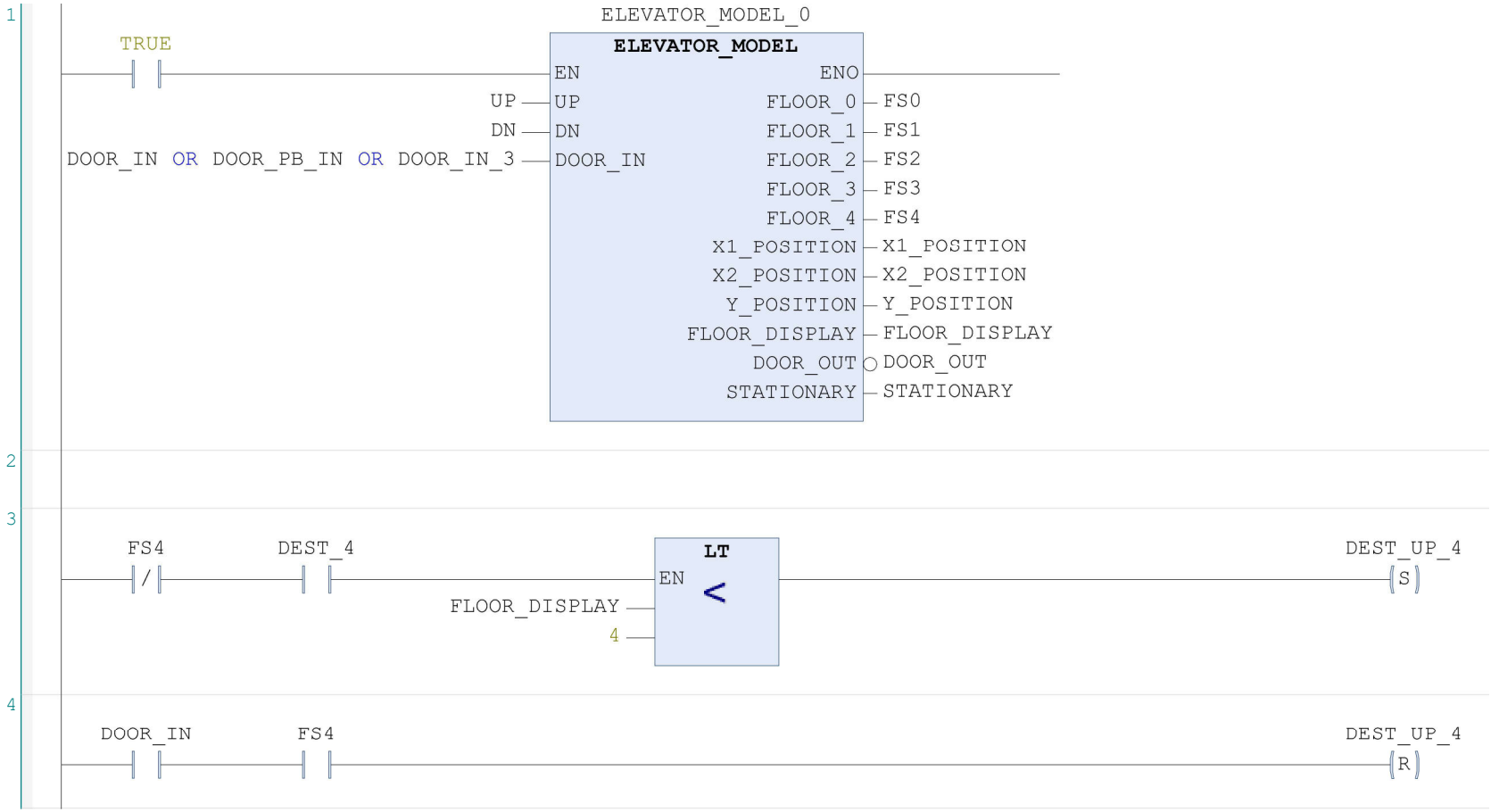
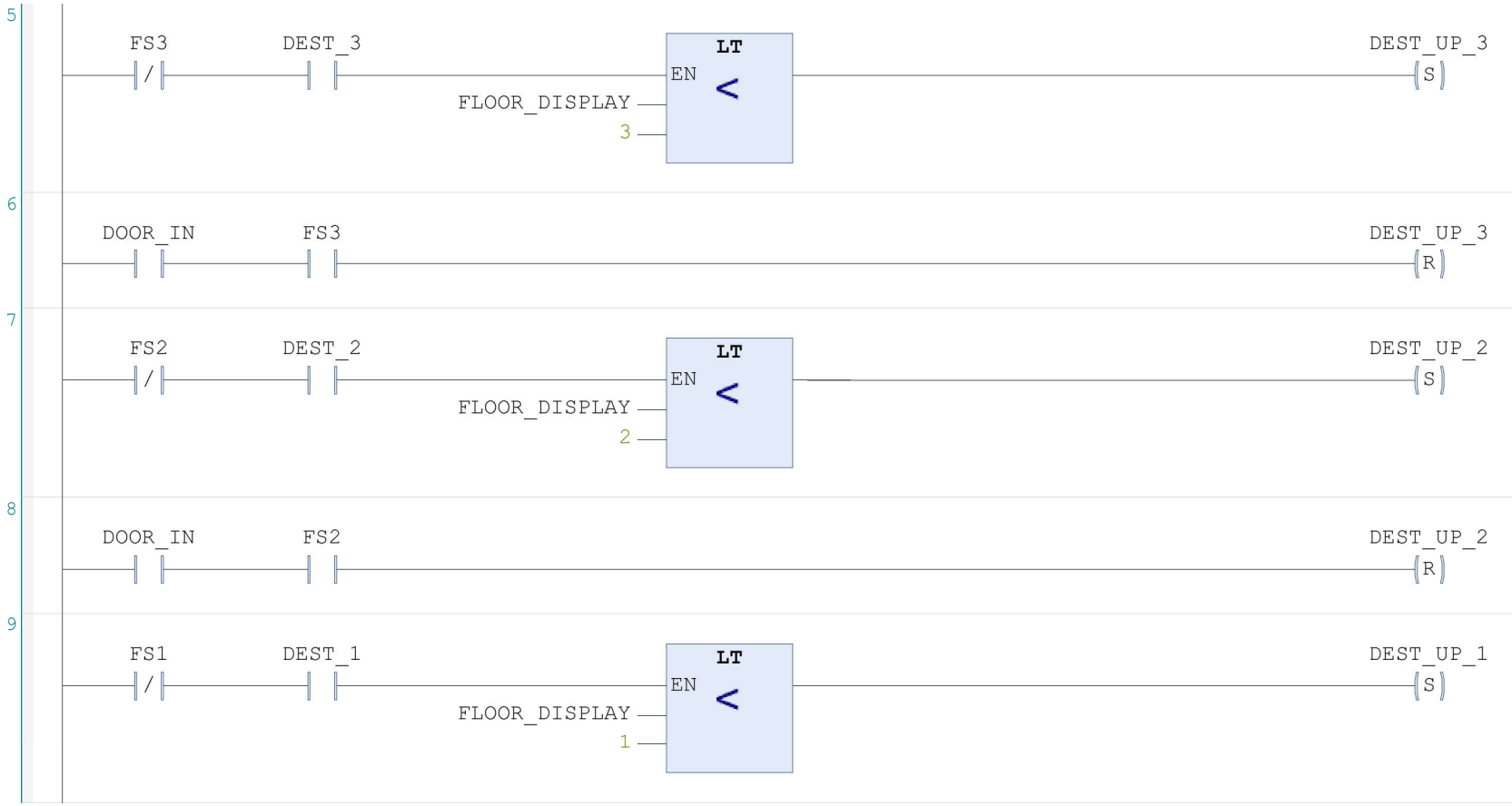
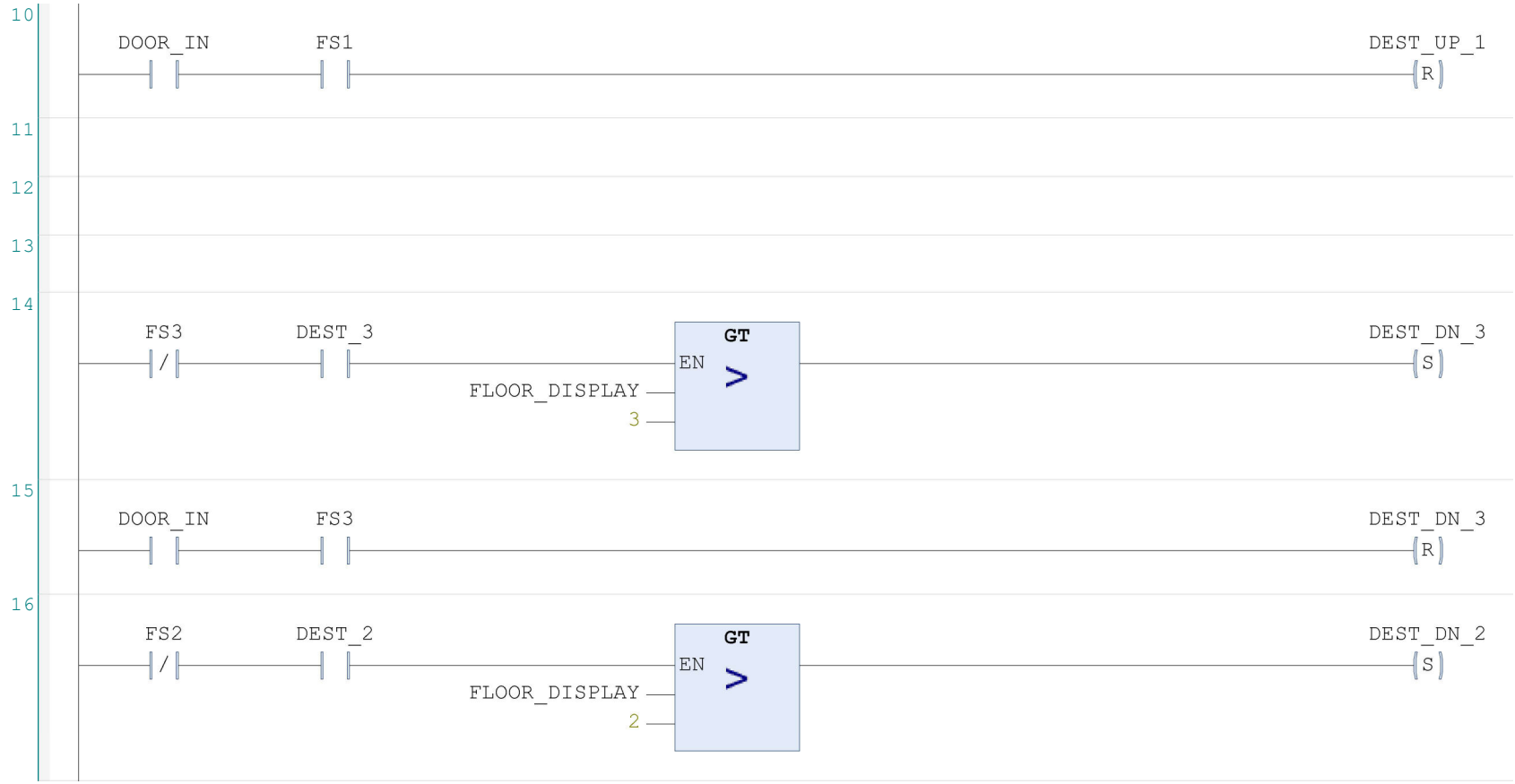
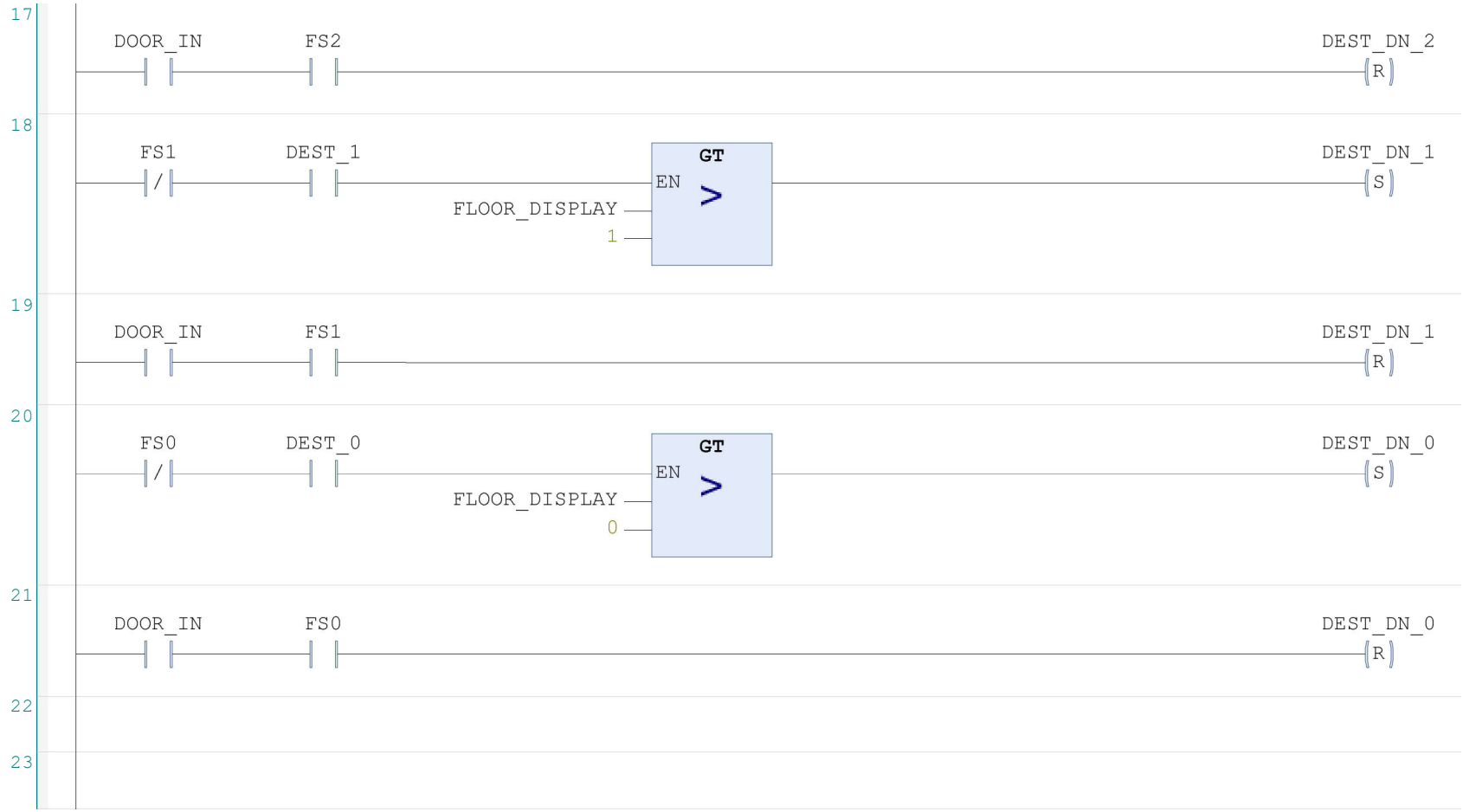
```
1   PROGRAM PLC_PRG
2   VAR
3       ELEVATOR_MODEL_0 : ELEVATOR_MODEL ;
4       UP : BOOL ;
5       DN : BOOL ;
6       FS0 : BOOL ;
7       FS1 : BOOL ;
8       FS2 : BOOL ;
9       FS3 : BOOL ;
10      FS4 : BOOL ;
11      Y_POSITION : REAL := 0 ;
12      FLOOR_DISPLAY : UINT ;
13      X1_POSITION : REAL := 0 ;
14      X2_POSITION : REAL := 0 ;
15
16
17      DEST_0 : BOOL ;
18      DEST_1 : BOOL ;
19      DEST_2 : BOOL ;
20      DEST_3 : BOOL ;
21      DEST_4 : BOOL ;
22      UP4 : BOOL ;
23      UP3 : BOOL ;
24      UP2 : BOOL ;
25      UP1 : BOOL ;
26      DN0 : BOOL ;
27      DN3 : BOOL ;
28      DN2 : BOOL ;
29      DN1 : BOOL ;
30
31      DOOR_IN : BOOL ;
32      DEST_UP_4 : BOOL ;
33      DEST_UP_3 : BOOL ;
34      DEST_UP_2 : BOOL ;
35      DEST_UP_1 : BOOL ;
```

