----------Class 1----------
Inversion Sequences (I_n=(n+1)!) avoiding L=[[021][0000]]

--
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,-->0,0,1,--0,1,1,--0,1,--
R4) 0,0,0,-->0,0,0,1,--0,0,0,2,--0,0,0,3,--
R5) 0,0,1,-->0,0,0,1,--0,0,1,1,--0,0,1,--0,0,2,--
R6) 0,0,2,-->0,0,0,2,--0,0,2,2,--0,0,2,--
R7) 0,1,1,-->0,0,1,1,--0,1,1,1,--0,1,1,2,--0,1,--
R8) 0,0,0,1,-->0,0,0,1,1,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
R9) 0,0,0,2,-->0,0,0,2,2,--0,0,0,2,--0,0,0,3,--
R10) 0,0,0,3,-->0,0,0,3,3,--0,0,0,3,--
R11) 0,0,1,1,-->0,0,0,1,1,--0,0,1,1,1,--0,0,1,1,2,--0,0,1,--0,0,2,--
R12) 0,0,2,2,-->0,0,0,2,2,--0,0,2,2,2,--0,0,1,--0,0,2,--
R13) 0,1,1,1,-->0,0,1,1,1,--0,1,1,1,2,--0,1,1,2,--0,1,--
R14) 0,1,1,2,-->0,0,1,1,2,--0,1,1,2,2,--0,1,1,2,--0,1,--
R15) 0,0,0,1,1,-->0,0,0,1,1,1,--0,0,0,1,1,2,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
R16) 0,0,0,2,2,-->0,0,0,2,2,2,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
R17) 0,0,0,3,3,-->0,0,0,--0,0,0,2,--0,0,0,3,--
R18) 0,0,1,1,1,-->0,0,0,1,1,1,--0,0,1,1,1,2,--0,0,1,1,2,--0,0,1,--0,0,2,--
R19) 0,0,1,1,2,-->0,0,0,1,1,2,--0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,--0,0,2,--
R20) 0,0,2,2,2,-->0,0,0,2,2,2,--0,0,1,1,2,--0,0,1,--0,0,2,--
R21) 0,1,1,1,2,-->0,0,1,1,1,2,--0,1,1,1,2,2,--0,1,1,1,2,--0,1,1,2,--0,1,--
R22) 0,1,1,2,2,-->0,0,1,1,2,2,--0,1,1,2,2,2,--0,1,1,1,2,--0,1,1,2,--0,1,--
R23) 0,0,0,1,1,1,-->0,0,0,1,1,1,2,--0,0,0,1,1,2,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
R24) 0,0,0,1,1,2,-->0,0,0,1,1,2,2,--0,0,0,1,1,2,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
R25) 0,0,0,2,2,2,-->0,0,0,1,1,2,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
R26)
0,0,1,1,1,2,-->0,0,0,1,1,1,2,--0,0,1,1,1,2,2,--0,0,1,1,1,2,--0,0,1,1,2,--0,0,1,--0,
0,2,--
R27)
0,0,1,1,2,2,-->0,0,0,1,1,2,2,--0,0,1,1,2,2,2,--0,0,1,1,1,2,--0,0,1,1,2,--0,0,1,--0,
0,2,--
R28)
0,1,1,1,2,2,-->0,0,1,1,1,2,2,--0,1,1,1,2,2,2,--0,1,1,1,2,2,3,--0,1,1,1,2,--0,1,1,2,
--0,1,--
R29) 0,1,1,2,2,2,-->0,0,1,1,2,2,2,--0,1,1,1,2,2,3,--0,1,1,1,2,--0,1,1,2,--0,1,--
R30)
0,0,0,1,1,1,2,-->0,0,0,1,1,1,2,2,--0,0,0,1,1,1,2,--0,0,0,1,1,2,--0,0,0,1,--0,0,0,2,
--0,0,0,3,--
R31)
0,0,0,1,1,2,2,-->0,0,0,1,1,2,2,2,--0,0,0,1,1,1,2,--0,0,0,1,1,2,--0,0,0,1,--0,0,0,2,
--0,0,0,3,--
R32)
0,0,1,1,1,2,2,-->0,0,0,1,1,1,2,2,--0,0,1,1,1,2,2,2,--0,0,1,1,1,2,2,3,--0,0,1,1,1,2,
--0,0,1,1,2,--0,0,1,--0,0,2,--
R33)

0,0,1,1,2,2,2,-->0,0,0,1,1,2,2,2,--0,0,1,1,1,2,2,3,--0,0,1,1,1,2,--0,0,1,1,2,--0,0,
1,--0,0,2,--
R34)
0,1,1,1,2,2,2,-->0,0,1,1,1,2,2,2,--0,1,1,1,2,2,2,3,--0,1,1,1,2,2,3,--0,1,1,1,2,--0,
1,1,2,--0,1,--
R35)
0,1,1,1,2,2,3,-->0,0,1,1,1,2,2,3,--0,1,1,1,2,2,3,3,--0,1,1,1,2,2,3,--0,1,1,1,2,--0,
1,1,2,--0,1,--
R36)
0,0,0,1,1,1,2,2,-->0,0,0,1,1,1,2,2,2,--0,0,0,1,1,1,2,2,3,--0,0,0,1,1,1,2,--0,0,0,1,
1,2,--0,0,0,1,--0,0,0,2,--0,0,0,3,--
R37)
0,0,0,1,1,2,2,2,-->0,0,0,1,1,1,2,2,3,--0,0,0,1,1,1,2,--0,0,0,1,1,2,--0,0,0,1,--0,0,
0,2,--0,0,0,3,--
R38)
0,0,1,1,1,2,2,2,-->0,0,0,1,1,1,2,2,2,--0,0,1,1,1,2,2,2,3,--0,0,1,1,1,2,2,3,--0,0,1,
1,1,2,--0,0,1,1,2,--0,0,1,--0,0,2,--
R39)
0,0,1,1,1,2,2,3,-->0,0,0,1,1,1,2,2,3,--0,0,1,1,1,2,2,3,3,--0,0,1,1,1,2,2,3,--0,0,1,
1,1,2,--0,0,1,1,2,--0,0,1,--0,0,2,--
R40)
0,1,1,1,2,2,2,3,-->0,0,1,1,1,2,2,2,3,--0,1,1,1,2,2,2,3,3,--0,1,1,1,2,2,2,3,--0,1,1,
1,2,2,3,--0,1,1,1,2,--0,1,1,2,--0,1,--
R41)
0,1,1,1,2,2,3,3,-->0,0,1,1,1,2,2,3,3,--0,1,1,1,2,2,3,3,3,--0,1,1,1,2,2,2,3,--0,1,1,
1,2,2,3,--0,1,1,1,2,--0,1,1,2,--0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,0,: 0,0,1,: 0,0,2,: 0,1,1,:
LEN=4) 0,0,0,1,: 0,0,0,2,: 0,0,0,3,: 0,0,1,1,: 0,0,2,2,: 0,1,1,1,: 0,1,1,2,:
LEN=5) 0,0,0,1,1,: 0,0,0,2,2,: 0,0,0,3,3,: 0,0,1,1,1,: 0,0,1,1,2,: 0,0,2,2,2,:
0,1,1,1,2,: 0,1,1,2,2,:
LEN=6) 0,0,0,1,1,1,: 0,0,0,1,1,2,: 0,0,0,2,2,2,: 0,0,1,1,1,2,: 0,0,1,1,2,2,:
0,1,1,1,2,2,: 0,1,1,2,2,2,:
LEN=7) 0,0,0,1,1,1,2,: 0,0,0,1,1,2,2,: 0,0,1,1,1,2,2,: 0,0,1,1,2,2,2,:
0,1,1,1,2,2,2,: 0,1,1,1,2,2,3,:
LEN=8) 0,0,0,1,1,1,2,2,: 0,0,0,1,1,2,2,2,: 0,0,1,1,1,2,2,2,: 0,0,1,1,1,2,2,3,:
0,1,1,1,2,2,2,3,: 0,1,1,1,2,2,3,3,:
LEN=9) 0,0,0,1,1,1,2,2,2,: 0,0,0,1,1,1,2,2,3,: 0,0,1,1,1,2,2,2,3,:
0,0,1,1,1,2,2,3,3,: 0,1,1,1,2,2,2,3,3,: 0,1,1,1,2,2,3,3,3,:
Number new nodes in level n is given by : 1,2,4,7,8,7,6,6,6,

----------Class 2----------
Inversion Sequences (I_n=(n+1)!) avoiding L=[[021][0001]]

--
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,-->0,0,1,--0,1,1,--0,1,--
R4) 0,0,0,-->0,0,0,--
R5) 0,0,1,-->0,0,0,--0,0,1,1,--0,0,1,--0,0,2,--
R6) 0,0,2,-->0,0,0,--0,0,2,2,--0,0,2,--
R7) 0,1,1,-->0,0,1,1,--0,1,1,1,--0,1,1,2,--0,1,--
R8) 0,0,1,1,-->0,0,0,--0,0,1,1,1,--0,0,1,1,2,--0,0,1,--0,0,2,--
R9) 0,0,2,2,-->0,0,0,--0,0,1,1,1,--0,0,1,--0,0,2,--
R10) 0,1,1,1,-->0,0,1,1,1,--0,1,1,1,--
R11) 0,1,1,2,-->0,0,1,1,2,--0,1,1,2,2,--0,1,1,2,--0,1,--
R12) 0,0,1,1,1,-->0,0,0,--0,0,1,1,1,--
R13) 0,0,1,1,2,-->0,0,0,--0,0,1,1,2,2,--0,0,1,1,2,--0,0,1,--0,0,2,--
R14) 0,1,1,2,2,-->0,0,1,1,2,2,--0,1,1,1,--0,1,1,2,2,3,--0,1,1,2,--0,1,--
R15)
0,0,1,1,2,2,-->0,0,0,--0,0,1,1,1,--0,0,1,1,2,2,3,--0,0,1,1,2,--0,0,1,--0,0,2,--
R16) 0,1,1,2,2,3,-->0,0,1,1,2,2,3,--0,1,1,2,2,3,3,--0,1,1,2,2,3,--0,1,1,2,--0,1,--
R17)
0,0,1,1,2,2,3,-->0,0,0,--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,--
R18)
0,1,1,2,2,3,3,-->0,0,1,1,2,2,3,3,--0,1,1,1,--0,1,1,2,2,3,3,4,--0,1,1,2,2,3,--0,1,1,
2,--0,1,--
R19)
0,0,1,1,2,2,3,3,-->0,0,0,--0,0,1,1,1,--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,--
R20)
0,1,1,2,2,3,3,4,-->0,0,1,1,2,2,3,3,4,--0,1,1,2,2,3,3,4,4,--0,1,1,2,2,3,3,4,--0,1,1,
2,2,3,--0,1,1,2,--0,1,--
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,: 0,1,1,:
LEN=4) 0,0,1,1,: 0,0,2,2,: 0,1,1,1,: 0,1,1,2,:
LEN=5) 0,0,1,1,1,: 0,0,1,1,2,: 0,1,1,2,2,:
LEN=6) 0,0,1,1,2,2,: 0,1,1,2,2,3,:
LEN=7) 0,0,1,1,2,2,3,: 0,1,1,2,2,3,3,:
LEN=8) 0,0,1,1,2,2,3,3,: 0,1,1,2,2,3,3,4,:
LEN=9) 0,0,1,1,2,2,3,3,4,: 0,1,1,2,2,3,3,4,4,:
 Number new nodes in level n is given by : 1,2,4,4,3,2,2,2,2,

