 0,0, -->0,0, --  
R3) 0,1, -->0,1,0, --0,0, --0,1,2, --  
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  
1117-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][021][100][101][102][110][201][210]]$

--  
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, --  
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  
1118-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[001][021][100][101][102][120][201][210]]$

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

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  
1119-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][021][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,--0,1,2,--  
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  
1120-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][021][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,--0,1,2,--  
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  
1121-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[001][021][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,--0,1,2,--
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
1122-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[001][100][101][102][110][120][201][210]]
-----

```

```

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,--
R3) 0,1,-->0,1,0,--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
1123-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[010][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,-->
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,--

```



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,:  
 LEN=12) 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  
 1125-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[\text{010}][\text{011}][\text{012}][\text{021}][\text{100}][\text{101}][\text{102}][\text{201}]$

-----  
 --  
 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,--  
 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,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--  
 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) 0,0,0,0,0,0,0,0,0,0,0,0,  
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,0,0,0,  
 LEN=12) 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,

-----Class  
 1126-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 L=[[010][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,-->  
 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,-->0,0,0,0,0,0,0,0,0,0,0,0,--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,--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,  
 LEN=12) 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  
 1127-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding



L=[[010][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,-->

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,--

R12)

0,0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--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,:

LEN=12) 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,

-----Class

1128-----

Inversion Sequences (I\_n=(n+1)!) avoiding

L=[[010][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,-->

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



```

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--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,--
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,--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,:
LEN=12) 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
1130-----
Inversion Sequences (In=(n+1)!) avoiding
L=[[010][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,-->
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,--0,1,--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,--
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,--0,1,--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, :
- LEN=12) 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

1131-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[010][011][012][021][100][101][120][210]$

-----

--  
Rules of T[L]:

- R1) 0, -->0,0, --0,1, --
- R2) 0,0, -->0,0,0, --0,1, --0,1, --
- R3) 0,1, -->
- 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, --
- 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, --

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, :  
LEN=12) 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  
1132-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[010][011][012][021][100][101][201][210]$

--  
Rules of T[L]:  
R1) 0, -->0,0,--0,1,--  
R2) 0,0, -->0,0,0,--0,1,--0,1,--  
R3) 0,1, -->  
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,--  
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,--  
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,--0,1,--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, :  
LEN=12) 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

1133-----

Inversion Sequences (I<sub>n</sub>=(n+1)!) avoiding  
L=[[010][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,-->
- 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,--
- 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,--
- 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,--0,1,--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,:
  - LEN=12) 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

1134-----

Inversion Sequences (I<sub>n</sub>=(n+1)!) avoiding  
L=[[010][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,-->  
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,--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,--0,1,--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, :  
LEN=12) 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,

-----Class

1135-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[010][011][012][021][100][102][110][210]]$

--  
Rules of T[L]:

R1) 0,-->0,0,--0,1,--  
R2) 0,0,-->0,0,0,--0,1,--0,1,--  
R3) 0,1,-->  
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,--0,1,--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,--0,1,--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,:
LEN=12) 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,

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-----Class
1136-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[010][011][012][021][100][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,--0,1,--
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,--0,1,--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,--
R12)

```





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, :  
 LEN=12) 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

1138-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[010][011][012][021][100][102][201][210]]$

--

Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,1,--
- R3) 0,1,-->
- 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,--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,--
- 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,--

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, :  
 LEN=12) 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

1139-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[010][011][012][021][100][110][120][201]]$

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--

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)

$0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$   
 $1, \rightarrow$

R10)

$0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$   
 $\rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$

R11)

$0, 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$   
 $0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$

R12)

$0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$   
 $1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$

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)  $0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, :$

LEN=12)  $0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, :$

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

-----Class

1140-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[010][011][012][021][100][110][120][210]]$

-----

--

Rules of  $T[L]$ :

R1) 0, -->0,0,--0,1,--  
 R2) 0,0,-->0,0,0,--0,1,--0,1,--  
 R3) 0,1,-->  
 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,  
 --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,--  
 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, :  
 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, :  
 LEN=12) 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  
 1141-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[010][011][012][021][100][110][201][210]$   
 -----

--  
 Rules of T[L]:  
 R1) 0, -->0,0,--0,1,--  
 R2) 0,0,-->0,0,0,--0,1,--0,1,--  
 R3) 0,1,-->  
 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,--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,--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, :  
LEN=12) 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,

-----Class  
1143-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[010][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,-->  
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,--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,--  
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,--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,:  
 LEN=12) 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

1144-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[010][011][012][021][101][102][110][201]$

--  
 Rules of  $T[L]$ :

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,1,--
- R3) 0,1,-->
- 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,--
- 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,--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,:

LEN=12) 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,

-----Class  
1145-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[010][011][012][021][101][102][110][210]]$

--  
Rules of  $T[L]$ :  
R1) 0,-->0,0,--0,1,--  
R2) 0,0,-->0,0,0,--0,1,--0,1,--  
R3) 0,1,-->  
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,--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,--  
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, :  
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, :  
LEN=12) 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  
1146-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[010][011][012][021][101][102][120][201]]$



--

Rules of T[L]:

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

R2)  $0,0 \rightarrow 0,0,0,--0,1,--0,1,--$

R3)  $0,1 \rightarrow$

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)

$0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,$

$1,--$

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

$0,1,--0,1,--0,1,--0,1,--$

R12)  
 $0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,$

$1,--0,1,--0,1,--0,1,--0,1,--0,1,--$

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)  $0,0,0,0,0,0,0,0,0,0,0, :$

LEN=12)  $0,0,0,0,0,0,0,0,0,0,0,0, :$

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

-----Class

1147-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[010][011][012][021][101][102][120][210]]$

-----

--

Rules of T[L]:

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

R2)  $0,0 \rightarrow 0,0,0,--0,1,--0,1,--$

R3)  $0,1 \rightarrow$

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,--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,--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,--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,--0,1,--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,--0,1,--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, :  
LEN=12) 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,

-----Class

1148-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[010][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,-->  
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,--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,--0,1,--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,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--  
--0,1,--0,1,--



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,:  
 LEN=12) 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  
 1150-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[010][011][012][021][101][110][120][210]$

-----  
 --  
 Rules of T[L]:  
 R1) 0,-->0,0,--0,1,--  
 R2) 0,0,-->0,0,0,--0,1,--0,1,--  
 R3) 0,1,-->  
 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,--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,--  
 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,:  
LEN=12) 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

1151-----

Inversion Sequences (I<sub>n</sub>=(n+1)!) avoiding  
L=[[010][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,-->  
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,--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,--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,:  
LEN=12) 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

1152-----

Inversion Sequences (I<sub>n</sub>=(n+1)!) avoiding

L=[[010][011][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,-->

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,--

R12)

0,0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--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,:

LEN=12) 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,

-----Class

1153-----

Inversion Sequences (I\_n=(n+1)!) avoiding

L=[[010][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,-->

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,--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,--  
 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,--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, :  
 LEN=12) 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  
 1154-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[\theta 10][\theta 11][\theta 12][\theta 21][1\theta 2][11\theta][12\theta][21\theta]]$

--  
 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,--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,--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,--  
 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,--0,1,--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, :  
 LEN=12) 0,0,0,0,0,0,0,0,0,0,0,0, :  
 Number new nodes in level n is given by : 1,2,1,1,1,1,1,1,1,1,1,1,1,1,1,

-----Class  
 1155-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[010][011][012][021][102][110][201][210]]$   
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--  
 Rules of  $T[L]$ :  
 R1) 0,-->0,0,--0,1,--  
 R2) 0,0,-->0,0,0,--0,1,--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,--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,--  
 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,--  
 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,--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, :
- LEN=12) 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

1156-----

Inversion Sequences (I\_n=(n+1)!) avoiding

L=[[010][011][012][021][102][120][201][210]]

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Rules of T[L]:

- R1) 0, -->0,0, --0,1, --
- R2) 0,0, -->0,0,0, --0,1, --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, --
- 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, --

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, :  
 LEN=12) 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

1157-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[010][011][012][021][110][120][201][210]$

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--

Rules of T[L]:

- R1) 0, -->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--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,--
- 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, :  
 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, :  
 LEN=12) 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

1158-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[010][011][012][100][101][102][110][120]$

-----  
--

Rules of  $T[L]$ :

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,0,2,--
- R3) 0,1,-->
- 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,--0,0,0,0,0,5,--
- 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,--0,0,0,0,0,6,  
--
- 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,--0,1,--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)  
0,0,0,0,0,0,0,0,9,-->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,--
- 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,--0,0,2,--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,--0,0,0,0,0,0,0,0,0,10,--0,0,0,0,0,0,0,0,0,11,--
- R21)  
0,0,0,0,0,0,0,0,0,10,-->0,1,--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,--

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,:

LEN=12) 0,0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,0,11,:

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

-----Class

1159-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[010][011][012][100][101][102][110][201]$

-----

--  
Rules of T[L]:

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

R2) 0,0,-->0,0,0,--0,1,--0,0,2,--

R3) 0,1,-->

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,--0,0,0,0,0,0,0,7,--

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,--0,0,0,0,0,6,

--

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,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,--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,--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,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--

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,--0,0,2,--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,--0,0,0,0,0,0,9,--0,0,0,0,0,0,0,0,0,10,--0,0,0,0,0,0,0,0,0,11,--

R21)

0,0,0,0,0,0,0,0,0,0,10,-->0,1,--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,--

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, :

LEN=12) 0,0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,0,11, :

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

-----Class

1160-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[ [010][011][012][100][101][102][110][210] ]$

--

Rules of T[L]:

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

R2) 0,0,-->0,0,0,--0,1,--0,0,2,--

R3) 0,1,-->

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,--0,1,--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,--0,0,0,0,0,0,0,0,8,--  
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,--0,0,0,0,0,0,0,0,8,--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,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,  
0,9,--0,0,0,0,0,0,0,0,0,0,10,--  
R19) 0,0,0,0,0,0,0,0,0,0,9,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--  
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,--0,1,--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,--0,0,0,0,0,0,0,0,0,0,11,--  
R21)  
0,0,0,0,0,0,0,0,0,0,0,10,-->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, :  
LEN=12) 0,0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,0,11, :  
Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,2,

-----Class  
1161-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[010][011][012][100][101][102][120][201]]$

-----  
--  
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,--0,1,--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,--0,0,0,0,0,0,0,0,8,--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,--0,0,0,0,0,0,7,--  
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,--0,0,0,0,0,0,0,0,8,--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,--0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--  
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,--0,0,2,--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,--0,0,0,0,0,0,0,0,0,0,11,--  
R21)  
0,0,0,0,0,0,0,0,0,0,10,-->0,1,--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,--

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, : 0,0,0,0,0,0,0,0,0,8, :  
 LEN=10) 0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,9, :  
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,10, :  
 LEN=12) 0,0,0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,11, :  
 Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1162-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[010][011][012][100][101][102][120][210]]$

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- 
- Rules of T[L]:
- R1) 0, -->0,0, --0,1, --
  - R2) 0,0, -->0,0,0, --0,1, --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, --0,0,0,0,5, --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, --0,0,0,0,0,0,0,0,0,9, --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, --
  - 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, --0,0,2, --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, --0,0,0,0,0,0,0,0,0,0,0,11, --
  - R21) 0,0,0,0,0,0,0,0,0,0,10, -->0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --0,1, --





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,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--  
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,--0,0,0,0,5,--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,--0,0,0,0,11,--

R21)

0,0,0,0,0,0,0,0,10,-->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,:

LEN=12) 0,0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,0,11,:

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

-----Class

1164-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[010][011][012][100][101][110][120][201]$

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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,--0,0,0,0,0,6,--

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,

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,--0,0,0,0,0,0,0,9  
,--

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,--  
0,0,0,0,5,--0,0,0,0,6,--0,0,0,0,7,--0,0,0,0,8,--0,0,0,0,9,  
,0,9,--0,0,0,0,0,0,10,--

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,  
0,6,--0,0,0,0,0,7,--0,0,0,0,0,8,--

R20)

0,0,0,0,0,0,0,0,0,-->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,  
,0,0,9,--0,0,0,0,0,0,10,--0,0,0,0,11,--

R21)

0,0,0,0,0,0,0,10,-->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,--0,0,0,0,7,--0,0,0,0,8,--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,:

LEN=12) 0,0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,0,11,:

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

-----Class

1165-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[010][011][012][100][101][110][120][210]]$

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Rules of T[L]:

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

R2) 0,0,-->0,0,0,--0,1,--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,--0,0,0,0,0,6,--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,--  
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,--0,0,0,0,0,0,7,--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,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,  
,0,9,--0,0,0,0,0,0,0,10,--  
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,--  
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,--0,0,2,--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,--0,0,0,0,0,0,0,10,--0,0,0,0,0,0,0,11,--  
R21)  
0,0,0,0,0,0,0,0,0,0,10,-->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, :
  - LEN=12) 0,0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,0,11, :
- Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1166-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[010][011][012][100][101][110][201][210]]$

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Rules of  $T[L]$ :

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--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,--0,0,0,4,--
- 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) 0,0,0,0,0,0,0,7,-->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,--0,0,0,0,0,0,0,9  
,--
- 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,--
- 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,--0,0,2,--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,--0,0,0,0,0,0,0,0,0,0,11,--
- R21)  
0,0,0,0,0,0,0,0,0,0,10,-->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,:  
 LEN=12) 0,0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,0,11,:  
 Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,2,

-----Class  
 1167-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[010][011][012][100][101][120][201][210]]$   
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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,  
 --0,0,0,0,0,6,--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,  
 0,0,0,5,--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,--0,1,--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,--  
 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,--  
 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,--0,0,0,0,0,5,--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,--0,0,0,0,0,0,0,0,0,10,--0,0,0,0,0,0,0,0,0,11,--

R21)  
0,0,0,0,0,0,0,0,0,0,10,-->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,:
  - LEN=12) 0,0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,0,11,:
- Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,2,

-----Class  
1168-----

Inversion Sequences (I<sub>n</sub>=(n+1)!) avoiding  
L=[[010][011][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,-->
- 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,--0,0,0,0,0,7,--
- 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,--0,0,0,0,0,6,  
--
- 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,--0,0,0,0,0,0,0,8,--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,--0,0,0,0,0,0,0,7,--
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,--0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,
,0,9,--0,0,0,0,0,0,0,0,0,0,10,--
R19)
0,0,0,0,0,0,0,0,9,-->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,--
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,--0,0,0,0,5,--0,0,0,0,6,--0,0,0,0,7,--0,0,0,0,8,--0,0,0,0,0,
,0,0,9,--0,0,0,0,0,0,0,0,0,0,10,--0,0,0,0,0,0,0,0,11,--
R21)
0,0,0,0,0,0,0,0,0,0,10,-->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,--0,0,0,0,0,0,9,--