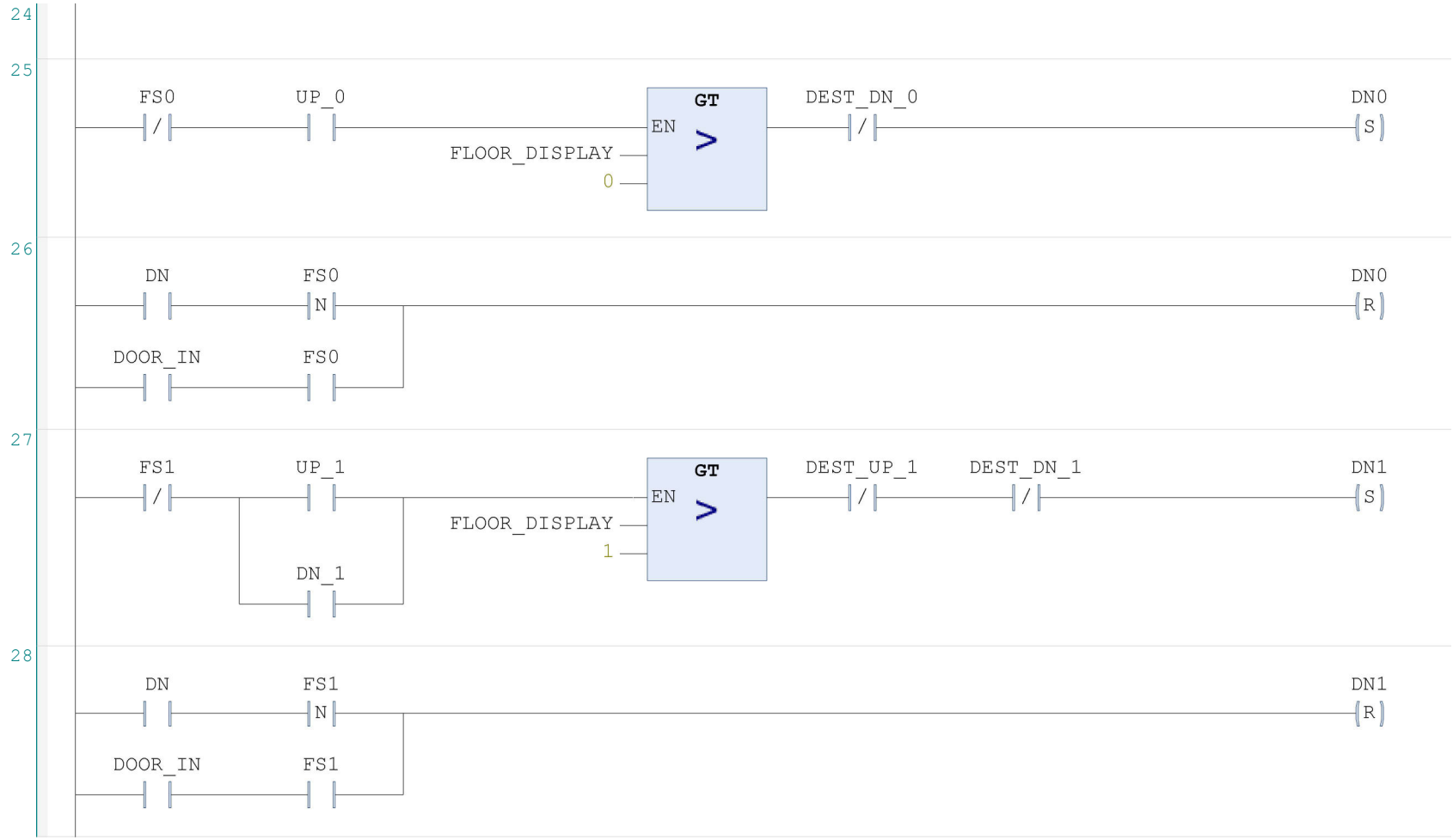
```
36          DEST_DN_3 :  BOOL ;
37          DEST_DN_2 :  BOOL ;
38          DEST_DN_1 :  BOOL ;
39          DEST_DN_0 :  BOOL ;
40          UP_0 :  BOOL ;
41          UP_1 :  BOOL ;
42          UP_2 :  BOOL ;
43          UP_3 :  BOOL ;
44          DN_4 :  BOOL ;
45          DN_3 :  BOOL ;
46          DN_2 :  BOOL ;
47          DN_1 :  BOOL ;
48          DOOR_IN_1 :  BOOL ;
49          DOOR_IN_2 :  BOOL ;
50          UP_PRESSED_3 :  BOOL ;
51          UP_PRESSED_2 :  BOOL ;
52          UP_PRESSED_1 :  BOOL ;
53          UP_PRESSED_0 :  BOOL ;
54          DN_PRESSED_4 :  BOOL ;
55          DN_PRESSED_3 :  BOOL ;
56          DN_PRESSED_2 :  BOOL ;
57          DN_PRESSED_1 :  BOOL ;
58          DOOR :  BOOL ;
59          DOOR_PB :  BOOL ;
60          DOOR_PB_IN :  BOOL ;
61          DN_NEW :  BOOL ;
62          UP_NEW :  BOOL ;
63          DOOR_OUT :  BOOL ;
64          STATIONARY :  BOOL ;
65          DOOR_IN_3 :  BOOL ;
66          DOOR_IN_4 :  BOOL ;
67      END_VAR
68
```