----------Class 3----------
Inversion Sequences (I_n=(n+1)!) avoiding L=[[021][0010]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,0,--0,0,2,--
R3) 0,1,-->0,0,0,--0,1,1,--0,1,--
R4) 0,0,0,-->0,0,0,0,--0,0,0,--0,0,--0,0,2,--
R5) 0,0,2,-->0,0,--0,0,2,--
R6) 0,1,1,-->0,0,0,0,--0,1,1,1,--0,1,1,--0,1,--

R7) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,0,2,--
R8) 0,1,1,1,-->0,0,0,0,0,--0,1,1,1,1,--0,1,1,1,--0,1,1,--0,1,--
R9) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,0,2,--
R10) 0,1,1,1,1,-->0,0,0,0,0,0,--0,1,1,1,1,1,--0,1,1,1,1,--0,1,1,1,--0,1,1,--0,1,--
R11)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,
0,2,--
R12)
0,1,1,1,1,1,-->0,0,0,0,0,0,0,--0,1,1,1,1,1,1,--0,1,1,1,1,1,--0,1,1,1,1,--0,1,1,1,--
0,1,1,--0,1,--
R13)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,
0,--0,0,0,--0,0,--0,0,2,--
R14)
0,1,1,1,1,1,1,-->0,0,0,0,0,0,0,0,--0,1,1,1,1,1,1,1,--0,1,1,1,1,1,1,--0,1,1,1,1,1,--
0,1,1,1,1,--0,1,1,1,--0,1,1,--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,--0,0,0,0,0,0,0,--0,0,0,0,0,
0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,0,2,--
R16)
0,1,1,1,1,1,1,1,-->0,0,0,0,0,0,0,0,0,0,--0,1,1,1,1,1,1,1,1,--0,1,1,1,1,1,1,1,--0,1,1,
1,1,1,1,--0,1,1,1,1,1,--0,1,1,1,1,--0,1,1,1,--0,1,1,--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,: 0,1,1,:
LEN=4) 0,0,0,0,: 0,1,1,1,:
LEN=5) 0,0,0,0,0,: 0,1,1,1,1,:
LEN=6) 0,0,0,0,0,0,: 0,1,1,1,1,1,:
LEN=7) 0,0,0,0,0,0,0,: 0,1,1,1,1,1,1,:
LEN=8) 0,0,0,0,0,0,0,0,: 0,1,1,1,1,1,1,1,:
LEN=9) 0,0,0,0,0,0,0,0,0,: 0,1,1,1,1,1,1,1,1,:
 Number new nodes in level n is given by : 1,2,3,2,2,2,2,2,2,

----------Class 4----------
Inversion Sequences (I_n=(n+1)!) avoiding L=[[021][0011]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,0,--0,0,2,--
R3) 0,1,-->0,0,0,--0,1,1,--0,1,--
R4) 0,0,0,-->0,0,0,0,--0,0,0,--0,0,--0,0,2,--
R5) 0,0,2,-->0,0,--0,0,2,--
R6) 0,1,1,-->0,0,0,0,--0,1,1,1,--0,0,--0,0,2,--
R7) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,0,2,--
R8) 0,1,1,1,-->0,0,0,0,0,--0,1,1,1,1,--0,0,0,--0,0,--0,0,2,--
R9) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,0,2,--
R10) 0,1,1,1,1,-->0,0,0,0,0,0,--0,1,1,1,1,1,--0,0,0,0,--0,0,0,--0,0,--0,0,2,--
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,
0,2,--
R12)
0,1,1,1,1,1,-->0,0,0,0,0,0,0,0,--0,1,1,1,1,1,1,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--
0,0,2,--
R13)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,0,
0,--0,0,0,--0,0,--0,0,2,--
R14)
0,1,1,1,1,1,1,-->0,0,0,0,0,0,0,0,0,--0,1,1,1,1,1,1,1,--0,0,0,0,0,0,--0,0,0,0,0,--0,0,
0,0,--0,0,0,--0,0,--0,0,2,--
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,--0,0,0,0,0,0,0,--0,0,0,0,0,
0,--0,0,0,0,0,--0,0,0,0,--0,0,0,--0,0,--0,0,2,--
R16)
0,1,1,1,1,1,1,1,-->0,0,0,0,0,0,0,0,0,0,--0,1,1,1,1,1,1,1,1,--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,--0,0,2,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,0,: 0,0,2,: 0,1,1,:
LEN=4) 0,0,0,0,: 0,1,1,1,:
LEN=5) 0,0,0,0,0,: 0,1,1,1,1,:
LEN=6) 0,0,0,0,0,0,: 0,1,1,1,1,1,:
LEN=7) 0,0,0,0,0,0,0,: 0,1,1,1,1,1,1,:
LEN=8) 0,0,0,0,0,0,0,0,: 0,1,1,1,1,1,1,1,:
LEN=9) 0,0,0,0,0,0,0,0,0,: 0,1,1,1,1,1,1,1,1,:
 Number new nodes in level n is given by : 1,2,3,2,2,2,2,2,2,

----------Class 5----------
Inversion Sequences (I_n=(n+1)!) avoiding L=[[021][0012]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,0,1,--0,0,1,--
R3) 0,1,-->0,0,0,--0,1,1,--0,1,--
R4) 0,0,0,-->0,0,0,0,--0,0,1,--0,0,1,--0,0,1,--
R5) 0,0,1,-->0,0,1,--0,0,1,--
R6) 0,1,1,-->0,0,0,0,--0,1,1,1,--0,0,1,--0,0,1,--
R7) 0,0,0,0,-->0,0,0,0,0,--0,0,1,--0,0,1,--0,0,1,--0,0,1,--
R8) 0,1,1,1,-->0,0,0,0,0,--0,1,1,1,1,--0,0,1,--0,0,1,--0,0,1,--
R9) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,1,--0,0,1,--0,0,1,--0,0,1,--0,0,1,--
R10) 0,1,1,1,1,-->0,0,0,0,0,0,--0,1,1,1,1,1,--0,0,1,--0,0,1,--0,0,1,--0,0,1,--
R11)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,1,--0,0,1,--0,0,1,--0,0,1,--0,0,1,--0,0,1,--
R12)
0,1,1,1,1,1,-->0,0,0,0,0,0,0,--0,1,1,1,1,1,1,--0,0,1,--0,0,1,--0,0,1,--0,0,1,--0,0,
1,--
R13)

0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,1,--0,0,1,--0,0,1,--0,0,1,--0,0,1,--0,0,1,--
0,0,1,--
R14)
0,1,1,1,1,1,1,-->0,0,0,0,0,0,0,0,0,--0,1,1,1,1,1,1,1,--0,0,1,--0,0,1,--0,0,1,--0,0,1,
--0,0,1,--0,0,1,--
R15)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,0,--0,0,1,--0,0,1,--0,0,1,--0,0,1,--0,0,1,--0,0,
1,--0,0,1,--0,0,1,--
R16)
0,1,1,1,1,1,1,1,-->0,0,0,0,0,0,0,0,0,0,--0,1,1,1,1,1,1,1,1,--0,0,1,--0,0,1,--0,0,1,--
0,0,1,--0,0,1,--0,0,1,--0,0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,0,: 0,0,1,: 0,1,1,:
LEN=4) 0,0,0,0,: 0,1,1,1,:
LEN=5) 0,0,0,0,0,: 0,1,1,1,1,:
LEN=6) 0,0,0,0,0,0,: 0,1,1,1,1,1,:
LEN=7) 0,0,0,0,0,0,0,: 0,1,1,1,1,1,1,:
LEN=8) 0,0,0,0,0,0,0,0,: 0,1,1,1,1,1,1,1,:
LEN=9) 0,0,0,0,0,0,0,0,0,: 0,1,1,1,1,1,1,1,1,:
 Number new nodes in level n is given by : 1,2,3,2,2,2,2,2,2,

----------Class 6----------
Inversion Sequences (I_n=(n+1)!) avoiding L=[[021][0100]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
R3) 0,1,-->0,1,0,--0,0,1,--0,1,--
R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
R5) 0,0,1,-->0,0,1,0,--0,0,0,1,--0,0,1,--0,1,--
R6) 0,1,0,-->0,0,1,0,--0,1,0,--0,1,0,3,--
R7) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R8) 0,0,0,1,-->0,0,0,1,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R9) 0,0,1,0,-->0,0,0,1,0,--0,0,1,0,--0,1,0,--0,1,0,3,--
R10) 0,1,0,3,-->0,1,0,--0,1,0,3,--
R11) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R12) 0,0,0,0,1,-->0,0,0,0,1,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R13) 0,0,0,1,0,-->0,0,0,0,1,0,--0,0,0,1,0,--0,0,1,0,--0,1,0,--0,1,0,3,--
R14)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
0,0,1,--0,1,--
R15)
0,0,0,0,0,1,-->0,0,0,0,0,1,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
0,0,1,--0,1,--
R16)
0,0,0,0,1,0,-->0,0,0,0,0,1,0,--0,0,0,0,1,0,--0,0,0,1,0,--0,0,1,0,--0,1,0,--0,1,0,3,
--

R17)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--
0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R18)
0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,0,--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)
0,0,0,0,0,1,0,-->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,--0,1,0,3,--
R20)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,
0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R21)
0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,0,--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,--
R22)
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,--0,1,0,3,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,0,: 0,0,1,: 0,1,0,:
LEN=4) 0,0,0,0,: 0,0,0,1,: 0,0,1,0,: 0,1,0,3,:
LEN=5) 0,0,0,0,0,: 0,0,0,0,1,: 0,0,0,1,0,:
LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,1,: 0,0,0,0,1,0,:
LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,1,: 0,0,0,0,0,1,0,:
LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,1,0,:
LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,1,0,:
 Number new nodes in level n is given by : 1,2,3,4,3,3,3,3,3,

----------Class 7----------
Inversion Sequences (I_n=(n+1)!) avoiding L=[[021][0101]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
R3) 0,1,-->0,0,--0,0,1,--0,1,--
R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
R5) 0,0,1,-->0,0,0,--0,0,0,1,--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,-->0,0,0,0,--0,0,0,0,1,--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,-->0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R10)
0,0,0,0,0,0,-->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,-->0,0,0,0,0,0,--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)
0,0,0,0,0,0,0,-->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,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--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,-->0,0,0,0,0,0,0,0,0,--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,--
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,:
 Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,

----------Class 8----------
Inversion Sequences (I_n=(n+1)!) avoiding L=[[021][0102]]

Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
R3) 0,1,-->0,1,0,--0,0,1,--0,1,2,--
R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
R5) 0,0,1,-->0,1,0,--0,0,0,1,--0,0,1,2,--0,1,2,--
R6) 0,1,0,-->0,1,0,--0,1,0,--
R7) 0,1,2,-->0,1,2,0,--0,0,1,2,--0,1,2,--
R8) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R9) 0,0,0,1,-->0,1,0,--0,0,0,0,1,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R10) 0,0,1,2,-->0,1,2,0,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R11) 0,1,2,0,-->0,1,2,0,--
R12) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R13)
0,0,0,0,1,-->0,1,0,--0,0,0,0,0,1,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R14) 0,0,0,1,2,-->0,1,2,0,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--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,--0,0,0,0,0,0,1,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,
0,1,2,--0,1,2,--