```

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,:
LEN=12) 0,0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,0,11,:
Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,2,

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-----Class
1169-----
Inversion Sequences (In=(n+1)!) avoiding
L=[[010][011][012][100][102][110][120][210]]
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--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,1,--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,--0,0,0,0,0,6,--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,  
 0,0,0,5,--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,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--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,--  
 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,--  
 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,--0,0,2,--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,--0,0,0,0,0,0,0,0,0,10,--0,0,0,0,0,0,0,0,0,11,--  
 R21)  
 0,0,0,0,0,0,0,0,0,0,10,-->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, : 0,0,0,0,0,6, :  
 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, : 0,0,0,0,0,0,0,8, :  
 LEN=10) 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, : 0,0,0,0,0,0,0,0,0,10, :  
 LEN=12) 0,0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,11, :  
 Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class  
 1170-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[010][011][012][100][102][110][201][210]]$

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 --

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

R2) 0,0,-->0,0,0,--0,1,--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,--0,0,0,0,0,0,0,8,--  
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,--0,1,--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,--  
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,--0,0,2,--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,--0,0,0,0,0,0,0,0,0,0,11,--  
R21)  
0,0,0,0,0,0,0,0,0,0,10,-->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, :  
LEN=12) 0,0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,0,11, :  
Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1171-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[010][011][012][100][102][120][201][210]]$

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--

Rules of  $T[L]$ :

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

R2)  $0, 0, \rightarrow 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow$

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)

$0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow 0, 0, 0, 3, \rightarrow 0, 0, 0, 0, 4, \rightarrow 0, 0, 0, 0, 0, 5, \rightarrow 0, 0, 0, 0, 0, 0, 6, \rightarrow 0, 0, 0, 0, 0, 0, 0, 7, \rightarrow 0, 0, 0, 0, 0, 0, 0, 8, \rightarrow$

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)

$0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow 0, 0, 0, 3, \rightarrow 0, 0, 0, 0, 4, \rightarrow 0, 0, 0, 0, 0, 5, \rightarrow 0, 0, 0, 0, 0, 0, 6, \rightarrow 0, 0, 0, 0, 0, 0, 0, 7, \rightarrow 0, 0, 0, 0, 0, 0, 0, 8, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 9, \rightarrow$

, --

R17)  $0, 0, 0, 0, 0, 0, 0, 0, 8, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$

R18)

$0, 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow 0, 0, 0, 3, \rightarrow 0, 0, 0, 0, 4, \rightarrow 0, 0, 0, 0, 0, 5, \rightarrow 0, 0, 0, 0, 0, 0, 6, \rightarrow 0, 0, 0, 0, 0, 0, 0, 7, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 8, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 9, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, 10, \rightarrow$

R19)  $0, 0, 0, 0, 0, 0, 0, 0, 0, 9, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$

R20)

$0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 0, 2, \rightarrow 0, 0, 0, 3, \rightarrow 0, 0, 0, 0, 4, \rightarrow 0, 0, 0, 0, 0, 5, \rightarrow 0, 0, 0, 0, 0, 0, 6, \rightarrow 0, 0, 0, 0, 0, 0, 0, 7, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 8, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 9, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, 10, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, 11, \rightarrow$

R21)

$0, 0, 0, 0, 0, 0, 0, 0, 0, 10, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$

List of different nodes in  $T[L]$

LEN=1)  $0, :$

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

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

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,:  
LEN=12) 0,0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,0,11,:  
Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class  
1172-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[010][011][012][100][110][120][201][210]]$   
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Rules of  $T[L]$ :  
R1) 0,-->0,0,--0,1,--  
R2) 0,0,-->0,0,0,--0,1,--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,--0,1,--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,--0,1,--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,--  
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,--  
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, --0,0,0,0,0,5, --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, --0,0,0,0,0,11, --

R21)

0,0,0,0,0,0,0,10, -->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, :

LEN=12) 0,0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,0,11, :

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

-----Class

1173-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[010][011][012][101][102][110][120][201]]$

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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, --0,0,0,0,0,6, --

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,-->0,0,0,0,0,0,0,0,0,0,0,0,0,--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,--0,0,2,--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,--

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,--0,0,0,0,0,0,0,0,0,0,10,--

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,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--

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,--0,0,2,--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,--0,0,0,0,0,0,0,0,0,0,11,--

R21)

0,0,0,0,0,0,0,0,0,0,10,-->0,1,--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,--

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, :

LEN=12) 0,0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,0,11, :

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

-----Class

1174-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[010][011][012][101][102][110][120][210]]$

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Rules of T[L]:

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

R2) 0,0, -->0,0,0, --0,1, --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) 0,0,0,0,0,0,0,6,-->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,--0,1,--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) 0,0,0,0,0,0,0,0,0,0,9,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--  
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,--0,1,--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,--0,0,0,0,0,0,0,0,0,0,11,--  
R21)  
0,0,0,0,0,0,0,0,0,0,0,10,-->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, :  
LEN=12) 0,0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,0,11, :  
Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,2,

-----Class  
1175-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[010][011][012][101][102][110][201][210]]$

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Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--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,--0,0,0,0,5,--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,--
- 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,--0,0,2,--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,--0,0,0,0,0,0,0,0,0,11,--
- R21) 0,0,0,0,0,0,0,0,0,0,10,-->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,:



LEN=12) 0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,11, :  
Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,2,2,2,

-----Class  
1176-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[\theta 10][\theta 11][\theta 12][1\theta 1][1\theta 2][12\theta][2\theta 1][21\theta]]$

--  
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, --
- 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, --0,0,0,0,0,0,0,8, --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, --0,1, --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,  
0,9, --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, --
- 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, --0,0,0,0,0,0,0,8, --0,0,0,0,0,0,  
0,0,0,9, --0,0,0,0,0,0,0,10, --0,0,0,0,0,0,0,11, --
- R21)  
0,0,0,0,0,0,0,0,0,10, -->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, :  
 LEN=12) 0,0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,0,11, :  
 Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1177-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[010][011][012][101][110][120][201][210]]$

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--

Rules of T[L]:

- R1) 0, -->0,0, --0,1, --
- R2) 0,0, -->0,0,0, --0,1, --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, --



```

0,0,0,0,0,0,0,0,0,-->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,--0,1,--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,--0,0,0,0,0,0,0,
0,9,--0,0,0,0,0,0,0,0,10,--
R19) 0,0,0,0,0,0,0,9,-->0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
R20)
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,
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,
0,0,9,--0,0,0,0,0,0,0,0,10,--0,0,0,0,0,0,0,0,0,0,11,--
R21)
0,0,0,0,0,0,0,0,10,-->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, :
LEN=12) 0,0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,0,11, :
Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,2,2,