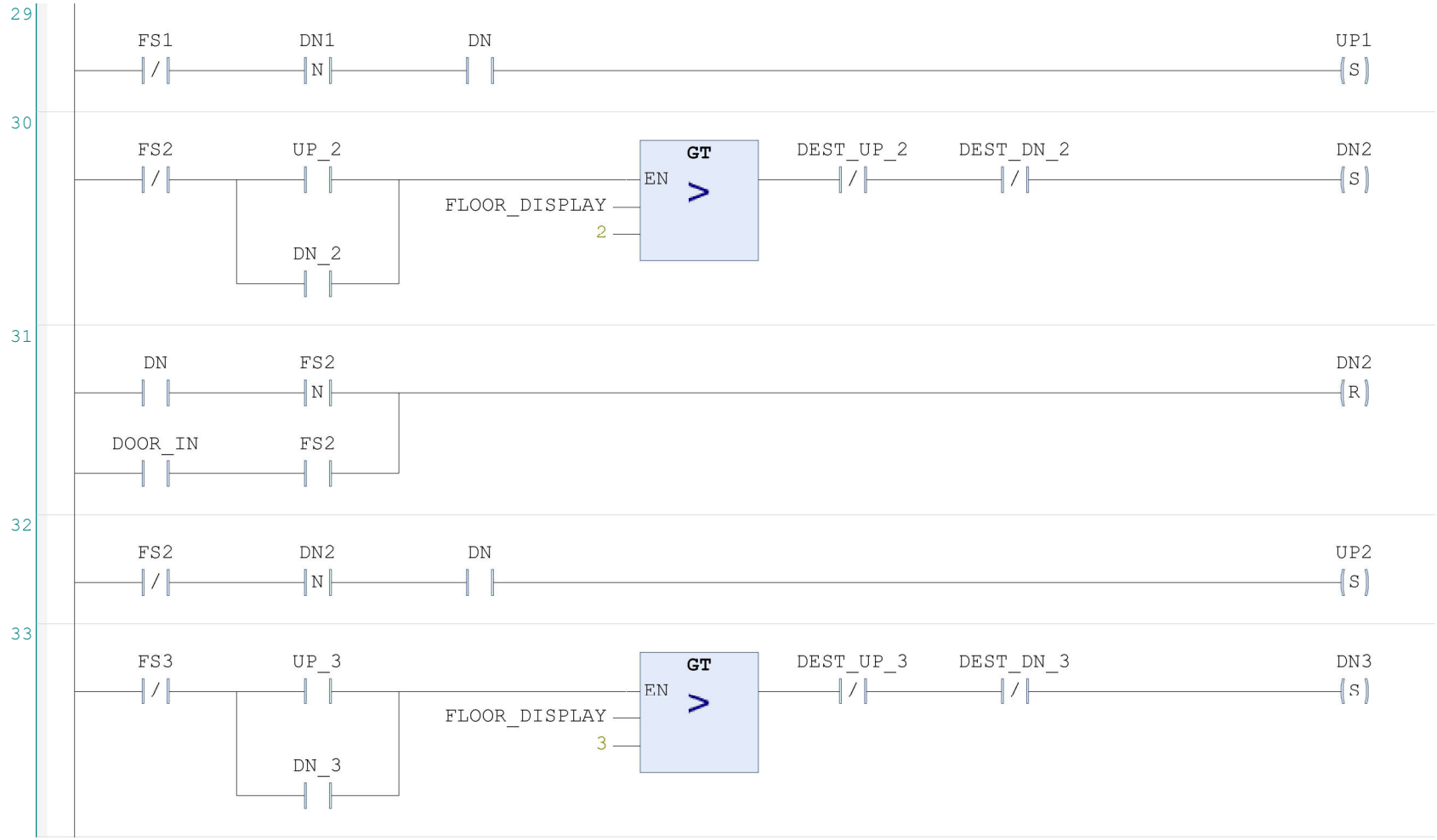

1
ELEVATOR_MODEL_0
ELEVATOR_MODEL
TRUE
EN
ENO
UP
UP
FLOOR_0
FS0
DN
DN
FLOOR_1
FS1
DOOR_IN OR DOOR_PB_IN OR DOOR_IN_3
DOOR_IN
FLOOR_2
FS2
FLOOR_3
FS3
FLOOR_4
FS4
X1_POSITION
X1_POSITION
X2_POSITION
X2_POSITION
Y_POSITION
Y_POSITION
FLOOR_DISPLAY
FLOOR_DISPLAY
DOOR_OUT
DOOR_OUT
STATIONARY
STATIONARY
2
3
FS4
/
DEST_4
LT
EN
<
FLOOR_DISPLAY
4
DEST_UP_4
S
4
DOOR_IN
FS4
DEST_UP_4
R

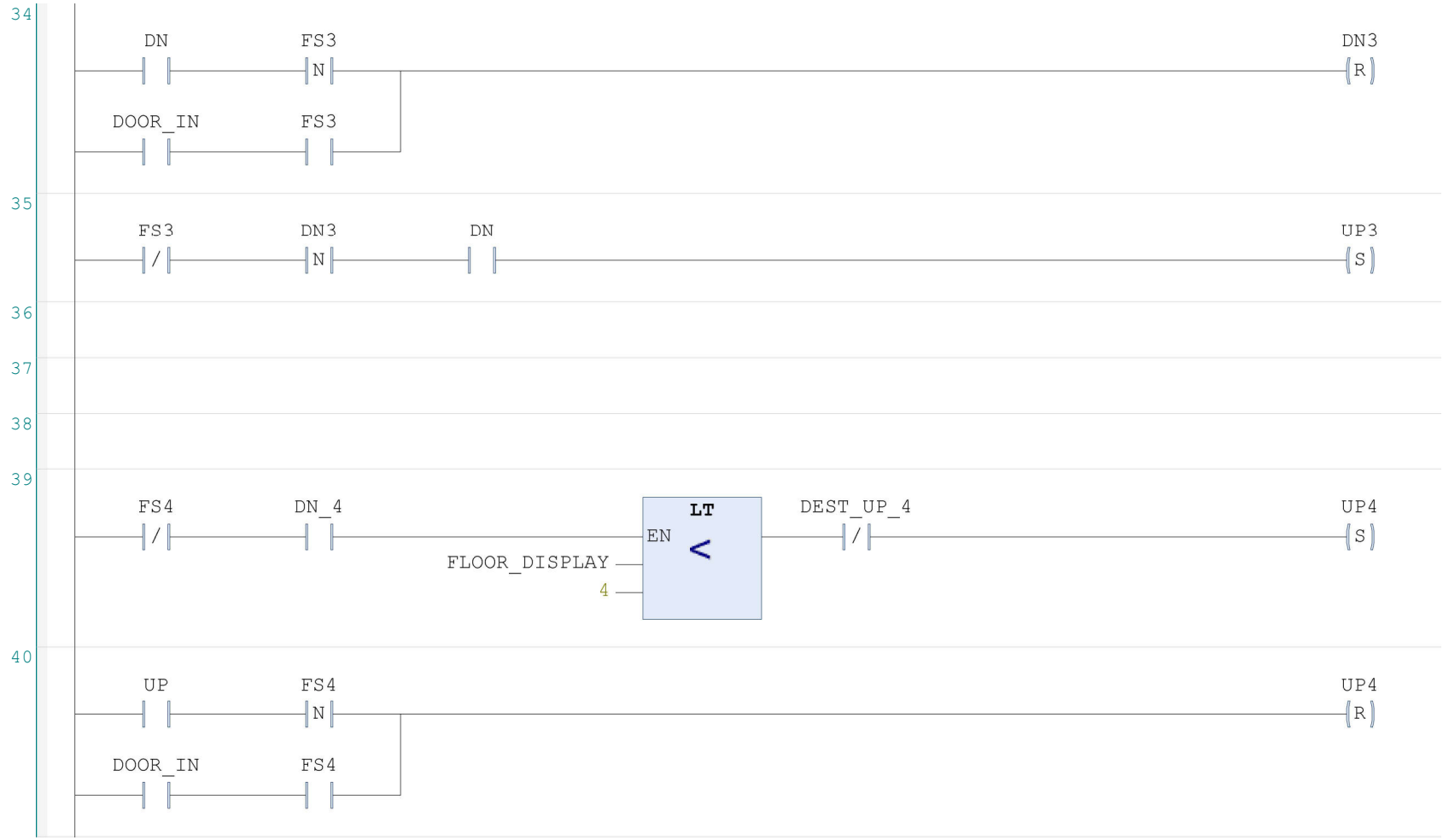

5
FS3
/
DEST_3
LT
EN
<
FLOOR_DISPLAY
3
DEST_UP_3
S
6
DOOR_IN
FS3
DEST_UP_3
R
7
FS2
/
DEST_2
LT
EN
<
FLOOR_DISPLAY
2
DEST_UP_2
S
8
DOOR_IN
FS2
DEST_UP_2
R
9
FS1
/
DEST_1
LT
EN
<
FLOOR_DISPLAY
1
DEST_UP_1
S