R17)
0,0,0,0,1,2,-->0,1,2,0,--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,
--
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,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,
0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R20)
0,0,0,0,0,1,2,-->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,--
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,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,2,
--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R23)
0,0,0,0,0,0,1,2,-->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,--0,0,0,1,2,--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,: 0,1,2,0,:
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,:
 Number new nodes in level n is given by : 1,2,4,4,3,3,3,3,3,

----------Class 9----------
Inversion Sequences (I_n=(n+1)!) avoiding L=[[021][0110]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
R3) 0,1,-->0,0,1,--0,1,1,--0,1,--
R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
R5) 0,0,1,-->0,0,0,1,--0,0,1,1,--0,0,1,--0,1,--
R6) 0,1,1,-->0,0,1,1,--0,1,1,--0,1,1,3,--
R7) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R8) 0,0,0,1,-->0,0,0,0,1,--0,0,0,1,1,--0,0,0,1,--0,0,1,--0,1,--
R9) 0,0,1,1,-->0,0,0,1,1,--0,0,1,1,--0,1,1,--0,1,1,3,--
R10) 0,1,1,3,-->0,1,1,--0,1,1,3,--
R11) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R12) 0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,1,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R13) 0,0,0,1,1,-->0,0,0,0,1,1,--0,0,0,1,1,--0,0,1,1,--0,1,1,--0,1,1,3,--
R14)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
0,0,1,--0,1,--
R15)
0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,1,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
0,0,1,--0,1,--
R16)
0,0,0,0,1,1,-->0,0,0,0,0,1,1,--0,0,0,0,1,1,--0,0,0,1,1,--0,0,1,1,--0,1,1,--0,1,1,3,
--
R17)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--
0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R18)
0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--
0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R19)
0,0,0,0,0,1,1,-->0,0,0,0,0,0,1,1,--0,0,0,0,0,1,1,--0,0,0,0,1,1,--0,0,0,1,1,--0,0,1,
1,--0,1,1,--0,1,1,3,--
R20)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,
0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R21)
0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,0,1,--0,0,0,
0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R22)
0,0,0,0,0,0,1,1,-->0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,1,1,--0,0,0,0,0,1,1,--0,0,0,0,1,
1,--0,0,0,1,1,--0,0,1,1,--0,1,1,--0,1,1,3,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,0,: 0,0,1,: 0,1,1,:
LEN=4) 0,0,0,0,: 0,0,0,1,: 0,0,1,1,: 0,1,1,3,:
LEN=5) 0,0,0,0,0,: 0,0,0,0,1,: 0,0,0,1,1,:
LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,1,: 0,0,0,0,1,1,:
LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,1,: 0,0,0,0,0,1,1,:
LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,1,1,:
LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,1,1,:
 Number new nodes in level n is given by : 1,2,3,4,3,3,3,3,3,

----------Class
10----------
Inversion Sequences (I_n=(n+1)!) avoiding L=[[021][0111]]

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

R5) 0,0,1,-->0,0,0,1,--0,0,0,--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,-->0,0,0,0,1,--0,0,0,0,--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,-->0,0,0,0,0,1,--0,0,0,0,0,--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,-->0,0,0,0,0,0,1,--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)
0,0,0,0,0,0,0,-->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,--0,0,0,0,0,0,0,--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)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--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,--0,0,0,0,0,0,0,0,--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,--
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,:
 Number new nodes in level n is given by : 1,2,2,2,2,2,2,2,2,

----------Class
11----------
Inversion Sequences (I_n=(n+1)!) avoiding L=[[021][0112]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
R3) 0,1,-->0,0,1,--0,1,1,--0,1,--
R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
R5) 0,0,1,-->0,0,0,1,--0,1,1,--0,0,1,--0,1,--
R6) 0,1,1,-->0,1,1,--0,1,1,--
R7) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R8) 0,0,0,1,-->0,0,0,0,1,--0,1,1,--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,-->0,0,0,0,0,1,--0,1,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R11)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
0,0,1,--0,1,--
R12)
0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,1,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--
0,1,--
R13)
0,0,0,0,0,0,0,-->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,-->0,0,0,0,0,0,0,1,--0,1,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,
--0,0,0,1,--0,0,1,--0,1,--
R15)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,
0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R16)
0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,1,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,
0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,0,: 0,0,1,: 0,1,1,:
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,:
 Number new nodes in level n is given by : 1,2,3,2,2,2,2,2,2,

----------Class
12----------
Inversion Sequences (I_n=(n+1)!) avoiding L=[[021][0120]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
R3) 0,1,-->0,0,1,--0,0,1,--0,1,2,--
R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
R5) 0,0,1,-->0,0,0,1,--0,0,0,1,--0,0,1,2,--0,1,2,--
R6) 0,1,2,-->0,0,1,2,--0,1,2,--
R7) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R8) 0,0,0,1,-->0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R9) 0,0,1,2,-->0,0,0,1,2,--0,0,1,2,--0,1,2,--
R10) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R11)
0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,
--

R12) 0,0,0,1,2,-->0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R13)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
0,0,1,--0,1,--
R14)
0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,
1,2,--0,0,1,2,--0,1,2,--
R15) 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,--
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,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,
2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R18)
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,--
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,
0,0,0,1,--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,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,2,--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,--
R21)
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,: 0,1,2,:
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,:
 Number new nodes in level n is given by : 1,2,3,3,3,3,3,3,3,

----------Class
13----------
Inversion Sequences (I_n=(n+1)!) avoiding L=[[021][0122]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
R3) 0,1,-->0,0,1,--0,0,1,--0,1,2,--
R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
R5) 0,0,1,-->0,0,0,1,--0,0,0,1,--0,0,1,2,--0,1,2,--
R6) 0,1,2,-->0,0,1,2,--0,1,2,--

R7) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R8) 0,0,0,1,-->0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R9) 0,0,1,2,-->0,0,0,1,2,--0,0,1,2,--0,1,2,--
R10) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R11)
0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,
--
R12) 0,0,0,1,2,-->0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R13)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
0,0,1,--0,1,--
R14)
0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,
1,2,--0,0,1,2,--0,1,2,--
R15) 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,--
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,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,
2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R18)
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,--
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,
0,0,0,1,--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,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,2,--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,--
R21)
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,: 0,1,2,:
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,:
 Number new nodes in level n is given by : 1,2,3,3,3,3,3,3,3,

----------Class
14----------
Inversion Sequences (I_n=(n+1)!) avoiding L=[[021][0123]]

--

Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
R3) 0,1,-->0,0,1,--0,0,1,--0,1,2,--
R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
R5) 0,0,1,-->0,0,0,1,--0,0,0,1,--0,1,2,--0,1,2,--
R6) 0,1,2,-->0,1,2,--0,1,2,--
R7) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R8) 0,0,0,1,-->0,0,0,0,1,--0,0,0,0,1,--0,1,2,--0,1,2,--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,-->0,0,0,0,0,1,--0,0,0,0,0,1,--0,1,2,--0,1,2,--0,1,2,--0,1,2,--
R11)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
0,0,1,--0,1,--
R12)
0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,1,2,--0,1,2,--0,1,2,--0,1,2,--0,1,
2,--
R13)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--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,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,1,2,--0,1,2,--0,1,2,--0,1,2,
--0,1,2,--0,1,2,--
R15)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,
0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R16)
0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,1,2,--0,1,2,--0,1,2,--
0,1,2,--0,1,2,--0,1,2,--0,1,2,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,0,: 0,0,1,: 0,1,2,:
LEN=4) 0,0,0,0,: 0,0,0,1,:
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,:
Number new nodes in level n is given by : 1,2,3,2,2,2,2,2,2,

a_m=0^m, b_m=0^m1
a_m-->a_{m+1}b_mb_{m-1}\cdots b_1
b_m-->b_{m+1}^2e^m
e-->e^2

----------Class
15----------
Inversion Sequences (I_n=(n+1)!) avoiding L=[[021][1000]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
R3) 0,1,-->0,1,0,--0,0,1,--0,1,--
R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
R5) 0,0,1,-->0,0,1,0,--0,0,0,1,--0,0,1,--0,1,--
R6) 0,1,0,-->0,1,0,0,--0,0,1,0,--0,1,0,--0,1,0,3,--
R7) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R8) 0,0,0,1,-->0,0,0,1,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R9) 0,0,1,0,-->0,0,1,0,0,--0,0,0,1,0,--0,0,1,0,--0,1,0,--0,1,0,3,--
R10) 0,1,0,0,-->0,0,1,0,0,--0,1,0,0,--0,1,0,0,3,--0,1,0,0,4,--
R11) 0,1,0,3,-->0,1,0,0,3,--0,1,0,--0,1,0,3,--
R12) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R13) 0,0,0,0,1,-->0,0,0,0,1,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R14)
0,0,0,1,0,-->0,0,0,1,0,0,--0,0,0,0,1,0,--0,0,0,1,0,--0,0,1,0,--0,1,0,--0,1,0,3,--
R15) 0,0,1,0,0,-->0,0,0,1,0,0,--0,0,1,0,0,--0,1,0,0,--0,1,0,0,3,--0,1,0,0,4,--
R16) 0,1,0,0,3,-->0,1,0,0,--0,1,0,0,3,--0,1,0,0,4,--
R17) 0,1,0,0,4,-->0,1,0,0,3,--0,1,0,0,4,--
R18)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
0,0,1,--0,1,--
R19)
0,0,0,0,0,1,-->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)
0,0,0,0,1,0,-->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,--0,1,0,3,--
R21)
0,0,0,1,0,0,-->0,0,0,0,1,0,0,--0,0,0,1,0,0,--0,0,1,0,0,--0,1,0,0,--0,1,0,0,3,--0,1,
0,0,4,--
R22)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--
0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R23)
0,0,0,0,0,0,1,-->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,--
R24)
0,0,0,0,0,1,0,-->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,--0,1,0,3,--
R25)
0,0,0,0,1,0,0,-->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,--0,1,0,0,3,--0,1,0,0,4,--
R26)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--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)
0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,
0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

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

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16----------
Inversion Sequences (I_n=(n+1)!) avoiding L=[[021][1001]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
R3) 0,1,-->0,1,0,--0,0,1,--0,1,--
R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
R5) 0,0,1,-->0,0,1,0,--0,0,0,1,--0,0,1,--0,1,--
R6) 0,1,0,-->0,0,0,--0,0,1,0,--0,0,1,--0,1,--
R7) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R8) 0,0,0,1,-->0,0,0,1,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R9) 0,0,1,0,-->0,0,0,0,--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,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R11) 0,0,0,0,1,-->0,0,0,0,1,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R12) 0,0,0,1,0,-->0,0,0,0,0,--0,0,0,0,1,0,--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,--0,0,0,0,0,0,1,--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,-->0,0,0,0,0,1,0,--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,--
R15)
0,0,0,0,1,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,
0,1,--0,1,--
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,-->0,0,0,0,0,0,1,0,--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)
0,0,0,0,0,1,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,
0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
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,
0,0,0,1,--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,-->0,0,0,0,0,0,0,1,0,--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)
0,0,0,0,0,0,1,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,0,--0,0,0,0,0,0,0,1,--0,0,0,0,
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,: 0,0,1,0,:
LEN=5) 0,0,0,0,0,: 0,0,0,0,1,: 0,0,0,1,0,:
LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,1,: 0,0,0,0,1,0,:
LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,1,: 0,0,0,0,0,1,0,:
LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,1,0,:
LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,1,0,:
 Number new nodes in level n is given by : 1,2,3,3,3,3,3,3,3,