```

-----Class  
1179-----

```

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[010][011][021][100][101][102][110][120]]
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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,--0,0,0,0,0,0,0,1,--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,--0,0,0,0,1,--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,--0,0,0,0,0,0,0,0,0,1,--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,--

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,--0,0,0,0,0,0,0,1,--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,-->0,0,0,0,0,0,0,0,0,1,--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,--

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,--0,0,0,0,0,0,0,0,0,0,1,--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,--

R21)  
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,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--

List of different nodes in T[L]

- LEN=1) 0,:
  - LEN=2) 0,0, : 0,1, :
  - LEN=3) 0,0,0, : 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, :
  - LEN=12) 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 : 1,2,2,2,2,2,2,2,2,2,2,2,2,

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[010][011][021][100][101][102][110][201]]$

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Rules of  $T[L]$ :

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
- 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,--0,1,--
- R11) 0,0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--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,-->0,0,0,0,0,0,0,1,--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,--0,0,0,0,0,0,0,0,1,--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,--0,1,--
- 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,--0,1,--
- 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,--0,1,--
- 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,--0,0,0,1,--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,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,1,--
- R19)  
0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,0,1,--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,--
- 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,--0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,1,--
- R21)  
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,--0,0,0,0,1,--0,0,0,1,--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,:

LEN=12) 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 : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1181-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[010][011][021][100][101][102][110][210]]$

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Rules of T[L]:

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

R2) 0,0,-->0,0,0,--0,0,1,--0,1,--

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,--

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,--0,0,0,1,--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,--0,0,0,0,1,--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,--0,0,1,--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)
0,0,0,0,0,0,0,0,0,1,-->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,--0,1,--0,1,--
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,--0,0,0,0,0,0,0,0,0,0,0,1,--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,
,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R21)
0,0,0,0,0,0,0,0,0,0,0,1,-->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,
0,0,1,--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, :
- LEN=12) 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 : 1,2,2,2,2,2,2,2,2,2,2,2,2,2,

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-----Class
1182-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[010][011][021][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,--0,1,--
- 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,--0,1,--  
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,--0,1,--  
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,--0,1,--  
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,--0,0,0,0,1,--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,--0,0,0,0,0,0,1,--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,--0,0,0,0,1,--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,--0,0,0,0,0,0,0,0,0,0,1,--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,--0,0,1,--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,--0,0,0,0,1,--0,0,1,--0,1,--  
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,--0,0,0,0,0,0,0,0,0,0,0,1,--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,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,1,--  
R21)  
0,0,0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--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,--

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, :
- LEN=12) 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 : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1183-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[010][011][021][100][101][102][120][210]$

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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)

$0,0,0,0,0,0, \rightarrow 0,0,0,0,0,0,0, \rightarrow 0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,1, \rightarrow 0,0,0,0,1, \rightarrow 0,0,0,0,1, \rightarrow 0,0,0,1, \rightarrow 0,1, \rightarrow$

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)

$0,0,0,0,0,0,0, \rightarrow 0,0,0,0,0,0,0,0, \rightarrow 0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,1, \rightarrow 0,0,0,0,1, \rightarrow 0,0,0,1, \rightarrow 0,1, \rightarrow$

R13)

$0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,1, \rightarrow 0,0,0,0,1, \rightarrow 0,0,0,1, \rightarrow 0,0,1, \rightarrow 0,1, \rightarrow 0,1, \rightarrow$

R14)

$0,0,0,0,0,0,0,0, \rightarrow 0,0,0,0,0,0,0,0,0, \rightarrow 0,0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,1, \rightarrow 0,0,0,0,1, \rightarrow 0,0,0,1, \rightarrow 0,1, \rightarrow$

R15)

$0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,1, \rightarrow 0,0,0,0,1, \rightarrow 0,0,0,1, \rightarrow 0,1, \rightarrow 0,1, \rightarrow$

R16)

$0,0,0,0,0,0,0,0,0, \rightarrow 0,0,0,0,0,0,0,0,0,0, \rightarrow 0,0,0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,1, \rightarrow 0,0,0,1, \rightarrow 0,1, \rightarrow 0,1, \rightarrow$

--

R17)

$0,0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,1, \rightarrow 0,0,0,0,1, \rightarrow 0,0,0,1, \rightarrow 0,1, \rightarrow 0,1, \rightarrow$

R18)

$0,0,0,0,0,0,0,0,0,0, \rightarrow 0,0,0,0,0,0,0,0,0,0,0, \rightarrow 0,0,0,0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,1, \rightarrow 0,0,0,0,1, \rightarrow 0,0,0,1, \rightarrow 0,1, \rightarrow 0,1, \rightarrow$

R19)

$0,0,0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,1, \rightarrow 0,0,0,0,1, \rightarrow 0,0,0,1, \rightarrow 0,1, \rightarrow 0,1, \rightarrow$

R20)

$0,0,0,0,0,0,0,0,0,0,0, \rightarrow 0,0,0,0,0,0,0,0,0,0,0,0, \rightarrow 0,0,0,0,0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,0,0,1, \rightarrow 0,0,0,0,0,0,1, \rightarrow 0,0,0,0,1, \rightarrow 0,0,0,1, \rightarrow 0,1, \rightarrow 0,1, \rightarrow$

,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,1,--  
R21)  
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,--0,0,1,--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,:
- LEN=12) 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 : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1184-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[010][011][021][100][101][102][201][210]]$

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Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
- 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,-->0,1,--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,--0,0,0,0,0,1,--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,--0,0,0,0,0,0,0,1,--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,-->0,1,--0,0,0,0,0,0,0,  
0,0,0,1,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--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,--

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,--  
0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R20)

0,0,0,0,0,0,0,0,0,0,0,0,-->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,  
,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R21)

0,0,0,0,0,0,0,0,0,0,1,-->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,  
0,0,1,--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,--

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, :

LEN=12) 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 : 1,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1185-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

L=[[010][011][021][100][101][110][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,--0,1,--

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,--0,0,1,--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,--0,0,0,0,0,0,0,0,0,0,1,--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,--  
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,--0,0,0,0,0,0,0,0,0,0,0,1,--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,--0,0,0,0,0,0,0,1,--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)  
0,0,0,0,0,0,0,0,0,0,1,-->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,--0,0,0,0,0,0,0,1,--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, :



0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,1,--  
R20)

0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--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,--

R21)  
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,  
0,0,1,--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,  
--0,1,--

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,:
  - LEN=12) 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 : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class  
1187-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[010][011][021][100][101][110][201][210]]$

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

R20)  
0,0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--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,--0,0,0,0,0,0,1,--0,0,0,  
,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--

R21)  
0,0,0,0,0,0,0,0,0,0,0,1,-->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,  
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,  
,--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, :  
LEN=12) 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 : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1188-----

Inversion Sequences (I<sub>n</sub>=(n+1)!) avoiding  
L=[[010][011][021][100][101][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,--0,1,--  
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,  
0,0,0,1,--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,--0,0,1,--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,--  
,--  
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,--0,0,0,0,0,1,--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,--0,0,0,0,0,0,0,0,0,1,--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,  
,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,--0,0,0,0,0,0,1,--  
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)  
0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--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,  
,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--  
R21)  
0,0,0,0,0,0,0,0,0,0,1,-->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,  
0,0,1,--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, :



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,--

R20)

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,--0,0,0,0,0,0,0,0,0,1,--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,--

R21)

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,--0,0,0,0,0,0,1,--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,:

LEN=12) 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 : 1,2,2,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1190-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[010][011][021][100][102][110][120][210]$

--

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,--

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,--0,0,1,--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,  
 0,1,--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,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--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,--  
 R20)  
 0,0,0,0,0,0,0,0,0,0,0,-->0,1,--0,0,0,  
 0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--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,--  
 R21)  
 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,  
 0,0,1,--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, :
- LEN=12) 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 : 1,2,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1191-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[010][011][021][100][102][110][201][210]]$

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--  
Rules of T[L]:

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

R2) 0,0,-->0,0,0,--0,0,1,--0,1,--

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,-->0,0,0,0,0,0,0,1,--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,-->0,0,0,0,0,0,0,0,1,--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,--

R16)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--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,-->0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,1,--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,--0,0,0,0,0,0,1,--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,-->0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--

R20)

0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--

R21)

0,0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--

R21)

0,0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--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, :  
 LEN=12) 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 : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1192-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[\text{[010] [011] [021] [100] [102] [120] [201] [210]}]$

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Rules of  $T[L]$ :

- R1) 0, -->0,0, --0,1, --
- R2) 0,0, -->0,0,0, --0,0,1, --0,1, --
- 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, --0,0,0,1, --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, --0,0,0,0,0,1, --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,--0,0,1,--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,--

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,--0,0,0,  
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,  
,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R21)

0,0,0,0,0,0,0,0,0,0,1,-->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,--0,0,1,  
,--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,:

LEN=12) 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 : 1,2,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1193-----

Inversion Sequences (I<sub>n</sub>=(n+1)!) avoiding

L=[[010][011][021][100][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,--0,1,--

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,--0,1,--  
 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,--0,1,--  
 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,--0,0,0,0,0,0,0,0,0,1,--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,--0,0,0,0,0,0,0,0,1,--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,--  
 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,--0,0,0,0,0,0,0,0,0,0,0,1,--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,--0,0,0,0,0,0,0,1,--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)  
 0,0,0,0,0,0,0,0,0,0,0,1,-->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,  
 0,0,1,--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, :
- LEN=12) 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 : 1,2,2,2,2,2,2,2,2,2,2,2,



-----Class

1194-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[010][011][021][101][102][110][120][201]]$

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Rules of  $T[L]$ :

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

R2)  $0,0, -->0,0,0, --0,0,1, --0,1, --$

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)

$0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,1, --0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --$

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)

$0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --$

R17)

$0,0,0,0,0,0,0,0,1, -->0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,1, --0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --$

R18)