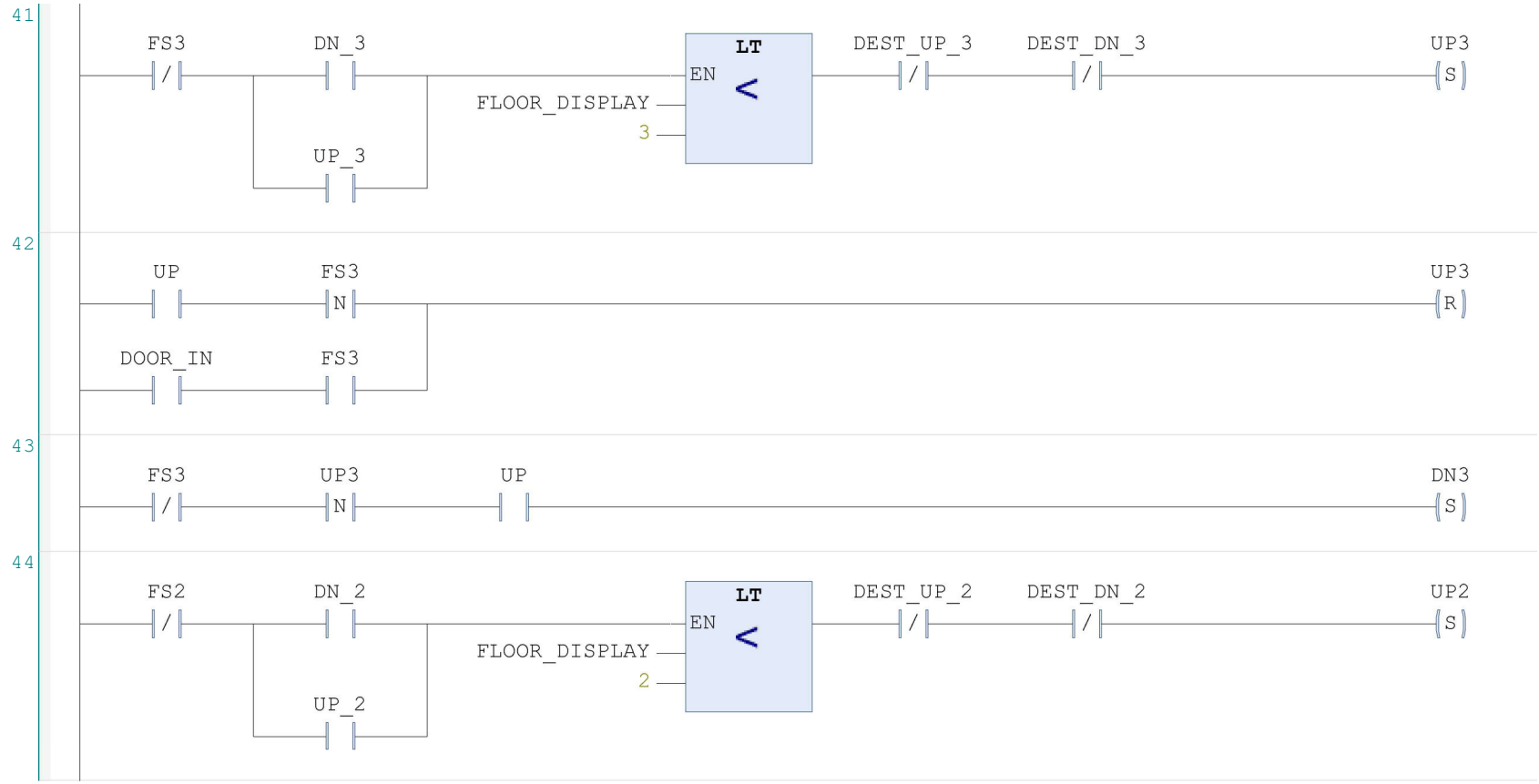

10
DOOR_IN
FS1
DEST_UP_1
R
11
12
13
14
FS3
DEST_3
GT
EN
>
FLOOR_DISPLAY
3
DEST_DN_3
S
15
DOOR_IN
FS3
DEST_DN_3
R
16
FS2
DEST_2
GT
EN
>
FLOOR_DISPLAY
2
DEST_DN_2
S

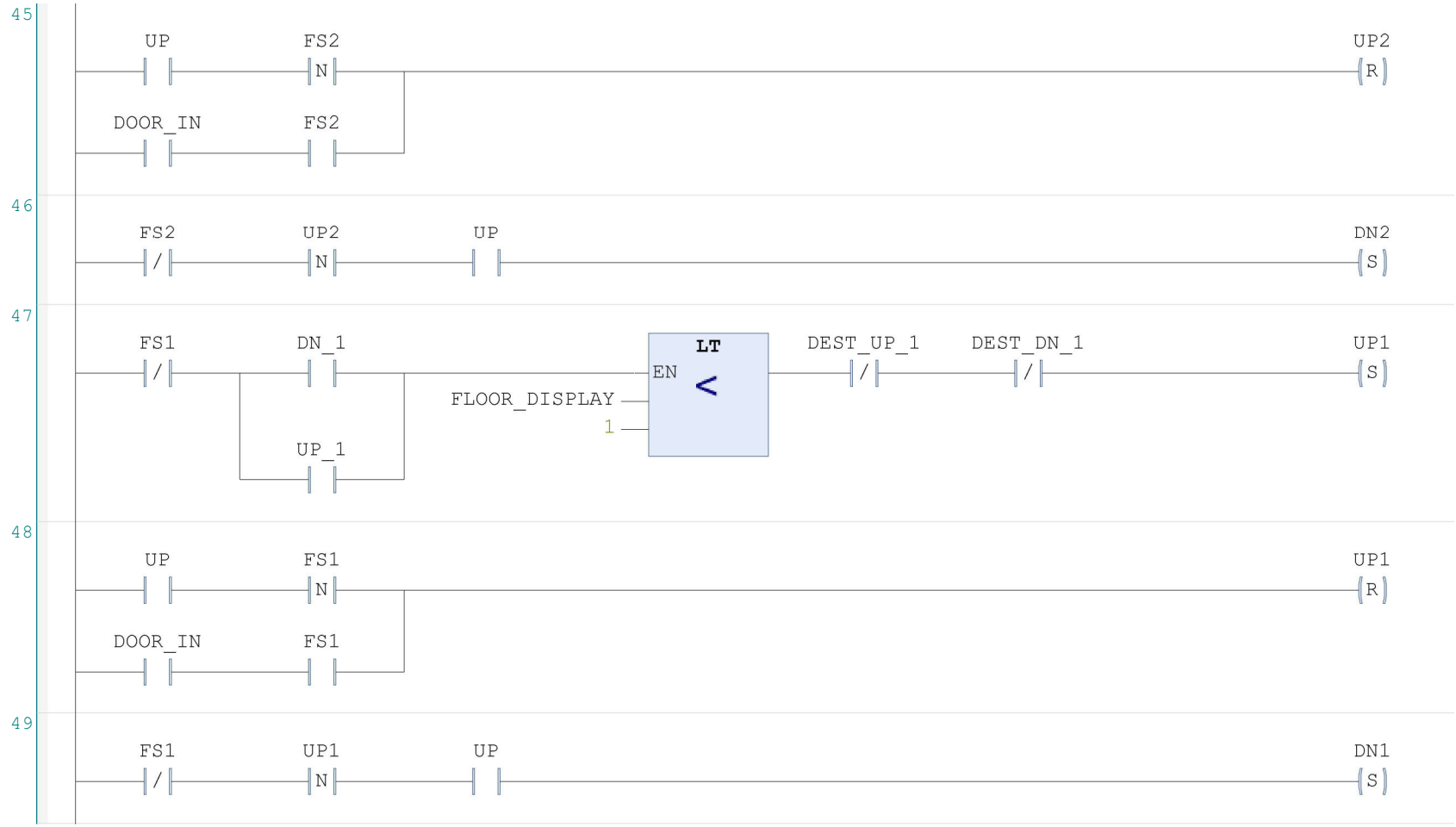

17
DOOR_IN
FS2
DEST_DN_2
R
18
FS1
DEST_1
GT
EN
>
FLOOR_DISPLAY
1
DEST_DN_1
S
19
DOOR_IN
FS1
DEST_DN_1
R
20
FS0
DEST_0
GT
EN
>
FLOOR_DISPLAY
0
DEST_DN_0
S
21
DOOR_IN
FS0
DEST_DN_0
R
22
23