----------Class
17----------
Inversion Sequences (I_n=(n+1)!) avoiding L=[[021][1002]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
R3) 0,1,-->0,1,0,--0,0,1,--0,1,2,--
R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
R5) 0,0,1,-->0,0,1,0,--0,0,0,1,--0,0,1,2,--0,1,2,--
R6) 0,1,0,-->0,1,0,0,--0,0,1,0,--0,1,0,2,--0,1,0,3,--
R7) 0,1,2,-->0,1,0,2,--0,0,1,2,--0,1,2,--
R8) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R9) 0,0,0,1,-->0,0,0,1,0,--0,0,0,0,1,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R10) 0,0,1,0,-->0,1,0,0,--0,0,0,1,0,--0,0,1,0,2,--0,1,0,2,--0,1,0,3,--
R11) 0,0,1,2,-->0,0,1,0,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R12) 0,1,0,0,-->0,1,0,0,--0,1,0,0,--
R13) 0,1,0,2,-->0,1,0,2,0,--0,0,1,0,2,--0,1,0,2,--0,1,0,3,--
R14) 0,1,0,3,-->0,1,0,2,0,--0,1,0,2,--0,1,0,3,--
R15) 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,--
R16)
0,0,0,0,1,-->0,0,0,0,1,0,--0,0,0,0,0,1,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,
--

R17)
0,0,0,1,0,-->0,1,0,0,--0,0,0,0,1,0,--0,0,0,1,0,2,--0,0,1,0,2,--0,1,0,2,--0,1,0,3,--
R18) 0,0,0,1,2,-->0,0,0,1,0,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R19) 0,0,1,0,2,-->0,1,0,2,0,--0,0,0,1,0,2,--0,0,1,0,2,--0,1,0,2,--0,1,0,3,--
R20) 0,1,0,2,0,-->0,1,0,2,0,--
R21)
0,0,0,0,0,0,-->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,--
R22)
0,0,0,0,0,1,-->0,0,0,0,0,1,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,
1,2,--0,0,1,2,--0,1,2,--
R23)
0,0,0,0,1,0,-->0,1,0,0,--0,0,0,0,0,1,0,--0,0,0,0,1,0,2,--0,0,0,1,0,2,--0,0,1,0,2,--
0,1,0,2,--0,1,0,3,--
R24)
0,0,0,0,1,2,-->0,0,0,0,1,0,2,--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)
0,0,0,1,0,2,-->0,1,0,2,0,--0,0,0,0,1,0,2,--0,0,0,1,0,2,--0,0,1,0,2,--0,1,0,2,--0,1,
0,3,--
R26)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--
0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R27)
0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,
2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R28)
0,0,0,0,0,1,0,-->0,1,0,0,--0,0,0,0,0,0,1,0,--0,0,0,0,0,1,0,2,--0,0,0,0,1,0,2,--0,0,
0,1,0,2,--0,0,1,0,2,--0,1,0,2,--0,1,0,3,--
R29)
0,0,0,0,0,1,2,-->0,0,0,0,0,1,0,2,--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,--
R30)
0,0,0,0,1,0,2,-->0,1,0,2,0,--0,0,0,0,0,1,0,2,--0,0,0,0,1,0,2,--0,0,0,1,0,2,--0,0,1,
0,2,--0,1,0,2,--0,1,0,3,--
R31)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--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,--
R32)
0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,2,--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,--
R33)
0,0,0,0,0,0,1,0,-->0,1,0,0,--0,0,0,0,0,0,0,1,0,--0,0,0,0,0,0,1,0,2,--0,0,0,0,0,1,0,
2,--0,0,0,0,1,0,2,--0,0,0,1,0,2,--0,0,1,0,2,--0,1,0,2,--0,1,0,3,--
R34)
0,0,0,0,0,0,1,2,-->0,0,0,0,0,0,1,0,2,--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,--
R35)
0,0,0,0,0,1,0,2,-->0,1,0,2,0,--0,0,0,0,0,0,1,0,2,--0,0,0,0,0,1,0,2,--0,0,0,0,1,0,2,
--0,0,0,1,0,2,--0,0,1,0,2,--0,1,0,2,--0,1,0,3,--

List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,0,: 0,0,1,: 0,1,0,: 0,1,2,:
LEN=4) 0,0,0,0,: 0,0,0,1,: 0,0,1,0,: 0,0,1,2,: 0,1,0,0,: 0,1,0,2,: 0,1,0,3,:
LEN=5) 0,0,0,0,0,: 0,0,0,0,1,: 0,0,0,1,0,: 0,0,0,1,2,: 0,0,1,0,2,: 0,1,0,2,0,:
LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,1,: 0,0,0,0,1,0,: 0,0,0,0,1,2,: 0,0,0,1,0,2,:
LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,1,: 0,0,0,0,0,1,0,: 0,0,0,0,0,1,2,:
0,0,0,0,1,0,2,:
LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,1,0,: 0,0,0,0,0,0,1,2,:
0,0,0,0,0,1,0,2,:
LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,1,0,:
0,0,0,0,0,0,0,1,2,: 0,0,0,0,0,0,1,0,2,:
Number new nodes in level n is given by : 1,2,4,7,6,5,5,5,5,

----------Class
18----------
Inversion Sequences (I_n=(n+1)!) avoiding L=[[021][1010]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
R3) 0,1,-->0,1,0,--0,0,1,--0,1,--
R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
R5) 0,0,1,-->0,0,1,0,--0,0,0,1,--0,0,1,--0,1,--
R6) 0,1,0,-->0,0,1,0,--0,1,0,1,--0,0,1,--0,1,--
R7) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R8) 0,0,0,1,-->0,0,0,1,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R9) 0,0,1,0,-->0,0,0,1,0,--0,0,1,0,1,--0,0,0,1,--0,0,1,--0,1,--
R10) 0,1,0,1,-->0,0,1,0,1,--0,1,0,1,--0,1,0,1,3,--0,1,0,1,4,--
R11) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R12) 0,0,0,0,1,-->0,0,0,0,1,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R13) 0,0,0,1,0,-->0,0,0,0,1,0,--0,0,0,1,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R14) 0,0,1,0,1,-->0,0,0,1,0,1,--0,0,1,0,1,--0,1,0,1,--0,1,0,1,3,--0,1,0,1,4,--
R15) 0,1,0,1,3,-->0,1,0,1,--0,1,0,1,3,--0,1,0,1,4,--
R16) 0,1,0,1,4,-->0,1,0,1,3,--0,1,0,1,4,--
R17)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
0,0,1,--0,1,--
R18)
0,0,0,0,0,1,-->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,--
R19)
0,0,0,0,1,0,-->0,0,0,0,0,1,0,--0,0,0,0,1,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
0,0,1,--0,1,--
R20)
0,0,0,1,0,1,-->0,0,0,0,1,0,1,--0,0,0,1,0,1,--0,0,1,0,1,--0,1,0,1,--0,1,0,1,3,--0,1,
0,1,4,--
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,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--
0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R22)
0,0,0,0,0,0,1,-->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,--
R23)
0,0,0,0,0,1,0,-->0,0,0,0,0,0,1,0,--0,0,0,0,0,1,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--
0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R24)
0,0,0,0,1,0,1,-->0,0,0,0,0,1,0,1,--0,0,0,0,1,0,1,--0,0,0,1,0,1,--0,0,1,0,1,--0,1,0,
1,--0,1,0,1,3,--0,1,0,1,4,--
R25)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,
0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R26)
0,0,0,0,0,0,0,1,-->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,--
R27)
0,0,0,0,0,0,1,0,-->0,0,0,0,0,0,0,1,0,--0,0,0,0,0,0,1,0,1,--0,0,0,0,0,0,0,1,--0,0,0,
0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R28)
0,0,0,0,0,1,0,1,-->0,0,0,0,0,0,1,0,1,--0,0,0,0,0,1,0,1,--0,0,0,0,1,0,1,--0,0,0,1,0,
1,--0,0,1,0,1,--0,1,0,1,--0,1,0,1,3,--0,1,0,1,4,--
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,: 0,0,1,0,: 0,1,0,1,:
LEN=5) 0,0,0,0,0,: 0,0,0,0,1,: 0,0,0,1,0,: 0,0,1,0,1,: 0,1,0,1,3,: 0,1,0,1,4,:
LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,1,: 0,0,0,0,1,0,: 0,0,0,1,0,1,:
LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,1,: 0,0,0,0,0,1,0,: 0,0,0,0,1,0,1,:
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,: 0,0,0,0,0,1,0,1,:
LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,1,0,:
0,0,0,0,0,0,1,0,1,:
 Number new nodes in level n is given by : 1,2,3,4,6,4,4,4,4,

----------Class
19----------
Inversion Sequences (I_n=(n+1)!) avoiding L=[[021][1011]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
R3) 0,1,-->0,1,0,--0,0,1,--0,1,--
R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
R5) 0,0,1,-->0,0,1,0,--0,0,0,1,--0,0,1,--0,1,--
R6) 0,1,0,-->0,0,1,0,--0,0,0,--0,0,1,--0,1,--
R7) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R8) 0,0,0,1,-->0,0,0,1,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R9) 0,0,1,0,-->0,0,0,1,0,--0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
R10) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R11) 0,0,0,0,1,-->0,0,0,0,1,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R12) 0,0,0,1,0,-->0,0,0,0,1,0,--0,0,0,0,0,--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,--0,0,0,0,0,0,1,--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,-->0,0,0,0,0,1,0,--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,--
R15)
0,0,0,0,1,0,-->0,0,0,0,0,1,0,--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,--
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,-->0,0,0,0,0,0,1,0,--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)
0,0,0,0,0,1,0,-->0,0,0,0,0,0,1,0,--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,--
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,
0,0,0,1,--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,-->0,0,0,0,0,0,0,1,0,--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)
0,0,0,0,0,0,1,0,-->0,0,0,0,0,0,0,1,0,--0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,
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,: 0,0,1,0,:
LEN=5) 0,0,0,0,0,: 0,0,0,0,1,: 0,0,0,1,0,:
LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,1,: 0,0,0,0,1,0,:
LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,1,: 0,0,0,0,0,1,0,:
LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,1,0,:
LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,1,0,:
Number new nodes in level n is given by : 1,2,3,3,3,3,3,3,3,

----------Class
20----------
Inversion Sequences (I_n=(n+1)!) avoiding L=[[021][1012]]