$0,0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,1, --0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,1, --0,0,1, --0,1, --$

R19)

$0,0,0,0,0,0,0,0,0,1, -->0,0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,1, --0,0,0,0,0,0,1, --0,0,0,0,1, --0,0,0,1, --0,0,1, --$

R20)

$0,0,0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,1, --0,0,0,0,0,0,1, --0,0,0,0,1, --0,0,1, --0,1, --$

R21)

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,  
0,0,1,--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,:

LEN=12) 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 : 1,2,2,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1195-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[010][011][021][101][102][110][120][210]$

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Rules of T[L]:

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

R2) 0,0,-->0,0,0,--0,0,1,--0,1,--

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,--0,1,--

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,-->0,1,--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,--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,--0,0,0,0,0,0,1,--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,-->0,1,--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,--

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,--

R20)

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,  
,0,0,0,1,--0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R21)

0,0,0,0,0,0,0,0,0,0,0,1,-->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,  
0,0,1,--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, :

LEN=12) 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 : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1196-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[\{010\}\{011\}\{021\}\{101\}\{102\}\{110\}\{201\}\{210\}]$

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--

Rules of T[L]:

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

R2) 0,0,-->0,0,0,--0,0,1,--0,1,--

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,-->0,0,0,0,0,0,0,0,1,--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,--  
 0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--  
 R20)  
 0,0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,  
 0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--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,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--  
 R21)  
 0,0,0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,  
 0,0,1,--0,0,0,0,0,0,0,0,1,--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) 0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,0,0,0,0,0,0,0,0,0,0,1,0,  
LEN=12) 0,1,0,  
Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1197-----

Inversion Sequences (I<sub>n</sub>=(n+1)!) avoiding  
L=[[010][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, --
- 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, --0,0,0,0,0,0,0,1, --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, --0,1, --
- 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, --0,0,0,0,1, --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, --0,0,0,0,0,1, --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, --0,0,0,0,1, --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, --0,0,0,0,0,0,0,0,0,1, --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, --
- , --
- 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, --0,0,0,0,0,0,0,1, --0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,1, --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, --0,0,0,0,0,0,0,1, --0,0,0,0,0,0,1, --0,0,0,0,0,1, --0,0,0,0,1, --0,0,1, --0,1, --
- R20)



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

R19)  
0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--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,--

R20)  
0,0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,1,--0,0,1,--0,1,--

R21)  
0,0,0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,1,--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,:
  - LEN=12) 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 : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class  
1199-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[010][011][021][102][110][120][201][210]$

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,--

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,--0,0,0,0,1,--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,--0,1,--  
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,--0,0,0,0,0,0,0,0,0,1,--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,--  
,--  
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,--0,0,0,1,--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,--0,0,0,0,0,0,0,0,0,0,1,--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,-->0,0,0,0,0,0,0,0,0,0,1,--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)  
0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,  
0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,1,--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,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--  
R21)  
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,  
0,0,1,--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, :  
 LEN=12) 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 : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1200-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[010][011][100][101][102][110][120][201]$

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--

Rules of  $T[L]$ :

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--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,--0,0,0,0,0,4,3,--0,0,1,--0,0,2,--
- R23) 0,0,0,0,0,5,-->0,0,2,1,--0,0,0,0,3,2,--0,0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,1,--
- R24) 0,0,0,0,0,4,3,-->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,--0,0,0,0,0,6,--

R27)

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)

0,0,0,0,0,3,-->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)

0,0,0,0,0,4,-->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)

0,0,0,0,0,5,-->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)

0,0,0,0,0,6,-->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,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--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)

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

0,0,0,0,0,0,6,-->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)

0,0,0,0,0,0,7,-->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,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,2,--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)

0,0,0,0,0,0,0,1,-->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,--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,  
0,0,0,0,2,--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,--0,0,0,0,0,0,0,0,2,--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,--0,0,0,0,0,0,0,0,4,--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,-->0,0,2,1,--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,--0,0,0,0,0,0,4,--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,-->0,0,2,1,--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,--

R63)  
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,--0,0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,  
,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,  
0,0,0,8,--0,0,0,0,0,0,0,0,0,0,9,--0,0,0,0,0,0,0,0,0,0,10,--0,0,0,0,0,0,0,0,0,0,  
0,11,--

R64)  
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,  
,--0,0,0,0,0,0,0,0,7,--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,--

R65)  
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,--0,0,0,0,0,0,0,0,9,--

R66)  
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,--0,0,0,0,0,0,3,--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,--0,0,0,0,0,0,0,8,--

R67)  
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,  
,--0,0,0,0,0,0,7,--

R68)  
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,  
0,0,0,1,--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,--

R69)  
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,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--

R70)  
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,--0,0,0,0,0,0,7,6,--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R71)  
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,--0,0,0,0,0,0,7,6,--0,0,0,0,0,0,8,7,--0,0,0,1,--0,0,0,2,--0,0,0,3,-  
-

R72)

0,0,0,0,0,0,0,0,0,0,9,-->0,0,2,1,--0,0,0,3,2,--0,0,0,0,4,3,--0,0,0,0,0,5,4,--0,0,0,0,0,6,5,--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,--0,0,1,--0,0,2,--

R73)

0,0,0,0,0,0,0,0,0,0,10,-->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,--0,0,0,0,0,0,0,8,7,--0,0,0,0,0,0,0,9,8,--0,0,0,0,0,0,0,0,10,9,--0,1,--

R74)

0,0,0,0,0,0,0,0,0,9,8,-->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,--0,0,0,0,0,0,0,8,7,--

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,:

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,: 0,0,0,0,0,0,0,0,0,0,1,: 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,: 0,0,0,0,0,0,0,0,9,8,:

LEN=12) 0,0,0,0,0,0,0,0,0,0,0,0,0,0,: 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,: 0,0,0,0,0,0,0,0,0,0,4,:

0,0,0,0,0,0,0,0,0,0,0,5,: 0,0,0,0,0,0,0,0,0,0,0,6,: 0,0,0,0,0,0,0,0,0,0,7,:

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,:

0,0,0,0,0,0,0,0,0,0,0,11,: 0,0,0,0,0,0,0,0,0,0,10,9,:

Number new nodes in level n is given by : 1,2,3,5,6,7,8,9,10,11,12,13,

-----Class

1201-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[010][011][100][101][102][110][120][210]]$

--

Rules of T[L]:

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

R2) 0,0,-->0,0,0,--0,0,1,--0,0,2,--

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,--0,0,0,0,0,0,0,0,7,1,--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,--0,0,0,0,0,0,0,0,0,0,1,--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,--0,0,0,0,0,0,0,0,4,--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,--0,0,0,0,0,0,0,0,0,8,--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,  
0,4,1,--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,-->0,0,0,0,0,0,0,0,8,1,--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)  
0,0,0,0,0,0,0,0,0,9,-->0,0,0,0,0,0,0,0,9,1,--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,--  
R63)  
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--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,  
0,0,0,8,--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,



0,11,--

R64)

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,--0,0,0,0,0,0,0,0,0,0,3,--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,--

R65)

0,0,0,0,0,0,0,0,0,0,2,-->0,0,2,1,--0,0,0,0,0,0,0,0,0,0,1,--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,--

R66)

0,0,0,0,0,0,0,0,0,0,3,-->0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,0,0,0,0,1,--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,--

R67)

0,0,0,0,0,0,0,0,0,0,4,-->0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,0,0,0,0,1,--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,--

R68)

0,0,0,0,0,0,0,0,0,0,5,-->0,0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,3,1,--0,0,2,1,--0,0,0,0,0,0,0,0,0,0,1,--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,--

R69)

0,0,0,0,0,0,0,0,0,0,6,-->0,0,0,0,0,0,0,6,1,--0,0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,0,3,1,--0,0,0,2,1,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,0,0,0,0,5,--

R70)

0,0,0,0,0,0,0,0,0,0,7,-->0,0,0,0,0,0,0,7,1,--0,0,0,0,0,0,6,1,--0,0,0,0,0,0,5,1,--0,0,0,0,0,4,1,--0,0,0,0,3,1,--0,0,0,2,1,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,0,4,--

R71)

0,0,0,0,0,0,0,0,0,0,8,-->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,--0,0,0,0,0,0,5,1,--0,0,0,0,0,4,1,--0,0,0,0,3,1,--0,0,0,2,1,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,0,3,--

R72)

0,0,0,0,0,0,0,0,0,0,9,-->0,0,0,0,0,0,0,9,1,--0,0,0,0,0,0,8,1,--0,0,0,0,0,0,7,1,--0,0,0,0,0,0,6,1,--0,0,0,0,0,5,1,--0,0,0,0,4,1,--0,0,0,0,3,1,--0,0,0,2,1,--0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,0,2,--

R73)

0,0,0,0,0,0,0,0,0,0,10,-->0,0,0,0,0,0,0,10,1,--0,0,0,0,0,0,9,1,--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,--0,0,0,0,3,1,--0,0,0,2,1,--0,0,0,1,--

R74)

0,0,0,0,0,0,0,0,0,9,1,-->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,--0,0,0,0,3,1,--0,0,0,2,1,--

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,: 0,0,0,0,0,0,0,0,0,0,1,: 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,:  
 LEN=12) 0,0,0,0,0,0,0,0,0,0,0,0,0,0,: 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,:  
 0,0,0,0,0,0,0,0,0,0,0,5,: 0,0,0,0,0,0,0,0,0,0,6,: 0,0,0,0,0,0,0,0,0,0,7,:  
 0,0,0,0,0,0,0,0,0,0,0,8,: 0,0,0,0,0,0,0,0,0,0,0,9,: 0,0,0,0,0,0,0,0,0,0,10,:  
 0,0,0,0,0,0,0,0,0,0,0,11,: 0,0,0,0,0,0,0,0,0,0,10,1,:  
 Number new nodes in level n is given by : 1,2,3,5,6,7,8,9,10,11,12,13,

-----Class

1202-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[010][011][100][101][102][110][201][210]]$

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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,--
- 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,--0,0,0,0,0,0,1,--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,--0,0,0,0,0,0,0,4,--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,--0,0,0,0,0,0,0,0,1,--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,--0,0,0,0,0,0,7,--

R38)

0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--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,--0,0,0,0,0,0,0,0,2,--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,--

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,--0,0,0,0,0,0,0,0,5,--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,--0,0,0,0,0,0,0,0,6,--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,--0,0,0,0,0,0,6,--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,--0,0,0,0,0,0,7,--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,--0,0,2,1,--0,0,0,0,0,0,8,--

R47)

0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--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,--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,--0,0,0,0,0,0,0,0,2,--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,--

R49)

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,--0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,9,--

R50)

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,--



R63)

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,--0,0,2,1,--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,--0,0,0,0,0,0,0,0,0,0,10,--

R64)

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,--0,0,2,1,  
--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,  
,0,0,0,0,0,10,--

R65)

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,  
--0,0,2,1,--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,  
--

R66)

0,0,0,0,0,0,0,0,0,0,9,-->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,--0,0,0,0,0,0,0,0,0,0,9,--0,0,0,0,0,0,0,0,0,10,--

R67)

0,0,0,0,0,0,0,0,0,0,10,-->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,--0,0,2,1,--0,0,0,0,0,0,0,0,0,0,10,--

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, :

LEN=12) 0,0,0,0,0,0,0,0,0,0,0,0, : 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, :

0,0,0,0,0,0,0,0,0,0,0,11, :

Number new nodes in level n is given by : 1,2,3,5,5,6,7,8,9,10,11,12,

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[010][011][100][101][102][120][201][210]]$

- --  
Rules of  $T[L]$ :  
R1)  $0, -->0,0, --0,1, --$   
R2)  $0,0, -->0,0,0, --0,0,1, --0,0,2, --$   
R3)  $0,1, -->0,1, --$   
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)  
 $0,0,0,0,0,0, -->0,0,0,0,0,0,0, --0,0,0,0,0,0,1, --0,0,0,0,0,0,2, --0,0,0,0,0,0,3, --0,0,$   
 $0,0,0,0,4, --0,0,0,0,0,5, --0,0,0,0,0,6, --$   
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)  
 $0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,2, --0,0,0,0,0,0,$   
 $0,3, --0,0,0,0,0,0,0,4, --0,0,0,0,0,0,0,5, --0,0,0,0,0,0,0,6, --0,0,0,0,0,0,0,7, --$   
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)  
 $0,0,0,0,0,0,2, -->0,0,2,1, --0,0,0,0,0,1, --0,0,0,0,0,2, --0,0,0,0,0,3, --0,0,0,0,0,4, --$   
 $0,0,0,0,0,5, --$   
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,--0,0,0,0,0,5,--

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,  
0,2,1, --0,1, --

R47)

0,0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1, --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,  
0,0,0,0,0,0,9, --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,  
0,3, --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, --0,0,0,0,0,0,0,0,1, --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,  
,0,7, --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, --0,0,0,0,0,0,0,1, --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, --0,0,0,0,0,0,0,0,5, --0,0,0,0,0,0,0,0,6, --0,0,0,0,0,0,0,7,  