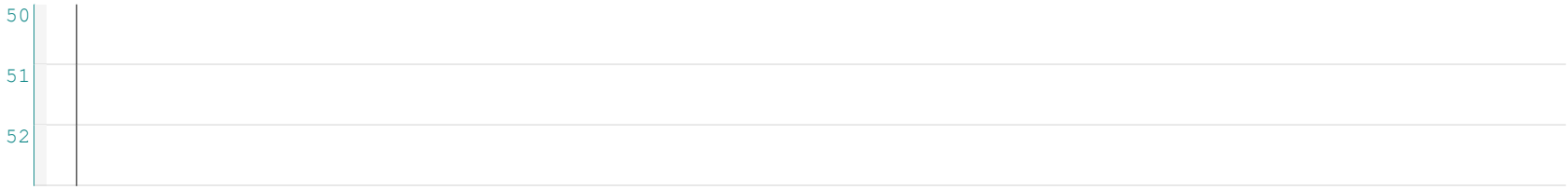

24
25
FS0
UP_0
GT
EN
>
FLOOR_DISPLAY
0
DEST_DN_0
DN0
S
26
DN
FS0
N
DOOR_IN
FS0
DN0
R
27
FS1
UP_1
GT
EN
>
FLOOR_DISPLAY
1
DEST_UP_1
DEST_DN_1
DN1
S
DN_1
28
DN
FS1
N
DOOR_IN
FS1
DN1
R


29
FS1
DN1
N
DN
UP1
S
30
FS2
UP_2
DN_2
GT
EN
>
FLOOR_DISPLAY
2
DEST_UP_2
DEST_DN_2
DN2
S
31
DN
FS2
N
DOOR_IN
FS2
DN2
R
32
FS2
DN2
N
DN
UP2
S
33
FS3
UP_3
DN_3
GT
EN
>
FLOOR_DISPLAY
3
DEST_UP_3
DEST_DN_3
DN3
S

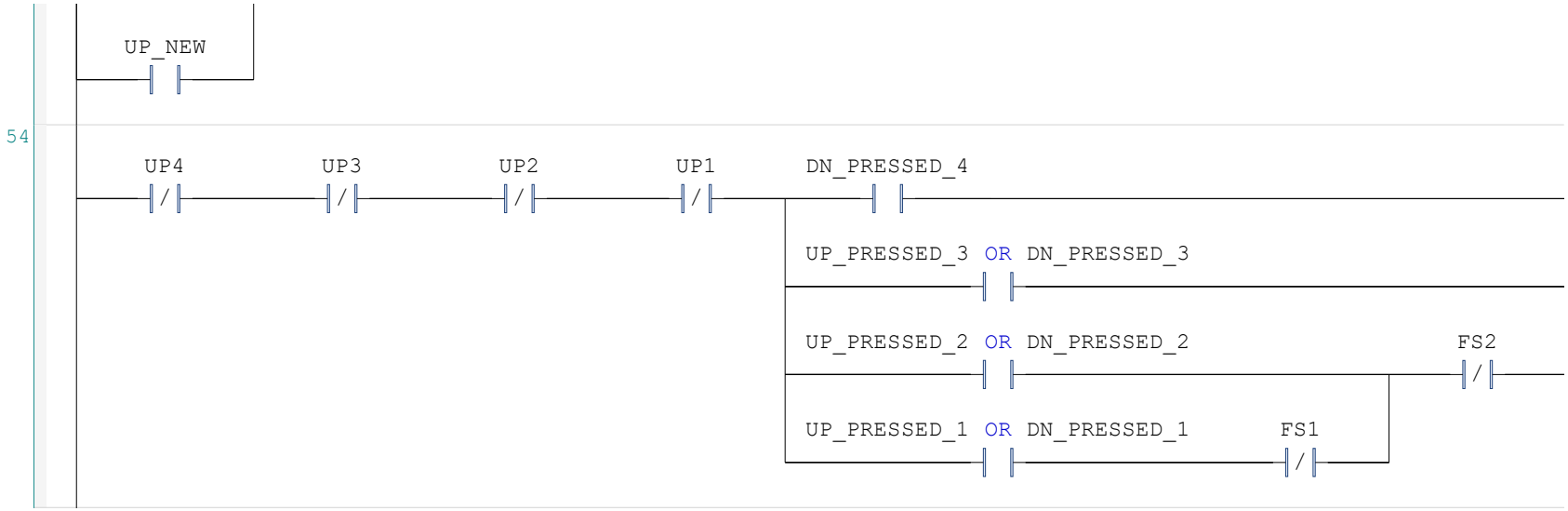

34
DN
FS3
N
DN3
R
DOOR_IN
FS3
35
FS3
/
DN3
N
DN
UP3
S
36
37
38
39
FS4
/
DN_4
LT
EN
<
FLOOR_DISPLAY
4
DEST_UP_4
/
UP4
S
40
UP
FS4
N
UP4
R
DOOR_IN
FS4

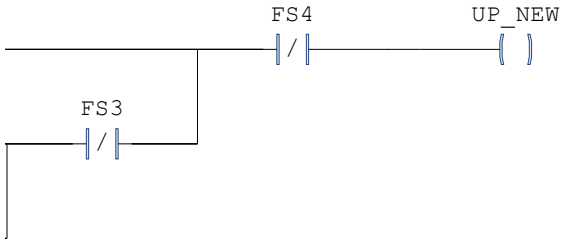

41
FS3
DN_3
UP_3
LT
EN
FLOOR_DISPLAY
3
DEST_UP_3
DEST_DN_3
UP3
S
42
UP
FS3
DOOR_IN
FS3
N
UP3
R
43
FS3
UP3
N
UP
DN3
S
44
FS2
DN_2
UP_2
LT
EN
FLOOR_DISPLAY
2
DEST_UP_2
DEST_DN_2
UP2
S

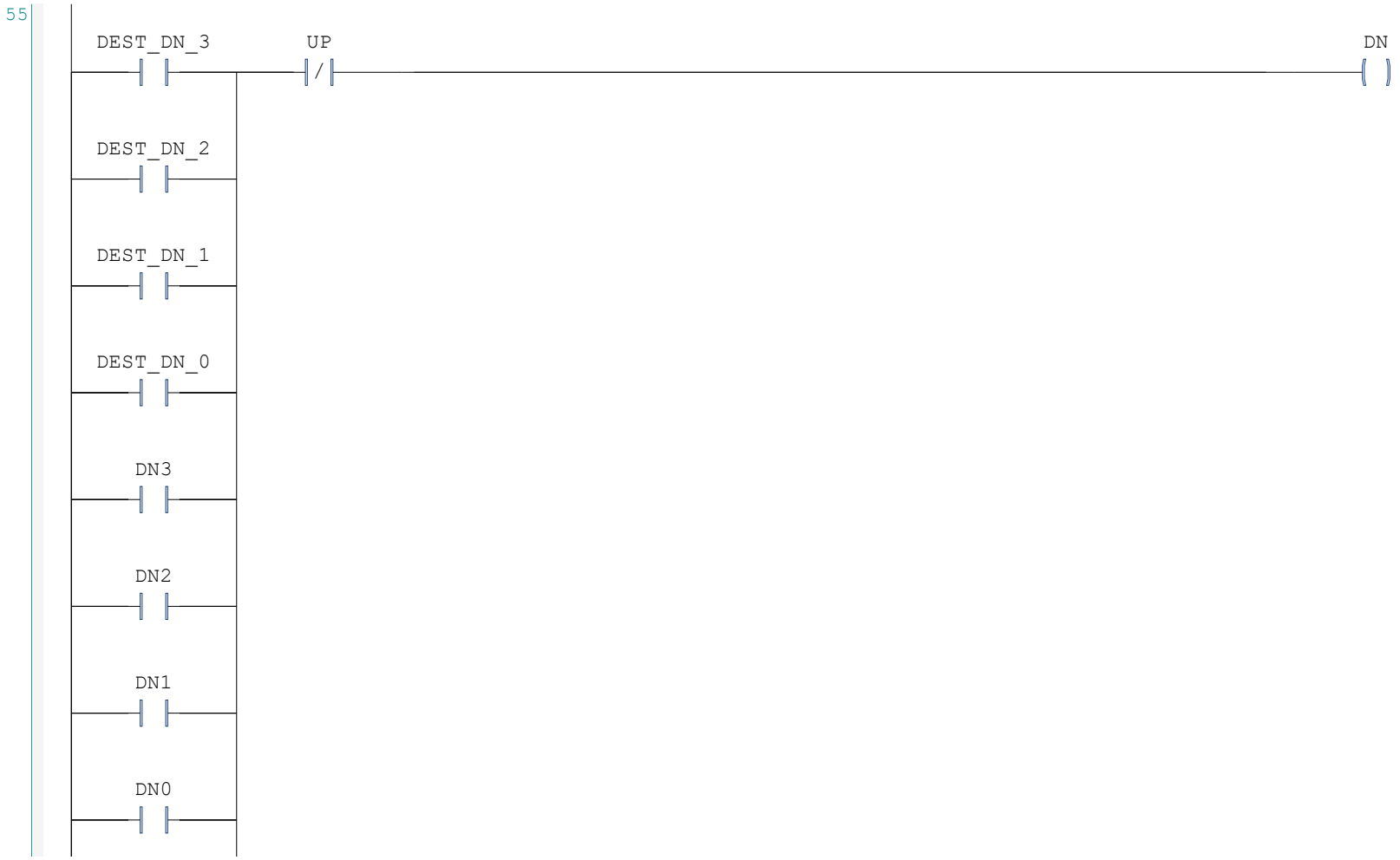

45
UP
FS2
N
UP2
R
DOOR_IN
FS2
46
FS2
/
UP2
N
UP
DN2
S
47
FS1
/
DN_1
UP_1
LT
EN
<
FLOOR_DISPLAY
1
DEST_UP_1
/
DEST_DN_1
/
UP1
S
48
UP
FS1
N
UP1
R
DOOR_IN
FS1
49
FS1
/
UP1
N
UP
DN1
S