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

```
R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
R3) 0,1,-->0,1,0,--0,0,1,--0,1,--
R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
R5) 0,0,1,-->0,0,1,0,--0,0,0,1,--0,0,1,--0,1,--
R6) 0,1,0,-->0,0,1,0,--0,1,0,1,--0,0,1,--0,1,--
R7) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R8) 0,0,0,1,-->0,0,0,1,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R9) 0,0,1,0,-->0,0,0,1,0,--0,1,0,1,--0,0,0,1,--0,0,1,--0,1,--
R10) 0,1,0,1,-->0,1,0,1,--0,1,0,1,--
R11) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R12) 0,0,0,0,1,-->0,0,0,0,1,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R13) 0,0,0,1,0,-->0,0,0,0,1,0,--0,1,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R14)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
0,0,1,--0,1,--
R15)
0,0,0,0,0,1,-->0,0,0,0,0,1,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
0,0,1,--0,1,--
R16)
0,0,0,0,1,0,-->0,0,0,0,0,1,0,--0,1,0,1,--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,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--
0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R18)
0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,0,--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)
0,0,0,0,0,1,0,-->0,0,0,0,0,0,1,0,--0,1,0,1,--0,0,0,0,0,0,1,--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,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,
0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R21)
0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,0,--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,--
R22)
0,0,0,0,0,0,1,0,-->0,0,0,0,0,0,0,1,0,--0,1,0,1,--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,: 0,0,1,0,: 0,1,0,1,:
LEN=5) 0,0,0,0,0,: 0,0,0,0,1,: 0,0,0,1,0,:
LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,1,: 0,0,0,0,1,0,:
LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,1,: 0,0,0,0,0,1,0,:
LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,1,0,:
LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,1,0,:
 Number new nodes in level n is given by : 1,2,3,4,3,3,3,3,3,
```

----------Class 21----------

Inversion Sequences (I_n=(n+1)!) avoiding L=[[021][1020]]

Rules of T[L]:

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

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

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

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

R5) 0,0,1,-->0,0,1,0,--0,0,0,1,--0,0,1,2,--0,1,2,--

R6) 0,1,0,-->0,0,1,0,--0,0,1,0,--0,1,0,2,--0,1,0,3,--

R7) 0,1,2,-->0,1,2,0,--0,0,1,2,--0,1,2,--

R8) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R9) 0,0,0,1,-->0,0,0,1,0,--0,0,0,0,1,--0,0,0,1,2,--0,0,1,2,--0,1,2,--

R10) 0,0,1,0,-->0,0,0,1,0,--0,0,0,1,0,--0,1,2,0,--0,1,0,2,--0,1,0,3,--

R11) 0,0,1,2,-->0,0,1,2,0,--0,0,0,1,2,--0,0,1,2,--0,1,2,--

R12) 0,1,0,2,-->0,1,2,0,--0,1,0,2,--0,1,0,3,--

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

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

R15) 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,--

R16) 0,0,0,0,1,-->0,0,0,0,1,0,--0,0,0,0,0,1,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--

R17) 0,0,0,1,0,-->0,0,0,0,1,0,--0,0,0,0,1,0,--0,0,1,2,0,--0,1,2,0,--0,1,0,2,--0,1,0,3,--

R18) 0,0,0,1,2,-->0,0,0,1,2,0,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--

R19) 0,0,1,2,0,-->0,0,0,1,2,0,--0,0,1,2,0,--0,1,2,0,--0,1,0,2,--0,1,0,3,--

R20) 0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R21) 0,0,0,0,0,1,-->0,0,0,0,0,1,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,1,2,--

R22) 0,0,0,0,1,0,-->0,0,0,0,0,1,0,--0,0,0,0,0,1,0,--0,0,0,1,2,0,--0,0,1,2,0,--0,1,2,0,--0,1,0,2,--0,1,0,3,--

R23) 0,0,0,0,1,2,-->0,0,0,0,1,2,0,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--

R24) 0,0,0,1,2,0,-->0,0,0,0,1,2,0,--0,0,0,1,2,0,--0,0,1,2,0,--0,1,2,0,--0,1,0,2,--0,1,0,3,--

R25) 0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R26) 0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--

R27)
0,0,0,0,0,1,0,-->0,0,0,0,0,0,1,0,--0,0,0,0,0,0,1,0,--0,0,0,0,1,2,0,--0,0,0,1,2,0,--
0,0,1,2,0,--0,1,2,0,--0,1,0,2,--0,1,0,3,--
R28)
0,0,0,0,0,1,2,-->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)
0,0,0,0,1,2,0,-->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,--0,1,0,2,--0,1,0,3,--
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,--0,0,0,0,0,0,0,1,--0,0,0,
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)
0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,2,--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,--
R32)
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,--0,0,0,0,0,1,2,0,--0,0,0,
0,1,2,0,--0,0,0,1,2,0,--0,0,1,2,0,--0,1,2,0,--0,1,0,2,--0,1,0,3,--
R33)
0,0,0,0,0,0,1,2,-->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,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R34)
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,--0,1,0,2,--0,1,0,3,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,0,: 0,0,1,: 0,1,0,: 0,1,2,:
LEN=4) 0,0,0,0,: 0,0,0,1,: 0,0,1,0,: 0,0,1,2,: 0,1,0,2,: 0,1,0,3,: 0,1,2,0,:
LEN=5) 0,0,0,0,0,: 0,0,0,0,1,: 0,0,0,1,0,: 0,0,0,1,2,: 0,0,1,2,0,:
LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,1,: 0,0,0,0,1,0,: 0,0,0,0,1,2,: 0,0,0,1,2,0,:
LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,1,: 0,0,0,0,0,1,0,: 0,0,0,0,0,1,2,:
0,0,0,0,1,2,0,:
LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,1,0,: 0,0,0,0,0,0,1,2,:
0,0,0,0,0,1,2,0,:
LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,1,0,:
0,0,0,0,0,0,0,1,2,: 0,0,0,0,0,0,1,2,0,:
 Number new nodes in level n is given by : 1,2,4,7,5,5,5,5,5,

----------Class
22----------
Inversion Sequences (I_n=(n+1)!) avoiding L=[[021][1022]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
R3) 0,1,-->0,1,0,--0,0,1,--0,1,2,--
R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
R5) 0,0,1,-->0,0,1,0,--0,0,0,1,--0,0,1,2,--0,1,2,--

R6) 0,1,0,-->0,0,1,0,--0,0,1,0,--0,1,0,2,--0,1,0,3,--
R7) 0,1,2,-->0,1,2,0,--0,0,1,2,--0,1,2,--
R8) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R9) 0,0,0,1,-->0,0,0,1,0,--0,0,0,0,1,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R10) 0,0,1,0,-->0,0,0,1,0,--0,0,0,1,0,--0,1,2,0,--0,1,0,2,--0,1,0,3,--
R11) 0,0,1,2,-->0,0,1,2,0,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R12) 0,1,0,2,-->0,1,2,0,--0,1,0,2,--0,1,0,3,--
R13) 0,1,0,3,-->0,1,0,2,--0,1,0,3,--
R14) 0,1,2,0,-->0,0,1,2,0,--0,1,2,0,--0,1,0,2,--0,1,0,3,--
R15) 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,--
R16)
0,0,0,0,1,-->0,0,0,0,1,0,--0,0,0,0,0,1,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,
--
R17)
0,0,0,1,0,-->0,0,0,0,1,0,--0,0,0,0,1,0,--0,0,1,2,0,--0,1,2,0,--0,1,0,2,--0,1,0,3,--
R18) 0,0,0,1,2,-->0,0,0,1,2,0,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R19) 0,0,1,2,0,-->0,0,0,1,2,0,--0,0,1,2,0,--0,1,2,0,--0,1,0,2,--0,1,0,3,--
R20)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
0,0,1,--0,1,--
R21)
0,0,0,0,0,1,-->0,0,0,0,0,1,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,
1,2,--0,0,1,2,--0,1,2,--
R22)
0,0,0,0,1,0,-->0,0,0,0,0,1,0,--0,0,0,0,0,1,0,--0,0,0,1,2,0,--0,0,1,2,0,--0,1,2,0,--
0,1,0,2,--0,1,0,3,--
R23)
0,0,0,0,1,2,-->0,0,0,0,1,2,0,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--
0,1,2,--
R24)
0,0,0,1,2,0,-->0,0,0,0,1,2,0,--0,0,0,1,2,0,--0,0,1,2,0,--0,1,2,0,--0,1,0,2,--0,1,0,
3,--
R25)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--
0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R26)
0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,
2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R27)
0,0,0,0,0,1,0,-->0,0,0,0,0,0,1,0,--0,0,0,0,0,0,1,0,--0,0,0,0,1,2,0,--0,0,0,1,2,0,--
0,0,1,2,0,--0,1,2,0,--0,1,0,2,--0,1,0,3,--
R28)
0,0,0,0,0,1,2,-->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)
0,0,0,0,1,2,0,-->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,--0,1,0,2,--0,1,0,3,--
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,--0,0,0,0,0,0,0,1,--0,0,0,
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)
0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,2,--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,--
R32)
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,--0,0,0,0,0,1,2,0,--0,0,0,
0,1,2,0,--0,0,0,1,2,0,--0,0,1,2,0,--0,1,2,0,--0,1,0,2,--0,1,0,3,--
R33)
0,0,0,0,0,0,1,2,-->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,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R34)
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,--0,1,0,2,--0,1,0,3,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,0,: 0,0,1,: 0,1,0,: 0,1,2,:
LEN=4) 0,0,0,0,: 0,0,0,1,: 0,0,1,0,: 0,0,1,2,: 0,1,0,2,: 0,1,0,3,: 0,1,2,0,:
LEN=5) 0,0,0,0,0,: 0,0,0,0,1,: 0,0,0,1,0,: 0,0,0,1,2,: 0,0,1,2,0,:
LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,1,: 0,0,0,0,1,0,: 0,0,0,0,1,2,: 0,0,0,1,2,0,:
LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,1,: 0,0,0,0,0,1,0,: 0,0,0,0,0,1,2,:
0,0,0,0,1,2,0,:
LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,1,0,: 0,0,0,0,0,0,1,2,:
0,0,0,0,0,1,2,0,:
LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,1,0,:
0,0,0,0,0,0,0,1,2,: 0,0,0,0,0,0,1,2,0,:
Number new nodes in level n is given by : 1,2,4,7,5,5,5,5,5,

----------Class
23----------
Inversion Sequences (I_n=(n+1)!) avoiding L=[[021][1023]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
R3) 0,1,-->0,1,0,--0,0,1,--0,1,2,--
R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
R5) 0,0,1,-->0,0,1,0,--0,0,0,1,--0,0,1,2,--0,1,2,--
R6) 0,1,0,-->0,0,1,0,--0,0,1,0,--0,1,0,2,--0,1,0,2,--
R7) 0,1,2,-->0,1,2,0,--0,0,1,2,--0,1,2,--
R8) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R9) 0,0,0,1,-->0,0,0,1,0,--0,0,0,0,1,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R10) 0,0,1,0,-->0,0,0,1,0,--0,0,0,1,0,--0,1,0,2,--0,1,0,2,--0,1,0,2,--
R11) 0,0,1,2,-->0,0,1,2,0,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R12) 0,1,0,2,-->0,1,0,2,--0,1,0,2,--
R13) 0,1,2,0,-->0,0,1,2,0,--0,1,0,2,--0,1,0,2,--0,1,0,2,--
R14) 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,--
R15)
0,0,0,0,1,-->0,0,0,0,1,0,--0,0,0,0,0,1,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,
--