, --

R51)

0,0,0,0,0,0,0,0,0,4, -->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, --0,0,0,0,0,0,5, --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, --0,0,0,0,0,1, --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)

0,0,0,0,0,0,0,0,0,6, -->0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,0,0,1,  
--0,0,0,0,2, --0,0,0,0,3, --0,0,0,0,4, --

R54)

0,0,0,0,0,0,0,0,0,7, -->0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,2,1, --0,0,2,1, --  
0,0,0,1, --0,0,0,2, --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, --0,0,1, --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, --0,1, --

R57)

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, --0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,3, --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, --0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,6, --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, --0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,9, --0,0,0,0,0,0,0,0,0,0,0,0,10, --0,0,0,0,0,0,0,0,0,0,  
0,11, --

R58)

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,  
0,0,0,0,0,3, --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, --

R59)

0,0,0,0,0,0,0,0,0,0,2, -->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,-  
-0,0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--

R60)

0,0,0,0,0,0,0,0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,1,--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  
,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,8,--

R61)

0,0,0,0,0,0,0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,1,--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,--

R62)

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,--0,0,0,0,0,0,1,--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,--

R63)

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,  
0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--

R64)

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,  
--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R65)

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,--0,0,0,1,--0,0,0,2,--0,0,0,3,--

R66)

0,0,0,0,0,0,0,0,0,0,9,-->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,--0,0,2,--

R67)

0,0,0,0,0,0,0,0,0,0,10,-->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,: 0,0,1,: 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,:  
 LEN=12) 0,0,0,0,0,0,0,0,0,0,0,0,: 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,:  
 0,0,0,0,0,0,0,0,0,0,0,11,:  
 Number new nodes in level n is given by : 1,2,3,5,5,6,7,8,9,10,11,12,

-----Class  
 1204-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[010][011][100][101][110][120][201][210]]$   
 -----

- Rules of T[L]:  
 R1) 0,-->0,0,--0,1,--  
 R2) 0,0,-->0,0,0,--0,0,1,--0,0,2,--  
 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,  
 0,0,0,0,4,--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,--0,0,0,0,0,0,4,--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,--0,0,0,4,--

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,--0,0,0,0,0,0,0,8,--

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,--0,0,0,0,0,0,0,7,--

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,--0,0,0,0,0,0,0,0,0,2,--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,--0,0,0,0,0,0,0,8,--

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,--0,0,0,0,0,0,3,--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,-->0,0,0,0,0,0,0,1,--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,-->0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,  
0,1,--0,0,0,0,2,--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,--0,0,0,0,1,--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)

0,0,0,0,0,0,0,0,7,-->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)

0,0,0,0,0,0,0,0,8,-->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,--0,0,0,0,0,0,0,0,0,0,1,--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,--  
-0,0,0,0,0,0,0,0,0,0,0,6,--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,--  
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,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,  
0,0,0,0,0,0,2,--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,--  
R50)

0,0,0,0,0,0,0,0,0,4,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--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,--0,0,0,0,0,  
,0,6,--  
R51)

0,0,0,0,0,0,0,0,0,5,-->0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,  
1,--0,0,0,0,0,1,--0,0,0,0,0,2,--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,-->0,0,0,0,0,1,--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,--0,0,0,0,2,--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,--0,0,0,0,1,--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,--  
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,--0,1,--  
R56)

0,0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--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,  
,0,0,0,0,0,5,--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,

0,0,0,8, --0,0,0,0,0,0,0,0,0,0,0,9, --0,0,0,0,0,0,0,0,0,0,10, --0,0,0,0,0,0,0,0,0,0,0,11, --

R57)

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, --0,0,0,0,0,0,0,0,0,0,3, --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, --

R58)

0,0,0,0,0,0,0,0,0,0,2, -->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, --0,0,0,0,0,0,0,0,0,0,3, --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, --

R59)

0,0,0,0,0,0,0,0,0,0,3, -->0,0,0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,0,0,0,0,1, --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, --

R60)

0,0,0,0,0,0,0,0,0,0,4, -->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, --0,0,0,0,0,0,0,0,0,0,2, --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, --

R61)

0,0,0,0,0,0,0,0,0,0,5, -->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, --0,0,0,0,0,0,0,0,0,0,2, --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, --

R62)

0,0,0,0,0,0,0,0,0,0,6, -->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, --0,0,0,0,0,0,0,0,0,0,2, --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, --

R63)

0,0,0,0,0,0,0,0,0,0,7, -->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, --0,0,0,0,0,0,0,0,0,0,1, --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, --

R64)

0,0,0,0,0,0,0,0,0,0,8, -->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, --0,0,0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,0,0,0,2, --0,0,0,0,0,0,0,0,0,0,3, --

R65)

0,0,0,0,0,0,0,0,0,0,9, -->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, --0,0,0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,0,0,0,2, --

R66)

0,0,0,0,0,0,0,0,0,0,10, -->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, --0,0,0,0,0,0,0,0,0,0,1, --0,0,0,0,0,0,0,0,0,0,1, --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) 0,0,0, : 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, :

0,0,0,0,0,0,0,4,: 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,:  
 LEN=12) 0,0,0,0,0,0,0,0,0,0,0,0,: 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,:  
 0,0,0,0,0,0,0,0,0,0,0,11,:  
 Number new nodes in level n is given by : 1,2,3,4,5,6,7,8,9,10,11,12,

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1205-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[010][011][100][102][110][120][201][210]]$

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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,  
0,0,0,0,0,5,--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,--0,0,0,0,0,0,0,0,1,--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,--0,0,0,0,0,0,1,--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,--0,0,0,0,0,5,--  
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,--0,0,0,0,0,0,0,0,0,1,--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,--  
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,--0,0,0,0,0,0,0,1,--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,--0,0,0,0,0,0,0,1,--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,--

R42)

0,0,0,0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,1,--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,--

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,--0,0,0,0,0,1,--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,--0,0,2,1,--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,--0,0,2,1,--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,--0,0,2,1,--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,--0,0,0,0,0,0,0,0,0,0,0,0,1,--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,--

R48)

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

0,0,0,0,0,0,0,0,2,-->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)

0,0,0,0,0,0,0,0,3,-->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,--0,0,0,0,0,0,0,3,--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,--

R51)

0,0,0,0,0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--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,--

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,--0,0,0,0,0,0,0,1,--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)

0,0,0,0,0,0,0,0,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R54)

0,0,0,0,0,0,0,0,0,7,-->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,--  
0,0,0,1,--0,0,0,2,--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,--  
0,0,2,1,--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,--0,0,2,1,--0,1,--

R57)

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,--0,0,0,0,0,0,0,0,0,0,0,0,3,--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,--0,0,0,0,0,0,0,0,0,0,0,0,9,--0,0,0,0,0,0,0,0,0,0,0,0,10,--0,0,0,0,0,0,0,0,0,0,0,0,11,--

R58)

0,0,0,0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,0,2,--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,--

R59)

0,0,0,0,0,0,0,0,0,0,2,-->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,--0,0,0,0,0,0,0,0,0,9,--

R60)

0,0,0,0,0,0,0,0,0,0,3,-->0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,0,1,--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,--

R61)

0,0,0,0,0,0,0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,0,1,--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,--

R62)

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,--0,0,0,0,0,0,0,1,--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,--

R63)

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,--0,0,0,0,0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--

R64)

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,--0,0,0,1,--0,0,0,2,--0,0,0,3,--0,0,0,4,--

R65)

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,--0,0,2,1,--0,0,0,1,--0,0,0,2,--0,0,0,3,--

R66)

0,0,0,0,0,0,0,0,0,0,9,-->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,--0,0,1,--0,0,2,--

R67)

0,0,0,0,0,0,0,0,0,0,10,-->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,--0,0,2,1,--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, :  
 LEN=12) 0,0,0,0,0,0,0,0,0,0,0,0, : 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, :  
 0,0,0,0,0,0,0,0,0,0,0,11, :

Number new nodes in level n is given by : 1,2,3,5,5,6,7,8,9,10,11,12,

-----Class

1206-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[010][011][101][102][110][120][201][210]$

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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, --
- 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,  
0,0,0,0,5,--0,0,0,0,0,0,6,--  
R25)  
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,--  
R26)  
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) 0,0,0,0,0,4,-->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) 0,0,0,0,0,5,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,1,--0,0,2,--  
R29) 0,0,0,0,0,6,-->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)  
0,0,0,0,0,0,2,-->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)  
0,0,0,0,0,0,3,-->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)

0,0,0,0,0,0,0,7,-->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,--0,0,0,0,0,0,0,0,0,1,--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,--0,0,2,1,--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,--0,0,2,1,--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,--0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,0,0,4,--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,--

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,--0,0,0,0,0,0,0,0,1,--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,--0,0,0,0,0,0,0,1,--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)

0,0,0,0,0,0,0,0,0,4,-->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,--0,0,0,0,0,0,5,--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,--0,0,0,0,0,1,--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)

0,0,0,0,0,0,0,0,0,6,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,1,  
--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R54)

0,0,0,0,0,0,0,0,0,7,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,2,1,--  
0,0,0,1,--0,0,0,2,--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,--0,0,1,--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,--0,1,--

R57)

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,--0,0,0,0,0,0,0,0,0,0,0,0,3,--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,--0,0,0,0,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,0,0,  
0,0,0,8,--0,0,0,0,0,0,0,0,0,9,--0,0,0,0,0,0,0,0,0,10,--0,0,0,0,0,0,0,0,0,0,0,  
0,11,--

R58)

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,  
,--0,0,0,0,0,0,0,0,7,--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,--

R59)

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,--0,0,0,0,0,0,0,0,9,--

R60)

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,  
,0,0,0,0,0,0,7,--0,0,0,0,0,0,0,8,--

R61)

0,0,0,0,0,0,0,0,0,4,-->0,0,2,1,--0,0,2,1,--0,0,2,1,--0,0,0,0,0,0,0,1,--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,--

R62)

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,--0,0,0,0,0,1,--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,--

R63)

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,  
0,1,--0,0,0,0,0,2,--0,0,0,0,0,3,--0,0,0,0,0,4,--0,0,0,0,0,5,--

R64)

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,  
--0,0,0,0,1,--0,0,0,0,2,--0,0,0,0,3,--0,0,0,0,4,--

R65)  
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,  
--0,0,2,1,--0,0,0,1,--0,0,0,2,--0,0,0,3,--

R66)  
0,0,0,0,0,0,0,0,0,0,9,-->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,--0,0,1,--0,0,2,--

R67)  
0,0,0,0,0,0,0,0,0,0,10,-->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,--0,0,2,1,--0,1,--

List of different nodes in T[L]

- LEN=1) 0, :
- LEN=2) 0,0, : 0,1, :
- LEN=3) 0,0,0, : 0,0,1, : 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, :  
0,0,0,0,0,0,0,0,0,0,0,3, : 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, : 0,0,0,0,0,0,0,0,0,0,0,0,10, :
- LEN=12) 0,0,0,0,0,0,0,0,0,0,0,0, : 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, : 0,0,0,0,0,0,0,0,0,0,0,0,3, : 0,0,0,0,0,0,0,0,0,0,0,0,4, :  
0,0,0,0,0,0,0,0,0,0,0,0,0,5, : 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, :  
0,0,0,0,0,0,0,0,0,0,0,0,0,0,8, : 0,0,0,0,0,0,0,0,0,0,0,0,0,9, : 0,0,0,0,0,0,0,0,0,0,0,0,0,10, :  
0,0,0,0,0,0,0,0,0,0,0,0,0,0,11, :

Number new nodes in level n is given by : 1,2,3,5,5,6,7,8,9,10,11,12,

-----Class  
1207-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[010][012][021][100][101][102][110][120]]$

-----  
--  
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,--
- 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,--  
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,--  
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,--

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, :  
LEN=12) 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

1208-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[010][012][021][100][101][102][110][201]]$

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Rules of T[L]:

R1) 0,-->0,0,--0,1,--  
R2) 0,0,-->0,0,0,--0,1,--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,--  
R10) 1,--



0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--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,--0,1,--0,1,--  
R12)  
0,0,0,0,0,0,0,0,0,0,0,-->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, :  
LEN=12) 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

1209-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[010][012][021][100][101][102][110][210]]$

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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,--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,--  
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,--0,1,--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,--0,1,--0,1,--  
R12)  
0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--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, :