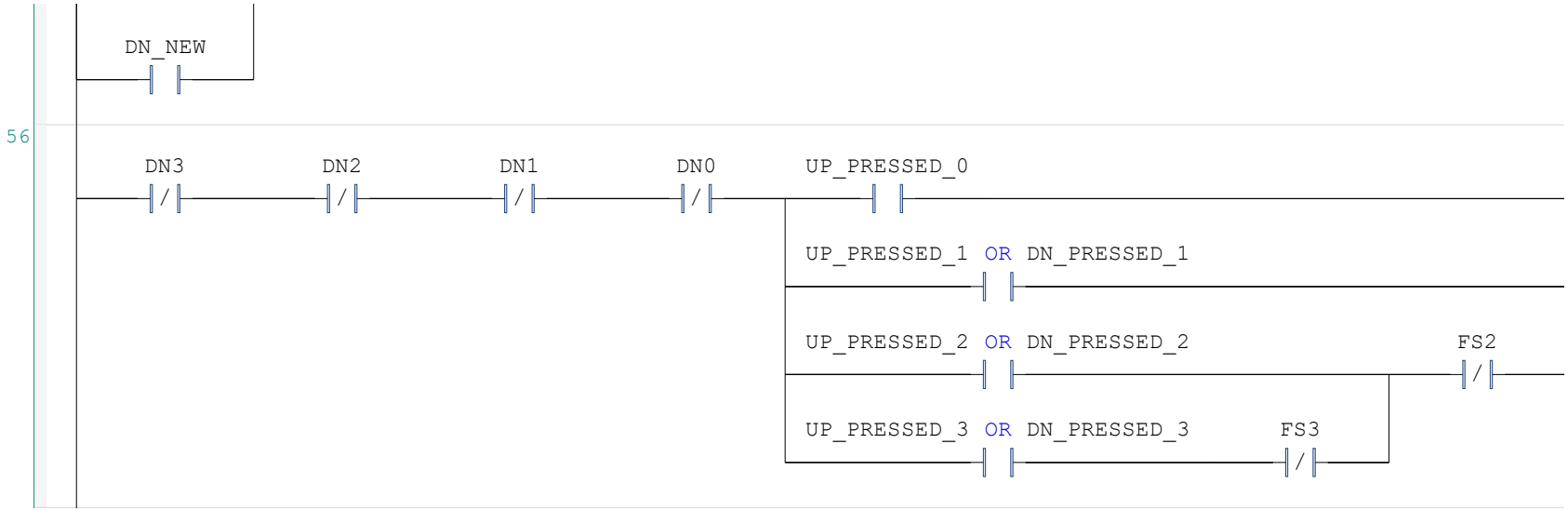

50
51
52

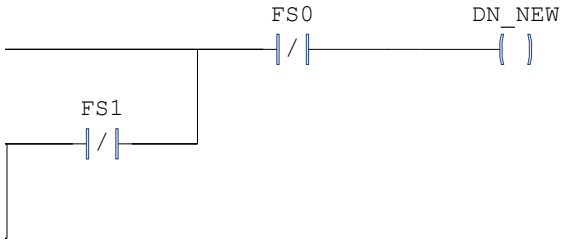

53
DEST_UP_4
DN
UP
DEST_UP_3
DEST_UP_2
DEST_UP_1
UP4
UP3
UP2
UP1


UP_NEW
54
UP4
UP3
UP2
UP1
DN_PRESSED_4
UP_PRESSED_3 OR DN_PRESSED_3
UP_PRESSED_2 OR DN_PRESSED_2
FS2
UP_PRESSED_1 OR DN_PRESSED_1
FS1


FS4
UP_NEW
FS3

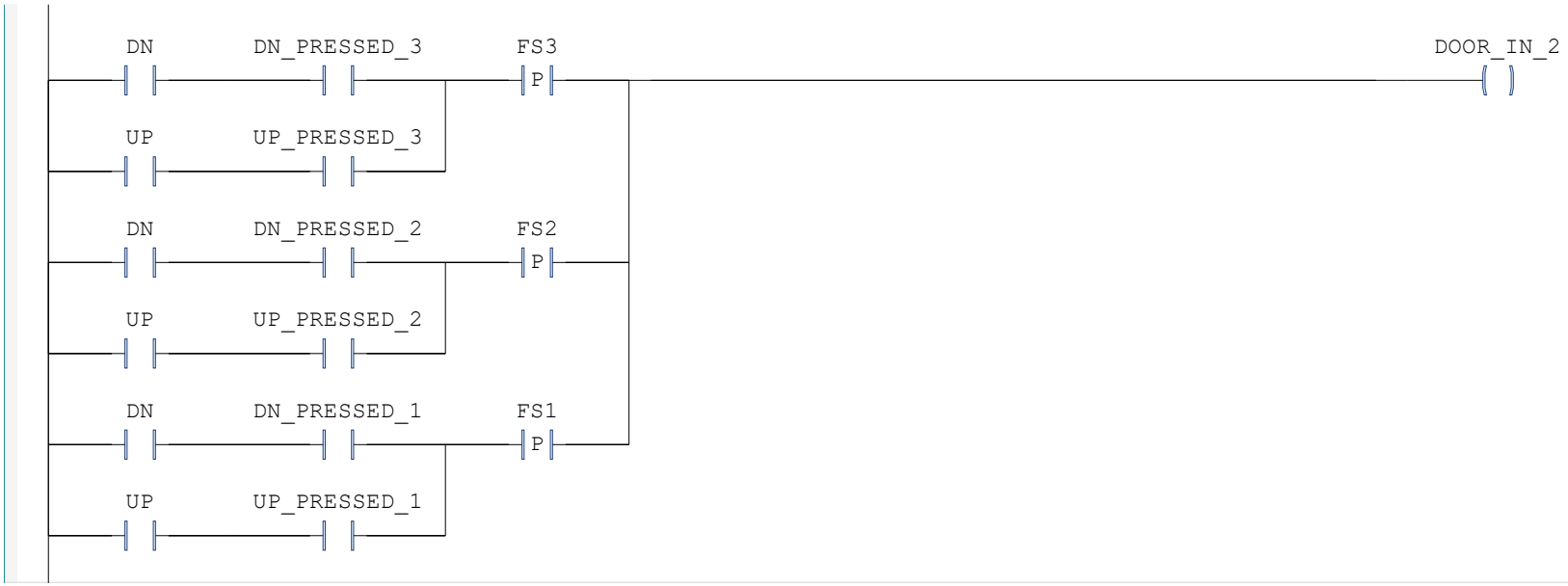

55
DEST_DN_3
UP
DN
DEST_DN_2
DEST_DN_1
DEST_DN_0
DN3
DN2
DN1
DN0


DN_NEW
56
DN3
DN2
DN1
DN0
UP_PRESSED_0
UP_PRESSED_1 OR DN_PRESSED_1
UP_PRESSED_2 OR DN_PRESSED_2
FS2
UP_PRESSED_3 OR DN_PRESSED_3
FS3