R16)
0,0,0,1,0,-->0,0,0,0,1,0,--0,0,0,0,1,0,--0,1,0,2,--0,1,0,2,--0,1,0,2,--0,1,0,2,--
R17) 0,0,0,1,2,-->0,0,0,1,2,0,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R18) 0,0,1,2,0,-->0,0,0,1,2,0,--0,1,0,2,--0,1,0,2,--0,1,0,2,--0,1,0,2,--
R19)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
0,0,1,--0,1,--
R20)
0,0,0,0,0,1,-->0,0,0,0,0,1,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,
1,2,--0,0,1,2,--0,1,2,--
R21)
0,0,0,0,1,0,-->0,0,0,0,0,1,0,--0,0,0,0,0,1,0,--0,1,0,2,--0,1,0,2,--0,1,0,2,--0,1,0,
2,--0,1,0,2,--
R22)
0,0,0,0,1,2,-->0,0,0,0,1,2,0,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--
0,1,2,--
R23)
0,0,0,1,2,0,-->0,0,0,0,1,2,0,--0,1,0,2,--0,1,0,2,--0,1,0,2,--0,1,0,2,--0,1,0,2,--
R24)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--
0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R25)
0,0,0,0,0,0,1,-->0,0,0,0,0,0,1,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,
2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R26)
0,0,0,0,0,1,0,-->0,0,0,0,0,0,1,0,--0,0,0,0,0,0,1,0,--0,1,0,2,--0,1,0,2,--0,1,0,2,--
0,1,0,2,--0,1,0,2,--0,1,0,2,--
R27)
0,0,0,0,0,1,2,-->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,--
R28)
0,0,0,0,1,2,0,-->0,0,0,0,0,1,2,0,--0,1,0,2,--0,1,0,2,--0,1,0,2,--0,1,0,2,--0,1,0,2,
--0,1,0,2,--
R29)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--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)
0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,2,--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)
0,0,0,0,0,0,1,0,-->0,0,0,0,0,0,0,1,0,--0,0,0,0,0,0,0,1,0,--0,1,0,2,--0,1,0,2,--0,1,
0,2,--0,1,0,2,--0,1,0,2,--0,1,0,2,--0,1,0,2,--
R32)
0,0,0,0,0,0,1,2,-->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,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R33)
0,0,0,0,0,1,2,0,-->0,0,0,0,0,0,1,2,0,--0,1,0,2,--0,1,0,2,--0,1,0,2,--0,1,0,2,--0,1,
0,2,--0,1,0,2,--0,1,0,2,--
List of different nodes in T[L]
LEN=1) 0,:

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

----------Class
24----------
Inversion Sequences (I_n=(n+1)!) avoiding L=[[021][1100]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
R3) 0,1,-->0,0,1,--0,1,1,--0,1,--
R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
R5) 0,0,1,-->0,0,0,1,--0,0,1,1,--0,0,1,--0,1,--
R6) 0,1,1,-->0,1,1,0,--0,0,1,1,--0,1,1,--0,1,1,3,--
R7) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R8) 0,0,0,1,-->0,0,0,0,1,--0,0,0,1,1,--0,0,0,1,--0,0,1,--0,1,--
R9) 0,0,1,1,-->0,0,1,1,0,--0,0,0,1,1,--0,0,1,1,--0,1,1,--0,1,1,3,--
R10) 0,1,1,0,-->0,0,1,1,0,--0,1,1,0,--0,1,1,0,3,--0,1,1,0,4,--
R11) 0,1,1,3,-->0,1,1,0,3,--0,1,1,--0,1,1,3,--
R12) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R13) 0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,1,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R14)
0,0,0,1,1,-->0,0,0,1,1,0,--0,0,0,0,1,1,--0,0,0,1,1,--0,0,1,1,--0,1,1,--0,1,1,3,--
R15) 0,0,1,1,0,-->0,0,0,1,1,0,--0,0,1,1,0,--0,1,1,0,--0,1,1,0,3,--0,1,1,0,4,--
R16) 0,1,1,0,3,-->0,1,1,0,--0,1,1,0,3,--0,1,1,0,4,--
R17) 0,1,1,0,4,-->0,1,1,0,3,--0,1,1,0,4,--
R18)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
0,0,1,--0,1,--
R19)
0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,1,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
0,0,1,--0,1,--
R20)
0,0,0,0,1,1,-->0,0,0,0,1,1,0,--0,0,0,0,0,1,1,--0,0,0,0,1,1,--0,0,0,1,1,--0,0,1,1,--
0,1,1,--0,1,1,3,--
R21)
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,--0,1,1,0,3,--0,1,
1,0,4,--
R22)

0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--
0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R23)
0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--
0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R24)
0,0,0,0,0,1,1,-->0,0,0,0,0,1,1,0,--0,0,0,0,0,0,1,1,--0,0,0,0,0,1,1,--0,0,0,0,1,1,--
0,0,0,1,1,--0,0,1,1,--0,1,1,--0,1,1,3,--
R25)
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,--0,1,1,0,3,--0,1,1,0,4,--
R26)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--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)
0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,0,1,--0,0,0,
0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R28)
0,0,0,0,0,0,1,1,-->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,--0,1,1,3,--
R29)
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,--0,1,1,0,3,--0,1,1,0,4,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,0,: 0,0,1,: 0,1,1,:
LEN=4) 0,0,0,0,: 0,0,0,1,: 0,0,1,1,: 0,1,1,0,: 0,1,1,3,:
LEN=5) 0,0,0,0,0,: 0,0,0,0,1,: 0,0,0,1,1,: 0,0,1,1,0,: 0,1,1,0,3,: 0,1,1,0,4,:
LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,1,: 0,0,0,0,1,1,: 0,0,0,1,1,0,:
LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,1,: 0,0,0,0,0,1,1,: 0,0,0,0,1,1,0,:
LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,1,1,: 0,0,0,0,0,1,1,0,:
LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,1,1,:
0,0,0,0,0,0,1,1,0,:
 Number new nodes in level n is given by : 1,2,3,5,6,4,4,4,4,

----------Class
25----------
Inversion Sequences (I_n=(n+1)!) avoiding L=[[021][1101]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
R3) 0,1,-->0,0,1,--0,1,1,--0,1,--
R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
R5) 0,0,1,-->0,0,0,1,--0,0,1,1,--0,0,1,--0,1,--
R6) 0,1,1,-->0,0,0,--0,0,1,1,--0,0,1,--0,1,--
R7) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R8) 0,0,0,1,-->0,0,0,0,1,--0,0,0,1,1,--0,0,0,1,--0,0,1,--0,1,--

R9) 0,0,1,1,-->0,0,0,0,--0,0,0,1,1,--0,0,0,1,--0,0,1,--0,1,--
R10) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R11) 0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,1,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R12) 0,0,0,1,1,-->0,0,0,0,0,--0,0,0,0,1,1,--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,--0,0,0,0,0,0,1,--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,-->0,0,0,0,0,0,1,--0,0,0,0,0,1,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
0,0,1,--0,1,--
R15)
0,0,0,0,1,1,-->0,0,0,0,0,0,--0,0,0,0,0,1,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,
0,1,--0,1,--
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,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--
0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R18)
0,0,0,0,0,1,1,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,
0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
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,
0,0,0,1,--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,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,0,1,--0,0,0,
0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R21)
0,0,0,0,0,0,1,1,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,0,1,--0,0,0,0,
0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,0,: 0,0,1,: 0,1,1,:
LEN=4) 0,0,0,0,: 0,0,0,1,: 0,0,1,1,:
LEN=5) 0,0,0,0,0,: 0,0,0,0,1,: 0,0,0,1,1,:
LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,1,: 0,0,0,0,1,1,:
LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,1,: 0,0,0,0,0,1,1,:
LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,1,1,:
LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,1,1,:
 Number new nodes in level n is given by : 1,2,3,3,3,3,3,3,3,

----------Class
26----------
Inversion Sequences (I_n=(n+1)!) avoiding L=[[021][1102]]

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

R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
R3) 0,1,-->0,0,1,--0,1,1,--0,1,--
R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
R5) 0,0,1,-->0,0,0,1,--0,0,1,1,--0,0,1,--0,1,--
R6) 0,1,1,-->0,1,1,0,--0,0,1,1,--0,1,1,2,--0,1,1,3,--
R7) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R8) 0,0,0,1,-->0,0,0,0,1,--0,0,0,1,1,--0,0,0,1,--0,0,1,--0,1,--
R9) 0,0,1,1,-->0,1,1,0,--0,0,0,1,1,--0,0,1,1,2,--0,1,1,2,--0,1,1,3,--
R10) 0,1,1,0,-->0,1,1,0,--0,1,1,0,--
R11) 0,1,1,2,-->0,1,1,2,0,--0,0,1,1,2,--0,1,1,2,--0,1,1,3,--
R12) 0,1,1,3,-->0,1,1,2,0,--0,1,1,2,--0,1,1,3,--
R13) 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,--
R14) 0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,1,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R15)
0,0,0,1,1,-->0,1,1,0,--0,0,0,0,1,1,--0,0,0,1,1,2,--0,0,1,1,2,--0,1,1,2,--0,1,1,3,--
R16) 0,0,1,1,2,-->0,1,1,2,0,--0,0,0,1,1,2,--0,0,1,1,2,--0,1,1,2,--0,1,1,3,--
R17) 0,1,1,2,0,-->0,1,1,2,0,--
R18)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
0,0,1,--0,1,--
R19)
0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,1,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
0,0,1,--0,1,--
R20)
0,0,0,0,1,1,-->0,1,1,0,--0,0,0,0,0,1,1,--0,0,0,0,1,1,2,--0,0,0,1,1,2,--0,0,1,1,2,--
0,1,1,2,--0,1,1,3,--
R21)
0,0,0,1,1,2,-->0,1,1,2,0,--0,0,0,0,1,1,2,--0,0,0,1,1,2,--0,0,1,1,2,--0,1,1,2,--0,1,
1,3,--
R22)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--
0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R23)
0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--
0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R24)
0,0,0,0,0,1,1,-->0,1,1,0,--0,0,0,0,0,0,1,1,--0,0,0,0,0,1,1,2,--0,0,0,0,1,1,2,--0,0,
0,1,1,2,--0,0,1,1,2,--0,1,1,2,--0,1,1,3,--
R25)
0,0,0,0,1,1,2,-->0,1,1,2,0,--0,0,0,0,0,1,1,2,--0,0,0,0,1,1,2,--0,0,0,1,1,2,--0,0,1,
1,2,--0,1,1,2,--0,1,1,3,--
R26)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--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)
0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,0,1,--0,0,0,
0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R28)
0,0,0,0,0,0,1,1,-->0,1,1,0,--0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,1,1,2,--0,0,0,0,0,1,1,
2,--0,0,0,0,1,1,2,--0,0,0,1,1,2,--0,0,1,1,2,--0,1,1,2,--0,1,1,3,--

R29)
0,0,0,0,0,1,1,2,-->0,1,1,2,0,--0,0,0,0,0,0,1,1,2,--0,0,0,0,0,1,1,2,--0,0,0,0,1,1,2,
--0,0,0,1,1,2,--0,0,1,1,2,--0,1,1,2,--0,1,1,3,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,0,: 0,0,1,: 0,1,1,:
LEN=4) 0,0,0,0,: 0,0,0,1,: 0,0,1,1,: 0,1,1,0,: 0,1,1,2,: 0,1,1,3,:
LEN=5) 0,0,0,0,0,: 0,0,0,0,1,: 0,0,0,1,1,: 0,0,1,1,2,: 0,1,1,2,0,:
LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,1,: 0,0,0,0,1,1,: 0,0,0,1,1,2,:
LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,1,: 0,0,0,0,0,1,1,: 0,0,0,0,1,1,2,:
LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,1,1,: 0,0,0,0,0,1,1,2,:
LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,1,1,:
0,0,0,0,0,0,1,1,2,:
 Number new nodes in level n is given by : 1,2,3,6,5,4,4,4,4,