- LEN=12) 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

1210-----

Inversion Sequences (I\_n=(n+1)!) avoiding

L=[[010][012][021][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, --0,1, --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, --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, --

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, :  
 LEN=12) 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  
 1211-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[010][012][021][100][101][102][120][210]$   
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--  
 Rules of T[L]:  
 R1) 0, -->0,0,--0,1,--  
 R2) 0,0, -->0,0,0,--0,1,--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,--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, -->0,0,0,0,0,0,0,0,0,0,0,0,0,--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, -->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--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, :  
 LEN=12) 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

1212-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[010][012][021][100][101][102][201][210]$

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--  
Rules of  $T[L]$ :  
R1)  $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$   
R2)  $0, 0, \rightarrow 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$   
R3)  $0, 1, \rightarrow 0, 1, \rightarrow$   
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)  
 $0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$   
 $1, \rightarrow$   
R10)  
 $0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$   
 $\rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$   
R11)  
 $0, 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$   
 $0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$   
R12)  
 $0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$   
 $1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$   
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)  $0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, :$   
LEN=12)  $0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, :$   
Number new nodes in level  $n$  is given by :  $1, 2, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,$

-----Class  
1213-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[010][012][021][100][101][110][120][201]$

-----  
--  
Rules of  $T[L]$ :  
R1)  $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$   
R2)  $0, 0, \rightarrow 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$

- 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,--
- 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,--0,1,--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,:
  - LEN=12) 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,

-----Class  
1214-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[010][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,--
  - 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,--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,--
R12)
0,0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--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,:
LEN=12) 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
1215-----
Inversion Sequences (In=(n+1)!) avoiding
L=[[010][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,--
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,--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,--
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, :
- 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, :
- LEN=12) 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,

-----Class  
 1216-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[010][012][021][100][101][120][201][210]$

- 
- 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, --
  - 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, --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, --
  - 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, --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, :  
 LEN=12) 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

1217-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[010][012][021][100][102][110][120][201]]$

--

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,--
- 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,--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,--
- 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,--

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, :  
 LEN=12) 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  
1218-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[010][012][021][100][102][110][120][210]]$   
-----

--  
Rules of  $T[L]$ :  
R1)  $0, \rightarrow 0, 0, \rightarrow 0, 1, \rightarrow$   
R2)  $0, 0, \rightarrow 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$   
R3)  $0, 1, \rightarrow 0, 1, \rightarrow$   
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)  
 $0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$   
1, --  
R10)  
 $0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$   
--0, 1, --0, 1, --  
R11)  
 $0, 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$   
0, 1, --0, 1, --0, 1, --0, 1, --  
R12)  
 $0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow 0, 1, \rightarrow$   
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)  $0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, :$   
LEN=12)  $0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, :$   
Number new nodes in level n is given by : 1, 2, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,

-----Class  
1219-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[010][012][021][100][102][110][201][210]]$   
-----

--  
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, --  
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, --  
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, :  
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, :  
LEN=12) 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  
1220-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[010][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, --  
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,--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,:  
 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,:  
 LEN=12) 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  
 1222-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[010][012][021][101][102][110][120][201]]$   
 -----

--  
 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,--  
 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,--  
 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,:

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,:  
 LEN=12) 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

1223-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[\{010\}\{012\}\{021\}\{101\}\{102\}\{110\}\{120\}\{210\}]$

--

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,--
- 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,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--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,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--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,:

LEN=12) 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,

-----Class  
1224-----

Inversion Sequences (I\_n=(n+1)!) avoiding  
L=[[010][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,--  
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,-->0,0,0,0,0,0,0,0,0,0,0,0,--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,--  
R12)  
0,0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--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,  
LEN=12) 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,

-----Class  
1225-----

Inversion Sequences (I\_n=(n+1)!) avoiding  
L=[[010][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,--

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,--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, :

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, :

LEN=12) 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

1226-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[010][012][021][101][110][120][201][210]$

--

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,--

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,--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,--0,1,--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,--0,1,--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,--  
R12) 0,0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--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, :
- LEN=12) 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  
1227-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[010][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,--  
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,--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,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--  
--0,1,--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,--0,0,0,0,0,0,6,--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,--0,0,0,0,0,0,  
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,--0,1,--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  
,--  
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)  
0,0,0,0,0,0,7,6,-->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,--  
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,--0,1,--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,  
0,0,0,9,--0,0,0,0,0,0,0,0,0,10,--0,0,0,0,0,0,0,0,0,11,--  
R28)  
0,0,0,0,0,0,0,0,10,-->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,  
0,0,0,0,0,0,10,9,--0,1,--  
R29)  
0,0,0,0,0,0,0,0,9,8,-->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,--

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) 0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,10,0,0,0,0,0,0,0,0,0,0,0,9,8,0,  
LEN=12) 0,11,0,  
0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,10,9,0,  
Number new nodes in level n is given by : 1,2,2,3,3,3,3,3,3,3,3,3,3,3,

-----Class

1229-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[010][012][100][101][102][110][120][210]]$

-----

--  
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,--
- 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,--0,1,--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,-->0,0,2,1,--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,--



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,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--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,--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,--

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,--

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,--0,0,2,--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,--0,0,0,0,0,0,0,0,0,10,--0,0,0,0,0,0,0,0,0,11,--

R22)  
0,0,0,0,0,0,0,0,0,10,-->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, : 0,0,0,0,0,0,0,0,0,0,10, :
  - LEN=12) 0,0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,0,11, :
- Number new nodes in level n is given by : 1,2,2,3,2,2,2,2,2,2,2,2,

-----Class  
1231-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[010][012][100][101][102][120][201][210]]$

- 
- 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,--
  - 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)  
0,0,0,0,0,0,0,7,-->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,--  
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,--0,0,0,0,0,0,0,8,--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,--0,0,0,0,0,0,0,8,--  
R19)  
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--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,-->0,0,2,1,--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,--  
R21)  
0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--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,--0,0,0,0,0,0,0,0,0,10,--0,0,0,0,0,0,0,0,0,11,--  
R22)  
0,0,0,0,0,0,0,0,0,10,-->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,--0,0,0,0,0,0,0,10,--

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,:  
 LEN=12) 0,0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,0,11,:  
 Number new nodes in level n is given by : 1,2,2,3,2,2,2,2,2,2,2,2,

-----Class

1232-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[010][012][100][101][110][120][201][210]$

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Rules of  $T[L]$ :

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--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,--0,0,0,0,0,0,7,--
- 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,--0,0,0,0,5,--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,-->0,0,2,1,--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,--0,0,0,0,0,0,0,9,--0,0,0,0,0,0,0,10,--
- 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,--0,0,0,0,0,0,7,--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,--0,1,--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)

0,0,0,0,0,0,0,8,-->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,--  
0,0,0,0,5,--0,0,0,0,0,6,--0,0,0,0,0,7,--0,0,0,0,0,8,--0,0,0,0,0,9,  
,0,9,--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,--

R21)

0,0,0,0,0,0,0,0,0,0,-->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,  
,0,9,--0,0,0,0,0,10,--0,0,0,0,11,--

R22)

0,0,0,0,0,0,0,10,-->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,: 0,0,0,0,5,:

LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,6,:

LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,7,:

LEN=9) 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,: 0,0,0,0,9,:

LEN=11) 0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,10,:

LEN=12) 0,0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,11,:

Number new nodes in level n is given by : 1,2,2,3,2,2,2,2,2,2,2,2,

-----Class

1234-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[010][012][101][102][110][120][201][210]]$

-----

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,--  
 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,--0,1,--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) 0,0,0,0,0,0,6,-->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,--0,1,--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,--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,--0,0,0,0,5,--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,--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,--0,0,0,0,0,0,0,0,9,--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,--0,1,--  
 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,--0,1,--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,--0,0,0,0,0,0,0,0,0,11,--  
 R21) 0,0,0,0,0,0,0,0,0,0,10,-->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, : 0,0,2, :
  - 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, :
  - LEN=12) 0,0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,0,11, :
- Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,2,2,2,

-----Class

1235-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[010][021][100][101][102][110][120][201]]$

-----

--  
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,--

R4) 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,--

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,--

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,--0,--

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,--0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,

0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,--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,:

LEN=12) 0,0,0,0,0,0,0,0,0,0,0,0,:

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

-----Class

1236-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[010][021][100][101][102][110][120][210]]$

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

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)

$0,0,0,0,0,0, -->0,0,0,0,0,0,0, --0,0,0,0,0,0, --0,0,0,0,0, --0,0,0,0, --0,0,0, --0, --$

--

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)

$0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0, --0,0,0,0,0,0, --0,0,0,0,0, --0,0,0,0, --0,0,0, --0, --$

R9)

$0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0, --0,0,0,0,0, --0,0,0, --0, --$

R10)

$0,0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,0, --0,0,0,0,0, --0,0,0, --0, --$

R11)

$0,0,0,0,0,0,0,0,0,0,0, -->0,0,0,0,0,0,0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0,0, --0,0,0,0,0,0,0, --0,0,0,0,0, --0,0,0, --0, --$

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)  $0,0,0,0,0,0,0,0,0,0,0, :$

LEN=12)  $0,0,0,0,0,0,0,0,0,0,0,0, :$

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

-----Class

1237-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[010][021][100][101][102][110][201][210]]$

-----