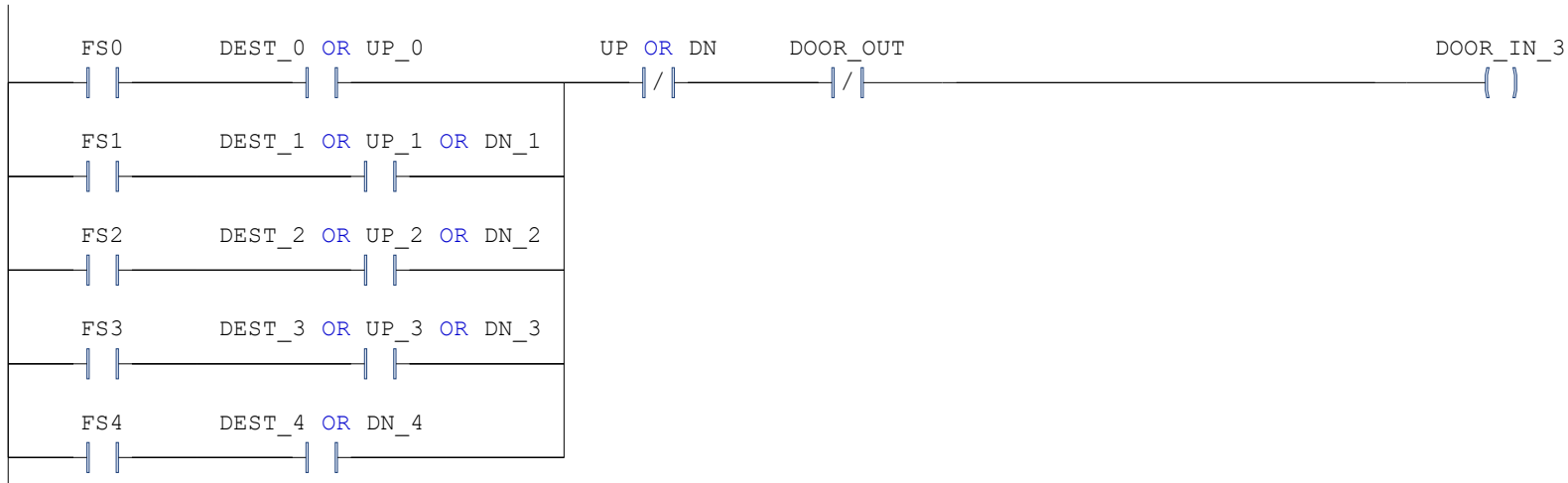

FS0
DN_NEW
FS1

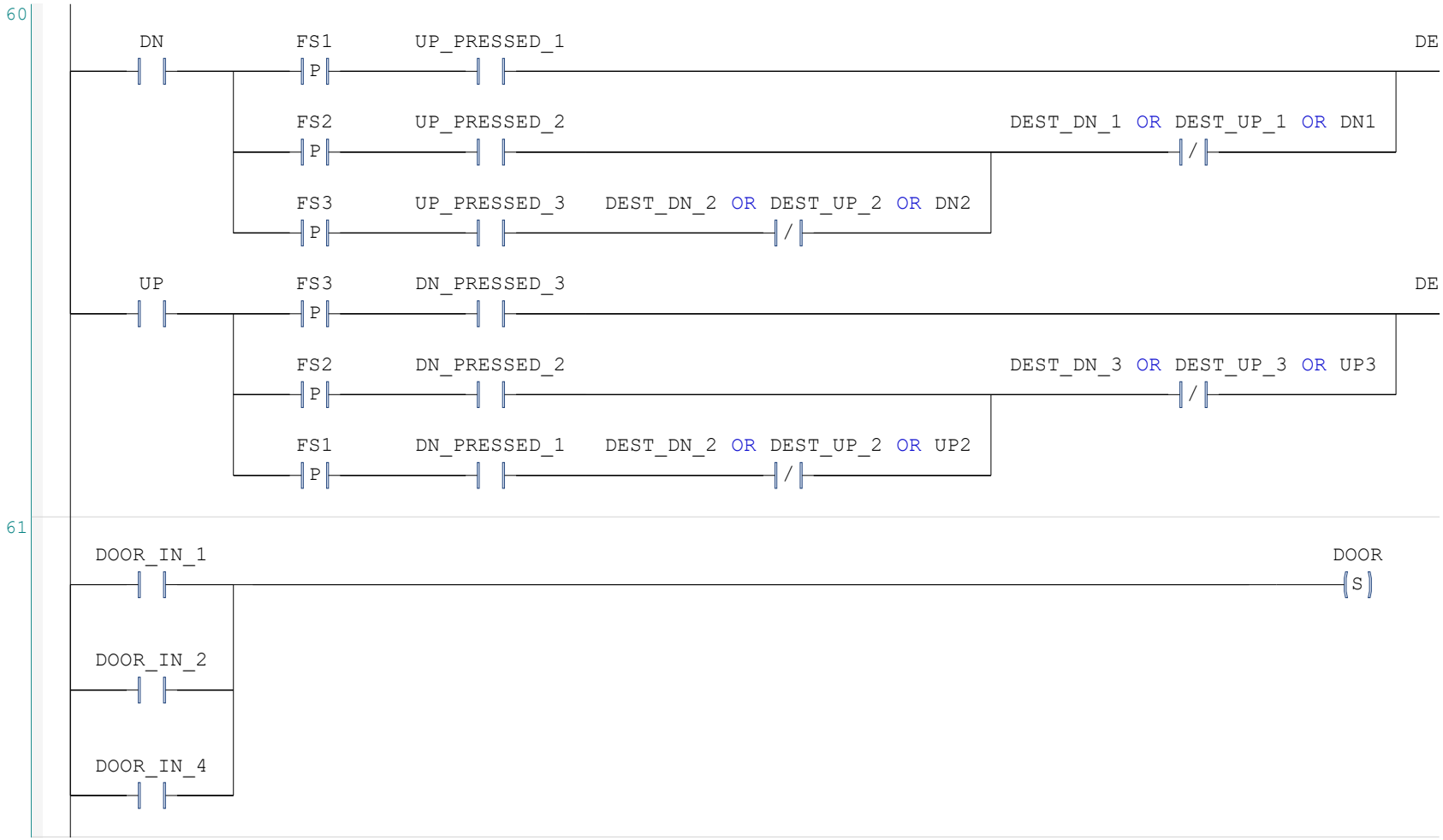

57
FS4
P
DOOR_IN_1
FS3
P
DEST_DN_3
DEST_UP_3
FS2
P
DEST_DN_2
DEST_UP_2
FS1
P
DEST_DN_1
DEST_UP_1
FS0
P

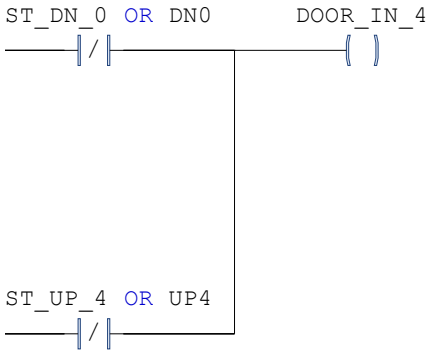
58

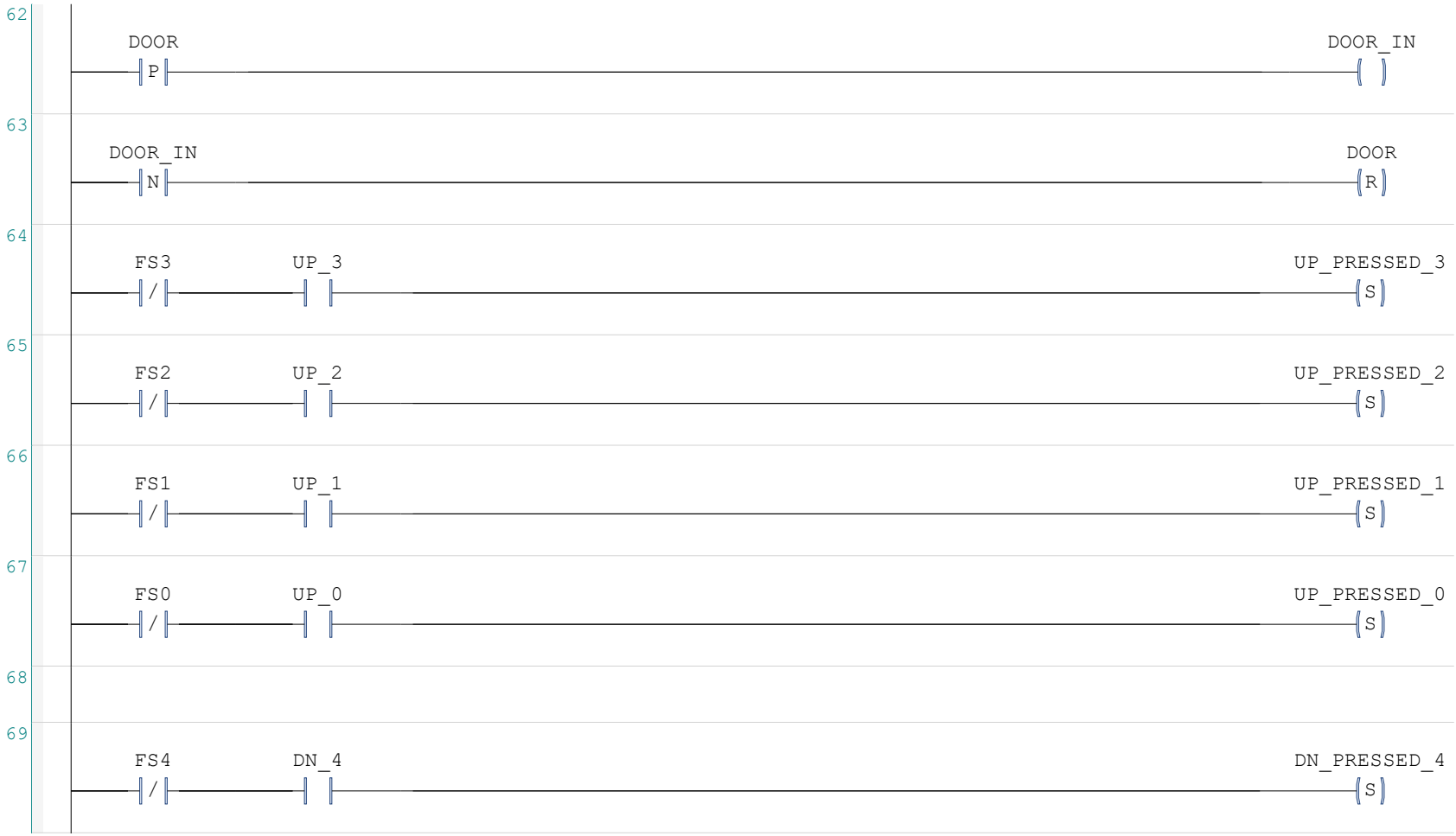

DN
DN_PRESSED_3
FS3
P
DOOR_IN_2
UP
UP_PRESSED_3
DN
DN_PRESSED_2
FS2
P
UP
UP_PRESSED_2
DN
DN_PRESSED_1
FS1
P
UP
UP_PRESSED_1