----------Class
27----------
Inversion Sequences (I_n=(n+1)!) avoiding L=[[021][1110]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
R3) 0,1,-->0,0,1,--0,1,1,--0,1,--
R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
R5) 0,0,1,-->0,0,0,1,--0,0,1,1,--0,0,1,--0,1,--
R6) 0,1,1,-->0,0,1,1,--0,1,1,1,--0,0,1,--0,1,--
R7) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R8) 0,0,0,1,-->0,0,0,0,1,--0,0,0,1,1,--0,0,0,1,--0,0,1,--0,1,--
R9) 0,0,1,1,-->0,0,0,1,1,--0,0,1,1,1,--0,0,0,1,--0,0,1,--0,1,--
R10) 0,1,1,1,-->0,0,1,1,1,--0,1,1,1,--0,1,1,1,3,--0,1,1,1,4,--
R11) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R12) 0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,1,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R13) 0,0,0,1,1,-->0,0,0,0,1,1,--0,0,0,1,1,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R14) 0,0,1,1,1,-->0,0,0,1,1,1,--0,0,1,1,1,--0,1,1,1,--0,1,1,1,3,--0,1,1,1,4,--
R15) 0,1,1,1,3,-->0,1,1,1,--0,1,1,1,3,--0,1,1,1,4,--
R16) 0,1,1,1,4,-->0,1,1,1,3,--0,1,1,1,4,--
R17)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
0,0,1,--0,1,--
R18)
0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,1,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
0,0,1,--0,1,--
R19)
0,0,0,0,1,1,-->0,0,0,0,0,1,1,--0,0,0,0,1,1,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
0,0,1,--0,1,--
R20)
0,0,0,1,1,1,-->0,0,0,0,1,1,1,--0,0,0,1,1,1,--0,0,1,1,1,--0,1,1,1,--0,1,1,1,3,--0,1,
1,1,4,--

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,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--
0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R22)
0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--
0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R23)
0,0,0,0,0,1,1,-->0,0,0,0,0,0,1,1,--0,0,0,0,0,1,1,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--
0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R24)
0,0,0,0,1,1,1,-->0,0,0,0,0,1,1,1,--0,0,0,0,1,1,1,--0,0,0,1,1,1,--0,0,1,1,1,--0,1,1,
1,--0,1,1,1,3,--0,1,1,1,4,--
R25)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,
0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R26)
0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,0,1,--0,0,0,
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)
0,0,0,0,0,0,1,1,-->0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,1,1,1,--0,0,0,0,0,0,0,1,--0,0,0,
0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R28)
0,0,0,0,0,1,1,1,-->0,0,0,0,0,0,1,1,1,--0,0,0,0,0,1,1,1,--0,0,0,0,1,1,1,--0,0,0,1,1,
1,--0,0,1,1,1,--0,1,1,1,--0,1,1,1,3,--0,1,1,1,4,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,0,: 0,0,1,: 0,1,1,:
LEN=4) 0,0,0,0,: 0,0,0,1,: 0,0,1,1,: 0,1,1,1,:
LEN=5) 0,0,0,0,0,: 0,0,0,0,1,: 0,0,0,1,1,: 0,0,1,1,1,: 0,1,1,1,3,: 0,1,1,1,4,:
LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,1,: 0,0,0,0,1,1,: 0,0,0,1,1,1,:
LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,1,: 0,0,0,0,0,1,1,: 0,0,0,0,1,1,1,:
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,: 0,0,0,0,0,1,1,1,:
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,:
0,0,0,0,0,0,1,1,1,:
 Number new nodes in level n is given by : 1,2,3,4,6,4,4,4,4,

----------Class
28----------
Inversion Sequences (I_n=(n+1)!) avoiding L=[[021][1120]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
R3) 0,1,-->0,0,1,--0,1,1,--0,1,--
R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
R5) 0,0,1,-->0,0,0,1,--0,0,1,1,--0,0,1,--0,1,--
R6) 0,1,1,-->0,0,1,1,--0,0,1,1,--0,1,1,2,--0,1,1,3,--
R7) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--

R8) 0,0,0,1,-->0,0,0,0,1,--0,0,0,1,1,--0,0,0,1,--0,0,1,--0,1,--
R9) 0,0,1,1,-->0,0,0,1,1,--0,0,0,1,1,--0,0,1,1,2,--0,1,1,2,--0,1,1,3,--
R10) 0,1,1,2,-->0,0,1,1,2,--0,1,1,2,--0,1,1,3,--
R11) 0,1,1,3,-->0,1,1,2,--0,1,1,3,--
R12) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R13) 0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,1,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R14)
0,0,0,1,1,-->0,0,0,0,1,1,--0,0,0,0,1,1,--0,0,0,1,1,2,--0,0,1,1,2,--0,1,1,2,--0,1,1,
3,--
R15) 0,0,1,1,2,-->0,0,0,1,1,2,--0,0,1,1,2,--0,1,1,2,--0,1,1,3,--
R16)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
0,0,1,--0,1,--
R17)
0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,1,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
0,0,1,--0,1,--
R18)
0,0,0,0,1,1,-->0,0,0,0,0,1,1,--0,0,0,0,0,1,1,--0,0,0,0,1,1,2,--0,0,0,1,1,2,--0,0,1,
1,2,--0,1,1,2,--0,1,1,3,--
R19) 0,0,0,1,1,2,-->0,0,0,0,1,1,2,--0,0,0,1,1,2,--0,0,1,1,2,--0,1,1,2,--0,1,1,3,--
R20)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--
0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R21)
0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--
0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R22)
0,0,0,0,0,1,1,-->0,0,0,0,0,0,1,1,--0,0,0,0,0,0,1,1,--0,0,0,0,0,1,1,2,--0,0,0,0,1,1,
2,--0,0,0,1,1,2,--0,0,1,1,2,--0,1,1,2,--0,1,1,3,--
R23)
0,0,0,0,1,1,2,-->0,0,0,0,0,1,1,2,--0,0,0,0,1,1,2,--0,0,0,1,1,2,--0,0,1,1,2,--0,1,1,
2,--0,1,1,3,--
R24)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--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)
0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,0,1,--0,0,0,
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)
0,0,0,0,0,0,1,1,-->0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,0,1,1,--0,0,0,0,0,0,1,1,2,--0,0,
0,0,0,1,1,2,--0,0,0,0,1,1,2,--0,0,0,1,1,2,--0,0,1,1,2,--0,1,1,2,--0,1,1,3,--
R27)
0,0,0,0,0,1,1,2,-->0,0,0,0,0,0,1,1,2,--0,0,0,0,0,1,1,2,--0,0,0,0,1,1,2,--0,0,0,1,1,
2,--0,0,1,1,2,--0,1,1,2,--0,1,1,3,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,0,: 0,0,1,: 0,1,1,:
LEN=4) 0,0,0,0,: 0,0,0,1,: 0,0,1,1,: 0,1,1,2,: 0,1,1,3,:
LEN=5) 0,0,0,0,0,: 0,0,0,0,1,: 0,0,0,1,1,: 0,0,1,1,2,:

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

----------Class
29----------
Inversion Sequences (I_n=(n+1)!) avoiding L=[[021][1200]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
R3) 0,1,-->0,0,1,--0,0,1,--0,1,2,--
R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
R5) 0,0,1,-->0,0,0,1,--0,0,0,1,--0,0,1,2,--0,1,2,--
R6) 0,1,2,-->0,1,2,0,--0,0,1,2,--0,1,2,--
R7) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R8) 0,0,0,1,-->0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R9) 0,0,1,2,-->0,0,1,2,0,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R10) 0,1,2,0,-->0,0,1,2,0,--0,1,2,0,--0,1,2,0,4,--
R11) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R12)
0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,
--
R13) 0,0,0,1,2,-->0,0,0,1,2,0,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R14) 0,0,1,2,0,-->0,0,0,1,2,0,--0,0,1,2,0,--0,1,2,0,--0,1,2,0,4,--
R15) 0,1,2,0,4,-->0,1,2,0,--0,1,2,0,4,--
R16)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
0,0,1,--0,1,--
R17)
0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,
1,2,--0,0,1,2,--0,1,2,--
R18)
0,0,0,0,1,2,-->0,0,0,0,1,2,0,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--
0,1,2,--
R19)
0,0,0,1,2,0,-->0,0,0,0,1,2,0,--0,0,0,1,2,0,--0,0,1,2,0,--0,1,2,0,--0,1,2,0,4,--
R20)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--
0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R21)
0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,
2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R22)
0,0,0,0,0,1,2,-->0,0,0,0,0,1,2,0,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--
0,0,0,1,2,--0,0,1,2,--0,1,2,--

R23)
0,0,0,0,1,2,0,-->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,--0,1,2,0,4,--
R24)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,
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)
0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,2,--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)
0,0,0,0,0,0,1,2,-->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,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R27)
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,--0,1,2,0,4,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,0,: 0,0,1,: 0,1,2,:
LEN=4) 0,0,0,0,: 0,0,0,1,: 0,0,1,2,: 0,1,2,0,:
LEN=5) 0,0,0,0,0,: 0,0,0,0,1,: 0,0,0,1,2,: 0,0,1,2,0,: 0,1,2,0,4,:
LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,1,: 0,0,0,0,1,2,: 0,0,0,1,2,0,:
LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,1,: 0,0,0,0,0,1,2,: 0,0,0,0,1,2,0,:
LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,1,2,: 0,0,0,0,0,1,2,0,:
LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,1,2,:
0,0,0,0,0,0,1,2,0,:
 Number new nodes in level n is given by : 1,2,3,4,5,4,4,4,4,

----------Class
30----------
Inversion Sequences (I_n=(n+1)!) avoiding L=[[021][1202]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
R3) 0,1,-->0,0,1,--0,0,1,--0,1,2,--
R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
R5) 0,0,1,-->0,0,0,1,--0,0,0,1,--0,0,1,2,--0,1,2,--
R6) 0,1,2,-->0,1,2,0,--0,0,1,2,--0,1,2,--
R7) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R8) 0,0,0,1,-->0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R9) 0,0,1,2,-->0,0,1,2,0,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R10) 0,1,2,0,-->0,0,1,2,0,--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,-->0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,
--
R13) 0,0,0,1,2,-->0,0,0,1,2,0,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R14) 0,0,1,2,0,-->0,0,0,1,2,0,--0,0,0,1,2,--0,0,1,2,--0,1,2,--