```

--
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,--
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,--0,0,0,--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,--
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,--
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,--
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,--0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,
0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,--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, :
- LEN=12) 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

1238-----  
 Inversion Sequences (I<sub>n</sub>=(n+1)!) avoiding  
 L=[[010][021][100][101][102][120][201][210]]

--  
 Rules of T[L]:

- R1) 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,--  
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,--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,--  
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,--0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,  
0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,--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, :
- LEN=12) 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  
1240-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[010][021][100][102][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,--0,0,--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,







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,--0,0,0,0,0,0,4,--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,--0,0,0,2,--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,--0,0,0,0,0,0,0,0,2,  
--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,--

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,--0,0,0,0,0,0,0,2,--  
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,--

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,  
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,--0,0,0,0,0,0,--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,--  
0,0,0,0,2,--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,--0,0,0,2,--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,--0,0,2,--

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,--

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,  
0,0,0,2,--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,  
,0,0,0,0,0,0,0,0,0,0,6,--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,--0,0,0,0,0,0,0,0,0,0,10,--

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,  
0,0,2,--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,--

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,  
0,0,0,0,2,--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,--

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,--  
0,0,0,0,0,0,2,--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,--

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,--0,0,0,0,0,2,--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,--0,0,0,0,0,  
--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,--  
0,0,0,0,--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,--0,0,0,--0,0,--0,0,2,--



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, :  
 LEN=12) 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, :  
 0,0,0,0,0,0,0,0,0,0,0,6, : 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, : 0,0,0,0,0,0,0,0,0,0,0,11, :  
 Number new nodes in level n is given by : 1,1,2,4,4,5,6,7,8,9,10,11,

-----Class  
 1243-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[011][012][021][100][101][102][110][120]]$   
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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, -->0,1,0, --  
 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, --  
 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, --  
 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, --0,1, --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, :

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, :  
 LEN=12) 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

1244-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[011][012][021][100][101][102][110][201]$

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Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--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,--0,1,--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,--0,1,--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, :



L=[[011][012][021][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,--0,1,--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,--0,1,--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,--0,1,--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,:
  - LEN=12) 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  
1247-----

Inversion Sequences (I<sub>n</sub>=(n+1)!) avoiding  
L=[[011][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,--



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,--  
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,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--  
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, :  
LEN=12) 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  
1248-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[011][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,--  
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,--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,--
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,--0,1,--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,:
LEN=12) 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,

```

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-----Class
1249-----
Inversion Sequences (I_n=(n+1)!) avoiding
L=[[011][012][021][100][101][110][120][201]]
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```

Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,1,--0,1,--
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,-->0,0,0,0,0,0,0,0,0,0,0,0,--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,--
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,--  
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,--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, :  
LEN=12) 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  
1250-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[011][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,--  
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,--  
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,--  
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,--0,1,--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, :  
 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, :  
 LEN=12) 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

1251-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[011][012][021][100][101][110][201][210]]$

-----

--  
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,--
- 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,--0,1,--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,--0,1,--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) 0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,  
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,  
 LEN=12) 0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,  
 Number new nodes in level n is given by : 1,2,2,1,1,1,1,1,1,1,1,1,1,1,

-----Class  
 1252-----

Inversion Sequences (I\_n=(n+1)!) avoiding  
 L=[[011][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,--
- 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,--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,--
- 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,--
- 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,--0,1,--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) 0,0,0,0,0,0,0,0,0,0,0, :
  - LEN=11) 0,0,0,0,0,0,0,0,0,0,0,0, :
  - LEN=12) 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  
 1253-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[011][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,--
  - 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,--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,--
- 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, :
  - LEN=12) 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

1254-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[011][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,--  
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,--  
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,--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, :  
LEN=12) 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  
1255-----  
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[011][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,--  
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,--







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,:  
 LEN=12) 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  
 1258-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[011][012][021][101][102][110][120][201]$

-----  
 --  
 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,--  
 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,--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,--  
 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,:



L=[[011][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,--

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,--

R12)

0,0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--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,:

LEN=12) 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

1261-----

Inversion Sequences (I<sub>n</sub>=(n+1)!) avoiding

L=[[011][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,--

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,--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,--  
 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, :  
 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, :  
 LEN=12) 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  
1262-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[011][012][021][101][110][120][201][210]$

--  
 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,--  
 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,-->0,0,0,0,0,0,0,0,0,0,0,--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,--0,1,--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, :
LEN=12) 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
1263-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[011][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,--
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,--
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, :
- 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, :
- LEN=12) 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

1264-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[011][012][100][101][102][110][120][201]$

-----

--  
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, --
- 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,--0,1,--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,--  
,0,9,--0,0,0,0,0,0,0,0,10,--

R20)  
0,0,0,0,0,0,0,0,9,-->0,1,0,--0,1,--0,0,2,--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,--

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,--0,0,2,--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,--  
,0,0,0,9,--0,0,0,0,0,0,0,0,10,--0,0,0,0,0,0,0,0,11,--

R22)  
0,0,0,0,0,0,0,0,0,10,-->0,1,0,--0,1,--0,0,2,--0,0,0,3,--0,0,0,0,4,--0,0,0,0,5,--  
-0,0,0,0,6,--0,0,0,0,7,--0,0,0,0,8,--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,: 0,0,0,0,0,0,7,:

LEN=9) 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,: 0,0,0,0,0,0,0,9,:

LEN=11) 0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,10,:

LEN=12) 0,0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,11,:

Number new nodes in level n is given by : 1,2,3,2,2,2,2,2,2,2,2,2,

-----Class

1265-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[011][012][100][101][102][110][120][210]$

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Rules of T[L]:

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

R2) 0,0,-->0,0,0,--0,1,--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,-->0,0,0,0,5,0,--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,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--  
R19)  
0,0,0,0,0,0,0,7,-->0,0,0,0,0,0,7,0,--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,--0,0,0,0,0,6,--0,0,0,0,0,0,7,--0,0,0,0,0,0,8,--0,0,0,0,0,0,9,  
,--  
R22)  
0,0,0,0,0,0,0,0,8,-->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,--0,1,--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,--0,0,0,0,0,0,0,0,0,10,--  
R25)  
0,0,0,0,0,0,0,0,9,-->0,0,0,0,0,0,0,9,0,--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)  
0,0,0,0,0,0,0,8,0,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--  
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,--0,0,2,--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,--0,0,0,0,0,0,0,0,0,11,--  
R28)  
0,0,0,0,0,0,0,0,0,10,-->0,0,0,0,0,0,0,0,0,10,0,--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,--  
R29)  
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,--

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,:  
 LEN=12) 0,0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,0,11,:  
 0,0,0,0,0,0,0,0,0,0,10,0,:  
 Number new nodes in level n is given by : 1,2,3,2,3,3,3,3,3,3,3,3,

-----Class

1266-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[011][012][100][101][102][110][201][210]]$

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Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--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,--0,0,0,0,0,0,6,--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,--
- 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,--0,1,--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,--



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,--0,0,0,0,0,0,7,--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,--  
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,--0,0,0,0,0,7,--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,--0,1,0,  
--  
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,--0,1,--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,--0,0,0,0,0,0,0  
,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,--0,1,0,--  
R21)  
0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--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,  
,0,9,--0,0,0,0,0,0,0,0,0,10,--0,0,0,0,0,0,0,0,0,11,--  
R22)  
0,0,0,0,0,0,0,0,0,10,-->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,--  
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, :  
LEN=12) 0,0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,0,11, :  
Number new nodes in level n is given by : 1,2,3,2,2,2,2,2,2,2,2,2,

-----Class

1268-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
L=[[011][012][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,--0,1,--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,--0,1,--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)  
 0,0,0,0,0,0,0,8,-->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,--0,1,--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,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,  
 0,--0,1,0,--  
 R21)  
 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--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,--0,0,0,0,0,0,0,0,0,10,--0,0,0,0,0,0,0,0,0,11,--  
 R22)  
 0,0,0,0,0,0,0,0,0,10,-->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) 0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,9, :  
 LEN=11) 0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,10, :  
 LEN=12) 0,11, :  
 Number new nodes in level n is given by : 1,2,3,2,2,2,2,2,2,2,2,2,2,2,

-----Class  
 1269-----

Inversion Sequences (I\_n=(n+1)!) avoiding  
 L=[[011][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,--
- 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,--0,0,0,0,0,0,8,--
- 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,--0,0,0,0,0,6,--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,--0,0,0,0,0,0,6,--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,--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,--
- R21)
  - 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--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, --0,0,0,0,0,11, --

R22)

0,0,0,0,0,0,0,10, -->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, --

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, :

LEN=12) 0,0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,0,11, :

Number new nodes in level n is given by : 1,2,3,2,2,2,2,2,2,2,2,2,

-----Class

1270-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[011][012][101][102][110][120][201][210]]$

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Rules of T[L]:

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

R2) 0,0, -->0,0,0, --0,1, --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,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,--0,1,--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)
0,0,0,0,0,0,0,0,8,-->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,--0,1,--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)
0,0,0,0,0,0,0,0,0,9,-->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,--0,0,2,1,--
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,--0,1,--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,--0,0,0,0,0,0,0,0,0,0,11,--
R22)
0,0,0,0,0,0,0,0,0,0,10,-->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,--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, :
LEN=12) 0,0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,0,11, :
Number new nodes in level n is given by : 1,2,2,3,2,2,2,2,2,2,2,2,

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-----Class
1271-----
Inversion Sequences ( $I_n=(n+1)!$ ) avoiding
L=[[011][021][100][101][102][110][120][201]]
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Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--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,--0,0,0,0,0,0,0,0,0,1,--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,--0,0,0,0,0,0,0,1,--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,--



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,--0,0,0,0,0,0,0,0,1,--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,--0,0,0,0,0,0,0,0,0,1,--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,--0,0,0,0,0,0,1,2,--

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,--

R29)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,0,1,--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,

,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R30)

0,0,0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,0,0,1,2,--

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,--

R31)

0,0,0,0,0,0,0,0,0,0,1,2,-->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,--0,0,1,2,--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, :
- LEN=12) 0,0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,0,1, :

0,0,0,0,0,0,0,0,0,0,1,2, :  
 Number new nodes in level n is given by : 1,2,4,3,3,3,3,3,3,3,3,3,

-----Class

1273-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[\{011\}\{021\}\{100\}\{101\}\{102\}\{110\}\{201\}\{210\}]$

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--  
 Rules of T[L]:

- R1) 0, -->0,0,--0,1,--
- R2) 0,0, -->0,0,0,--0,0,1,--0,1,--
- 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,--0,0,0,0,0,0,1,--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,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,1,--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,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,1,--0,1,--
- R16) 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,--

0,0,0,0,0,0,0,1,-->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,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--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,--0,1,  
--

R18)

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,--0,0,0,0,0,0,1,--  
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,  
0,0,0,1,--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,--0,0,0,0,0,0,0,0,1,--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,--

R21)

0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--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,--0,0,0,0,0,0,1,--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,--

R22)

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,  
0,0,0,0,0,0,1,--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, :

LEN=12) 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

1274-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding

$L=[[011][021][100][101][102][120][201][210]]$

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Rules of T[L]:

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

R2) 0,0,-->0,0,0,--0,0,1,--0,1,--

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,--0,0,0,0,0,0,1,--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,--0,0,0,0,0,0,0,0,0,1,--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,--  
R29)

0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--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,--0,0,0,0,0,0,0,1,--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,--  
R30)

0,0,0,0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,0,0,0,0,1,2,--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,--  
R31)

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,--0,0,0,0,0,0,1,2,--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, :  
LEN=12) 0,0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,0,1, :

0,0,0,0,0,0,0,0,0,0,1,2, :  
Number new nodes in level n is given by : 1,2,4,3,3,3,3,3,3,3,3,3,3,

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1275-----

Inversion Sequences (I\_n=(n+1)!) avoiding

L=[[011][021][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,--0,1,--  
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,--0,0,0,0,1,--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,--0,0,0,0,0,0,0,0,0,1,--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,-->0,0,0,0,0,0,0,0,1,--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,  
0,0,0,1,--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,-->0,0,0,0,0,0,0,0,0,1,--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,--0,1,2,--  
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,--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,--0,0,0,0,0,0,0,0,1,--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)  
0,0,0,0,0,0,0,0,0,0,1,-->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,--0,0,0,0,0,0,1,--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, : 0,0,0,0,0,0,0,0,0,0,1, :
- LEN=12) 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,





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,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--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,--0,0,0,0,0,1,--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,--0,0,0,0,0,1,2,--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,--0,0,0,0,0,0,0,0,1,2,--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,--

R29)

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,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R30)

0,0,0,0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,1,2,--

R31)

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,--0,0,0,0,0,1,2,--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,:
- LEN=12) 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 : 1,2,4,3,3,3,3,3,3,3,3,3,

-----Class

1277-----  
Inversion Sequences (I\_n=(n+1)!) avoiding  
L=[[011][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,--0,1,0,--  
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,--  
--0,0,1,2,--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,--0,0,0,0,0,0,0,0,1,--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,--  
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,--0,0,1,2,--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,--0,0,0,0,0,0,0,0,0,1,--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,  
--  
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,--0,0,0,0,0,1,2,--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,--0,0,0,0,0,0,0,0,0,1,--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,--  
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,  
0,0,0,0,1,2,--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,--

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,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,1,2,--0,1,0,--

R28)

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,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R29)

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,--0,0,0,0,0,0,1,2,--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,--0,0,1,2,--0,1,0,--

R30)

0,0,0,0,0,0,0,0,0,0,1,2,-->0,0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,0,1,2,--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,--0,0,0,0,0,1,2,--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, :

LEN=12) 0,0,0,0,0,0,0,0,0,0,0,0, : 0,0,0,0,0,0,0,0,0,0,0,1, :

0,0,0,0,0,0,0,0,0,0,0,1,2, :

Number new nodes in level n is given by : 1,2,3,3,3,3,3,3,3,3,3,3,

-----Class

1278-----

Inversion Sequences (I<sub>n</sub>=(n+1)!) avoiding

L=[[011][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,--0,1,2,--

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,--0,0,0,0,0,0,1,--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,--0,0,0,0,0,0,0,0,8,--  
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,--0,0,0,0,0,0,0,0,0,0,1,--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,--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,--0,0,0,0,0,0,0,0,3,--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,-->0,1,0,--0,1,0,--0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,1,--0,0,  
0,0,0,0,0,2,--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,--0,0,0,0,0,0,0,6  
,--0,0,0,0,0,0,0,0,7,--

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,--  
0,0,0,0,0,0,2,--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,--0,0,0,0,0,1,2,--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,--0,0,0,0,1,2,  
--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,--0,0,  
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,--0,0,1,2,--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,--0,1,2,--

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,--

R65)

0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,--0,0,0,  
0,0,0,0,0,0,0,0,2,--0,0,0,0,0,0,0,0,0,0,0,3,--0,0,0,0,0,0,0,0,0,0,4,--0,0,0,0,0,0,  
,0,0,0,0,0,5,--0,0,0,0,0,0,0,0,0,0,0,6,--0,0,0,0,0,0,0,0,0,0,7,--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,--0,0,0,0,0,0,0,0,0,0,  
0,11,--

R66)

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,  
0,0,0,0,0,0,0,0,2,--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,--

R67)

0,0,0,0,0,0,0,0,0,2,-->0,1,0,--0,1,0,--0,0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,0,1,  
--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,--

R68)

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,

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,--

R69)

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,--0,0,0,0,0,0,1,--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,--

R70)

0,0,0,0,0,0,0,0,5,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,0,0,0,0,1,2,--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,--

R71)

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,--0,0,0,0,0,0,1,2,--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,--

R72)

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,--0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--0,0,0,0,0,0,3,--

R73)

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,--0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--

R74)

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,--0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--

R75)

0,0,0,0,0,0,0,0,10,-->0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,1,0,--0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,--0,0,0,0,0,0,2,--

R76)

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,--0,0,0,0,0,0,0,0,4,--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,: 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,:

0,0,0,0,0,1,2,:

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,:

0,0,0,0,0,0,7,:

0,0,0,0,0,0,1,2,:

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,:

0,0,0,0,0,0,0,8,:

0,0,0,0,0,0,0,9,:

0,0,0,0,0,0,0,1,2,:

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,:

0,0,0,0,0,0,0,0,1,2,:



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,:  
 LEN=12) 0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,:  
 0,0,0,0,0,0,0,0,0,0,0,0,2,: 0,0,0,0,0,0,0,0,0,0,0,3,: 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,: 0,0,0,0,0,0,0,0,0,0,0,6,: 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,:  
 0,0,0,0,0,0,0,0,0,0,0,0,11,: 0,0,0,0,0,0,0,0,0,0,0,1,2,:  
 Number new nodes in level n is given by : 1,2,5,5,6,7,8,9,10,11,12,13,

-----Class  
 1279-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[012][021][100][101][102][110][120][201]]$   
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--  
 Rules of T[L]:  
 R1) 0,-->0,0,--0,1,--  
 R2) 0,0,-->0,0,0,--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,--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,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--  
 0,1,--0,1,--0,1,--0,1,--  
 R14)  
 0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,--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, :



L=[[012][021][100][101][102][110][201][210]]

-----  
--  
Rules of T[L]:

- R1) 0,-->0,0,--0,1,--
- R2) 0,0,-->0,0,0,--0,1,--0,1,--
- 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,--
- R13) 0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--0,1,--
- R14) 0,0,0,0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,0,0,0,--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,:
  - LEN=11) 0,0,0,0,0,0,0,0,0,0,0,:
  - LEN=12) 0,0,0,0,0,0,0,0,0,0,0,0,:
- Number new nodes in level n is given by : 1,2,3,1,1,1,1,1,1,1,1,1,1,

-----Class

1282-----  
Inversion Sequences (I<sub>n</sub>=(n+1)!) avoiding  
L=[[012][021][100][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,--0,1,--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,--  
 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,--  
 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,--  
 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, :  
 LEN=12) 0,0,0,0,0,0,0,0,0,0,0,0, :  
 Number new nodes in level n is given by : 1,2,2,1,1,1,1,1,1,1,1,1,1,1,1,

-----Class  
 1283-----  
 Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[[012][021][100][101][110][120][201][210]]$   
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--  
 Rules of T[L]:  
 R1) 0,-->0,0,--0,1,--  
 R2) 0,0,-->0,0,0,--0,1,--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,--  
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,--  
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,--0,1,--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, :  
LEN=12) 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

1284-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[012][021][100][102][110][120][201][210]$

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--

Rules of T[L]:

R1) 0,-->0,0,--0,1,--  
R2) 0,0,-->0,0,0,--0,1,--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,--  
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,--



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, :  
 LEN=12) 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

1286-----

Inversion Sequences ( $I_n=(n+1)!$ ) avoiding  
 $L=[012][100][101][102][110][120][201][210]$

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--

Rules of T[L]:

- R1) 0, -->0,0, --0,1, --
- R2) 0,0, -->0,0,0, --0,1, --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, --0,0,0,0,0,6, --
- 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, --0,0,0,0,0,0,6, --0,0,0,0,0,0,0,7, --
- 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, --0,0,0,0,0,0,6, --0,0,0,0,0,0,0,7, --0,0,0,0,0,0,0,0,8, --
- 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, --0,1,0, --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, --0,0,0,0,0,0,6, --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, --
- R19)





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,--  
0,1,2,--  
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,--  
--  
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,--  
0,0,0,0,1,1,--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,--  
0,0,0,1,--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,--0,0,0,1,--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,--  
0,0,0,0,1,1,--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,-->0,0,0,0,0,0,0,0,0,1,1,--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,--

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,--0,0,0,0,0,0,0,0,0,0,0,1,--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,--0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R31)

0,0,0,0,0,0,0,0,0,0,0,1,-->0,1,0,--0,0,0,0,0,0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,0,1,1,--0,0,0,0,0,1,1,--0,0,0,0,1,1,--0,0,1,1,--0,1,1,--0,1,2,--

R32)

0,0,0,0,0,0,0,0,0,1,1,-->0,0,0,0,0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,0,0,1,1,--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,--0,0,1,1,--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,:

LEN=12) 0,0,0,0,0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,0,0,0,1,:

0,0,0,0,0,0,0,0,0,0,0,1,1,:

Number new nodes in level n is given by : 1,2,5,3,3,3,3,3,3,3,3,3,3,