R15)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R16)
0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R17)
0,0,0,0,1,2,-->0,0,0,0,1,2,0,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R18) 0,0,0,1,2,0,-->0,0,0,0,1,2,0,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R19)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R20)
0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R21)
0,0,0,0,0,1,2,-->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,--
R22)
0,0,0,0,1,2,0,-->0,0,0,0,0,1,2,0,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--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,--0,0,0,0,0,0,0,0,1,--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,--
R24)
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,--0,0,0,0,0,0,0,1,2,--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,--
R25)
0,0,0,0,0,0,1,2,-->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,--0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R26)
0,0,0,0,0,1,2,0,-->0,0,0,0,0,0,1,2,0,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,0,: 0,0,1,: 0,1,2,:
LEN=4) 0,0,0,0,: 0,0,0,1,: 0,0,1,2,: 0,1,2,0,:
LEN=5) 0,0,0,0,0,: 0,0,0,0,1,: 0,0,0,1,2,: 0,0,1,2,0,:
LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,1,: 0,0,0,0,1,2,: 0,0,0,1,2,0,:
LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,1,: 0,0,0,0,0,1,2,: 0,0,0,0,1,2,0,:
LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,1,2,: 0,0,0,0,0,1,2,0,:
LEN=9) 0,0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,0,1,2,:
0,0,0,0,0,0,1,2,0,:
 Number new nodes in level n is given by : 1,2,3,4,4,4,4,4,4,

----------Class
31----------

Inversion Sequences (I_n=(n+1)!) avoiding L=[[021][1203]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
R3) 0,1,-->0,0,1,--0,0,1,--0,1,2,--
R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
R5) 0,0,1,-->0,0,0,1,--0,0,0,1,--0,0,1,2,--0,1,2,--
R6) 0,1,2,-->0,1,2,0,--0,0,1,2,--0,1,2,3,--
R7) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R8) 0,0,0,1,-->0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R9) 0,0,1,2,-->0,1,2,0,--0,0,0,1,2,--0,0,1,2,3,--0,1,2,3,--
R10) 0,1,2,0,-->0,1,2,0,--0,1,2,0,--
R11) 0,1,2,3,-->0,1,2,3,0,--0,0,1,2,3,--0,1,2,3,--
R12) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R13)
0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,
--
R14) 0,0,0,1,2,-->0,1,2,0,--0,0,0,0,1,2,--0,0,0,1,2,3,--0,0,1,2,3,--0,1,2,3,--
R15) 0,0,1,2,3,-->0,1,2,3,0,--0,0,0,1,2,3,--0,0,1,2,3,--0,1,2,3,--
R16) 0,1,2,3,0,-->0,1,2,3,0,--
R17)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
0,0,1,--0,1,--
R18)
0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,
1,2,--0,0,1,2,--0,1,2,--
R19)
0,0,0,0,1,2,-->0,1,2,0,--0,0,0,0,0,1,2,--0,0,0,0,1,2,3,--0,0,0,1,2,3,--0,0,1,2,3,--
0,1,2,3,--
R20)
0,0,0,1,2,3,-->0,1,2,3,0,--0,0,0,0,1,2,3,--0,0,0,1,2,3,--0,0,1,2,3,--0,1,2,3,--
R21)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--
0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R22)
0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,
2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R23)
0,0,0,0,0,1,2,-->0,1,2,0,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,3,--0,0,0,0,1,2,3,--0,0,
0,1,2,3,--0,0,1,2,3,--0,1,2,3,--
R24)
0,0,0,0,1,2,3,-->0,1,2,3,0,--0,0,0,0,0,1,2,3,--0,0,0,0,1,2,3,--0,0,0,1,2,3,--0,0,1,
2,3,--0,1,2,3,--
R25)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,
0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R26)
0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,2,--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,--
R27)
0,0,0,0,0,0,1,2,-->0,1,2,0,--0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,2,3,--0,0,0,0,0,1,2,
3,--0,0,0,0,1,2,3,--0,0,0,1,2,3,--0,0,1,2,3,--0,1,2,3,--
R28)
0,0,0,0,0,1,2,3,-->0,1,2,3,0,--0,0,0,0,0,0,1,2,3,--0,0,0,0,0,1,2,3,--0,0,0,0,1,2,3,
--0,0,0,1,2,3,--0,0,1,2,3,--0,1,2,3,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,0,: 0,0,1,: 0,1,2,:
LEN=4) 0,0,0,0,: 0,0,0,1,: 0,0,1,2,: 0,1,2,0,: 0,1,2,3,:
LEN=5) 0,0,0,0,0,: 0,0,0,0,1,: 0,0,0,1,2,: 0,0,1,2,3,: 0,1,2,3,0,:
LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,1,: 0,0,0,0,1,2,: 0,0,0,1,2,3,:
LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,1,: 0,0,0,0,0,1,2,: 0,0,0,0,1,2,3,:
LEN=8) 0,0,0,0,0,0,0,0,: 0,0,0,0,0,0,0,1,: 0,0,0,0,0,0,1,2,: 0,0,0,0,0,1,2,3,:
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,:
0,0,0,0,0,0,1,2,3,:
 Number new nodes in level n is given by : 1,2,3,5,5,4,4,4,4,

----------Class
32----------
Inversion Sequences (I_n=(n+1)!) avoiding L=[[021][1220]]

--
Rules of T[L]:
R1) 0,-->0,0,--0,1,--
R2) 0,0,-->0,0,0,--0,0,1,--0,1,--
R3) 0,1,-->0,0,1,--0,0,1,--0,1,2,--
R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
R5) 0,0,1,-->0,0,0,1,--0,0,0,1,--0,0,1,2,--0,1,2,--
R6) 0,1,2,-->0,0,1,2,--0,1,2,2,--0,1,2,--
R7) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R8) 0,0,0,1,-->0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R9) 0,0,1,2,-->0,0,0,1,2,--0,0,1,2,2,--0,0,1,2,--0,1,2,--
R10) 0,1,2,2,-->0,0,1,2,2,--0,1,2,2,--0,1,2,2,4,--
R11) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R12)
0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,
--
R13) 0,0,0,1,2,-->0,0,0,0,1,2,--0,0,0,1,2,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R14) 0,0,1,2,2,-->0,0,0,1,2,2,--0,0,1,2,2,--0,1,2,2,--0,1,2,2,4,--
R15) 0,1,2,2,4,-->0,1,2,2,--0,1,2,2,4,--
R16)
0,0,0,0,0,0,-->0,0,0,0,0,0,0,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--
0,0,1,--0,1,--
R17)
0,0,0,0,0,1,-->0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,
1,2,--0,0,1,2,--0,1,2,--
R18)

0,0,0,0,1,2,-->0,0,0,0,0,1,2,--0,0,0,0,1,2,2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--
0,1,2,--
R19)
0,0,0,1,2,2,-->0,0,0,0,1,2,2,--0,0,0,1,2,2,--0,0,1,2,2,--0,1,2,2,--0,1,2,2,4,--
R20)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--
0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R21)
0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,
2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R22)
0,0,0,0,0,1,2,-->0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,2,--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)
0,0,0,0,1,2,2,-->0,0,0,0,0,1,2,2,--0,0,0,0,1,2,2,--0,0,0,1,2,2,--0,0,1,2,2,--0,1,2,
2,--0,1,2,2,4,--
R24)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,
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)
0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,2,--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)
0,0,0,0,0,0,1,2,-->0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,2,2,--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,--
R27)
0,0,0,0,0,1,2,2,-->0,0,0,0,0,0,1,2,2,--0,0,0,0,0,1,2,2,--0,0,0,0,1,2,2,--0,0,0,1,2,
2,--0,0,1,2,2,--0,1,2,2,--0,1,2,2,4,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:
LEN=3) 0,0,0,: 0,0,1,: 0,1,2,:
LEN=4) 0,0,0,0,: 0,0,0,1,: 0,0,1,2,: 0,1,2,2,:
LEN=5) 0,0,0,0,0,: 0,0,0,0,1,: 0,0,0,1,2,: 0,0,1,2,2,: 0,1,2,2,4,:
LEN=6) 0,0,0,0,0,0,: 0,0,0,0,0,1,: 0,0,0,0,1,2,: 0,0,0,1,2,2,:
LEN=7) 0,0,0,0,0,0,0,: 0,0,0,0,0,0,1,: 0,0,0,0,0,1,2,: 0,0,0,0,1,2,2,:
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,: 0,0,0,0,0,1,2,2,:
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,:
0,0,0,0,0,0,1,2,2,:
 Number new nodes in level n is given by : 1,2,3,4,5,4,4,4,4,

----------Class
33----------
Inversion Sequences (I_n=(n+1)!) avoiding L=[[021][1230]]

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

R4) 0,0,0,-->0,0,0,0,--0,0,0,1,--0,0,1,--0,1,--
R5) 0,0,1,-->0,0,0,1,--0,0,0,1,--0,0,1,2,--0,1,2,--
R6) 0,1,2,-->0,0,1,2,--0,0,1,2,--0,1,2,3,--
R7) 0,0,0,0,-->0,0,0,0,0,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R8) 0,0,0,1,-->0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R9) 0,0,1,2,-->0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,3,--0,1,2,3,--
R10) 0,1,2,3,-->0,0,1,2,3,--0,1,2,3,--
R11) 0,0,0,0,0,-->0,0,0,0,0,0,--0,0,0,0,0,1,--0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R12)
0,0,0,0,1,-->0,0,0,0,0,1,--0,0,0,0,0,1,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,
--
R13) 0,0,0,1,2,-->0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,1,2,3,--0,0,1,2,3,--0,1,2,3,--
R14) 0,0,1,2,3,-->0,0,0,1,2,3,--0,0,1,2,3,--0,1,2,3,--
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,-->0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,2,--0,0,0,0,1,2,--0,0,0,
1,2,--0,0,1,2,--0,1,2,--
R17)
0,0,0,0,1,2,-->0,0,0,0,0,1,2,--0,0,0,0,0,1,2,--0,0,0,0,1,2,3,--0,0,0,1,2,3,--0,0,1,
2,3,--0,1,2,3,--
R18) 0,0,0,1,2,3,-->0,0,0,0,1,2,3,--0,0,0,1,2,3,--0,0,1,2,3,--0,1,2,3,--
R19)
0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,--0,0,0,0,0,1,--
0,0,0,0,1,--0,0,0,1,--0,0,1,--0,1,--
R20)
0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,
2,--0,0,0,0,1,2,--0,0,0,1,2,--0,0,1,2,--0,1,2,--
R21)
0,0,0,0,0,1,2,-->0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,2,--0,0,0,0,0,1,2,3,--0,0,0,0,1,2,
3,--0,0,0,1,2,3,--0,0,1,2,3,--0,1,2,3,--
R22)
0,0,0,0,1,2,3,-->0,0,0,0,0,1,2,3,--0,0,0,0,1,2,3,--0,0,0,1,2,3,--0,0,1,2,3,--0,1,2,
3,--
R23)
0,0,0,0,0,0,0,0,-->0,0,0,0,0,0,0,0,0,--0,0,0,0,0,0,0,0,1,--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)
0,0,0,0,0,0,0,1,-->0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,0,1,--0,0,0,0,0,0,0,1,2,--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)
0,0,0,0,0,0,1,2,-->0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,0,1,2,--0,0,0,0,0,0,1,2,3,--0,0,
0,0,0,1,2,3,--0,0,0,0,1,2,3,--0,0,0,1,2,3,--0,0,1,2,3,--0,1,2,3,--
R26)
0,0,0,0,0,1,2,3,-->0,0,0,0,0,0,1,2,3,--0,0,0,0,0,1,2,3,--0,0,0,0,1,2,3,--0,0,0,1,2,
3,--0,0,1,2,3,--0,1,2,3,--
List of different nodes in T[L]
LEN=1) 0,:
LEN=2) 0,0,: 0,1,:

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