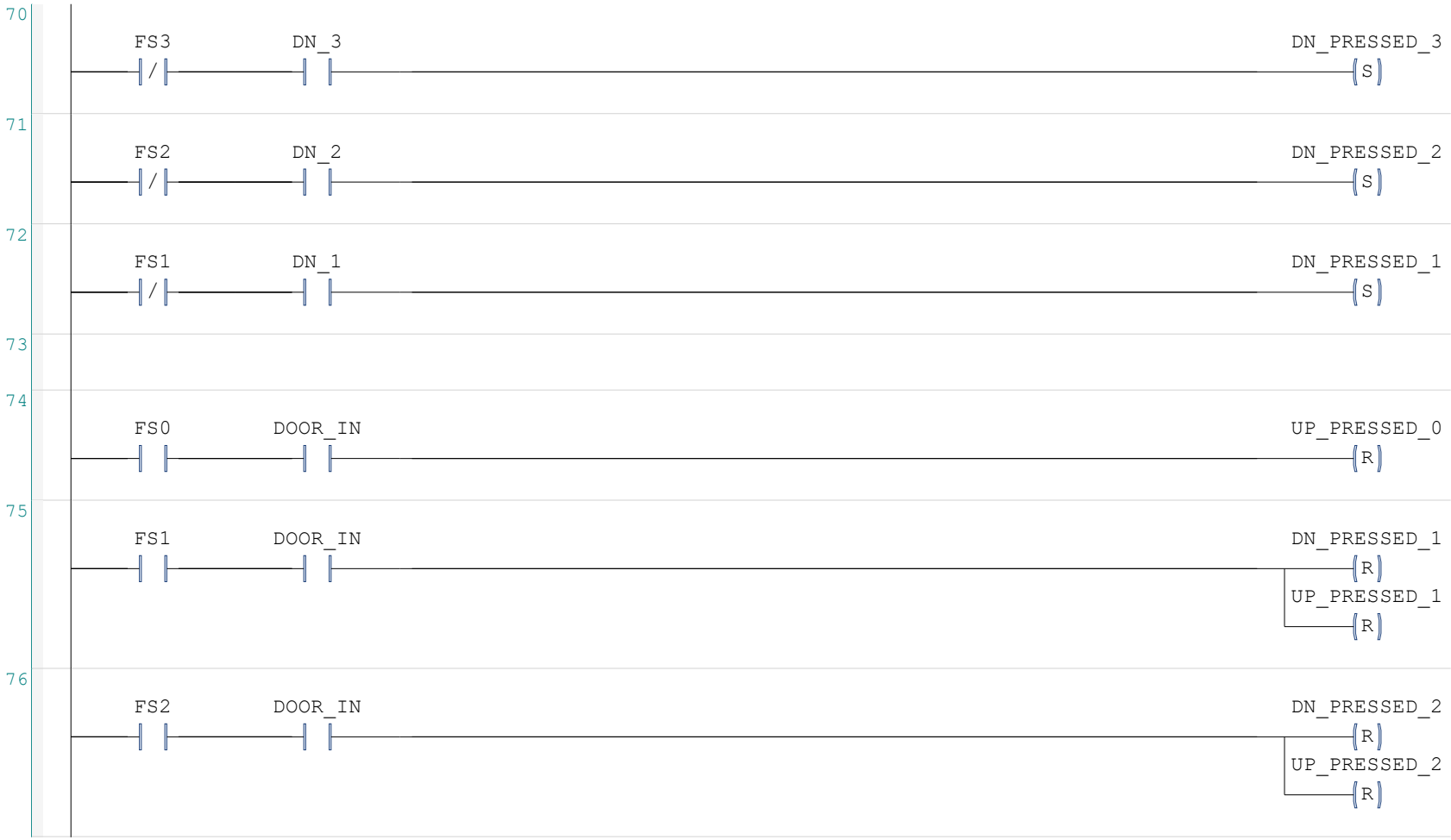
59

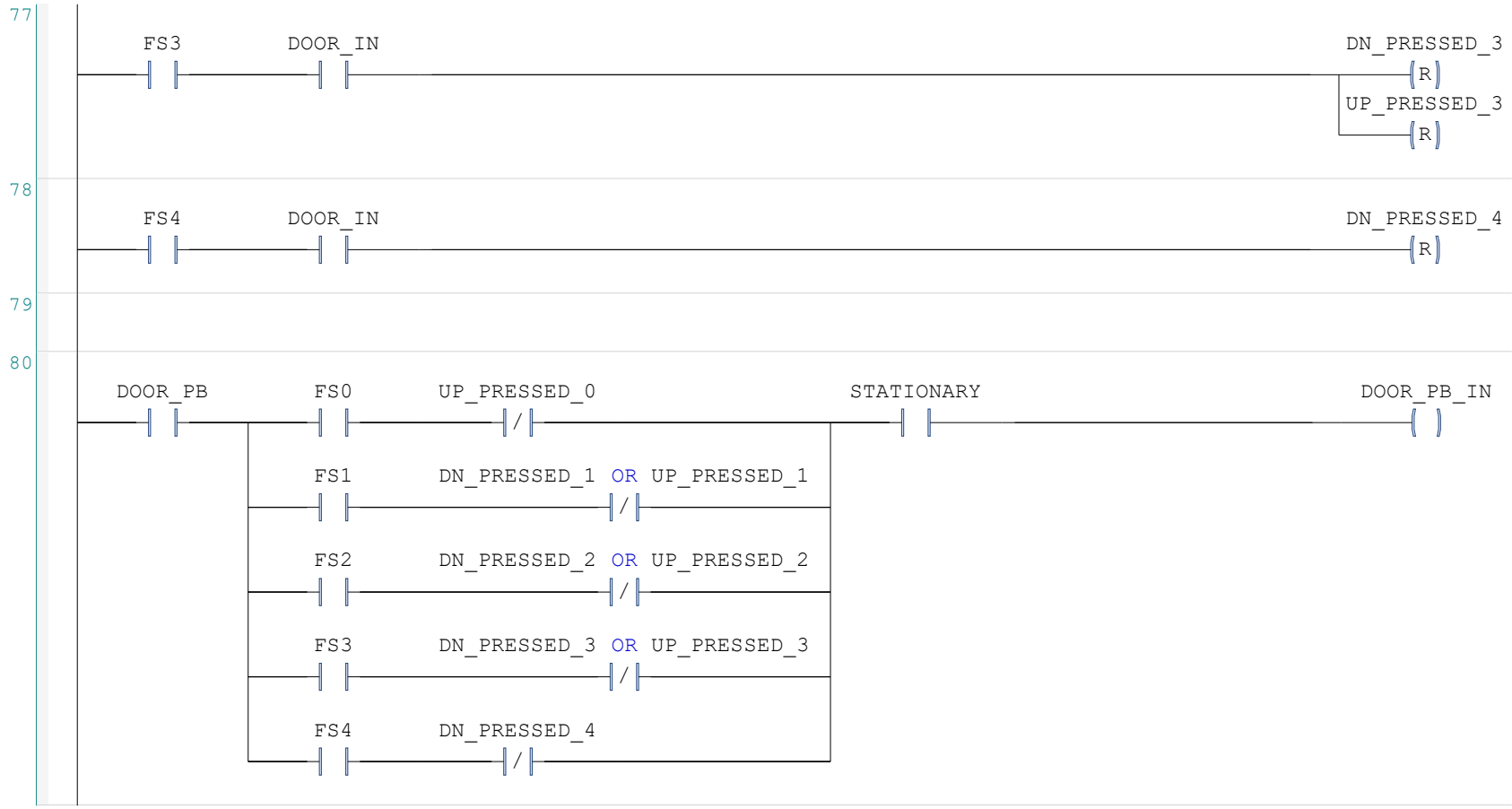

FS0
DEST_0 OR UP_0
UP OR DN
DOOR_OUT
DOOR_IN_3
FS1
DEST_1 OR UP_1 OR DN_1
FS2
DEST_2 OR UP_2 OR DN_2
FS3
DEST_3 OR UP_3 OR DN_3
FS4
DEST_4 OR DN_4


60
DN
FS1
P
UP_PRESSED_1
DE
FS2
P
UP_PRESSED_2
DEST_DN_1 OR DEST_UP_1 OR DN1
/
FS3
P
UP_PRESSED_3
DEST_DN_2 OR DEST_UP_2 OR DN2
/
UP
FS3
P
DN_PRESSED_3
DE
FS2
P
DN_PRESSED_2
DEST_DN_3 OR DEST_UP_3 OR UP3
/
FS1
P
DN_PRESSED_1
DEST_DN_2 OR DEST_UP_2 OR UP2
/
61
DOOR_IN_1
DOOR
S
DOOR_IN_2
DOOR_IN_4


ST_DN_0 OR DN0
DOOR_IN_4
ST_UP_4 OR UP4


62
DOOR
P
DOOR_IN
63
DOOR_IN
N
DOOR
R
64
FS3
/
UP_3
UP_PRESSED_3
S
65
FS2
/
UP_2
UP_PRESSED_2
S
66
FS1
/
UP_1
UP_PRESSED_1
S
67
FS0
/
UP_0
UP_PRESSED_0
S
68
69
FS4
/
DN_4
DN_PRESSED_4
S

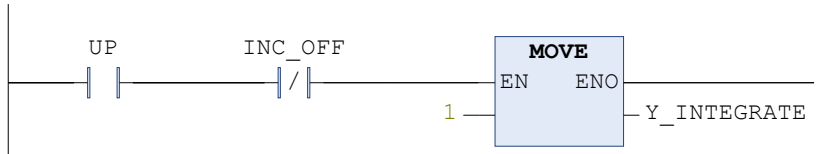

70
FS3
DN_3
DN_PRESSED_3
S
71
FS2
DN_2
DN_PRESSED_2
S
72
FS1
DN_1
DN_PRESSED_1
S
73
74
FS0
DOOR_IN
UP_PRESSED_0
R
75
FS1
DOOR_IN
DN_PRESSED_1
R
UP_PRESSED_1
R
76
FS2
DOOR_IN
DN_PRESSED_2
R
UP_PRESSED_2
R


77
FS3
DOOR_IN
DN_PRESSED_3
R
UP_PRESSED_3
R
78
FS4
DOOR_IN
DN_PRESSED_4
R
79
80
DOOR_PB
FS0
UP_PRESSED_0
STATIONARY
DOOR_PB_IN
FS1
DN_PRESSED_1 OR UP_PRESSED_1
FS2
DN_PRESSED_2 OR UP_PRESSED_2
FS3
DN_PRESSED_3 OR UP_PRESSED_3
FS4
DN_PRESSED_4

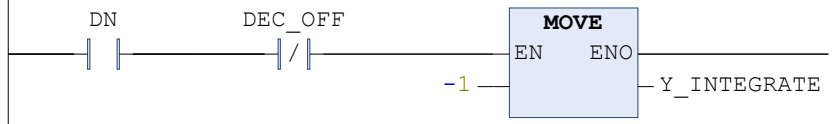
```
1   FUNCTION_BLOCK  ELEVATOR_MODEL
2   VAR_INPUT
3       UP :  BOOL ;
4       DN :  BOOL ;
5
6       DOOR_IN :  BOOL ;
7   END_VAR
8   VAR_OUTPUT
9       FLOOR_0 :  BOOL ;
10      FLOOR_1 :  BOOL ;
11      FLOOR_2 :  BOOL ;
12      FLOOR_3 :  BOOL ;
13      FLOOR_4 :  BOOL ;
14      X1_POSITION :  REAL ;
15      X2_POSITION :  REAL ;
16      Y_POSITION :  REAL ;
17      FLOOR_DISPLAY :  UINT ;
18
19      DOOR_OUT :  BOOL ;
20      STATIONARY :  BOOL ;
21
22  END_VAR
23  VAR
24      INC_OFF :  BOOL ;
25      DEC_OFF :  BOOL ;
26      Y_INTEGRATE :  INT ;
27      INTEGRAL_0 :  INTEGRAL ;
28      LIN_TRAFO_0 :  LIN_TRAFO ;
29      LIN_TRAFO_1 :  LIN_TRAFO ;
30      LIN_TRAFO_2 :  LIN_TRAFO ;
31      TOF_0 :  TOF ;
32      X_PIXELS :  REAL ;
33      X_PIXELS_1 :  REAL ;
34      ABSOLUTE_POSITION :  REAL ;
35      TOF_1 :  TOF ;
```

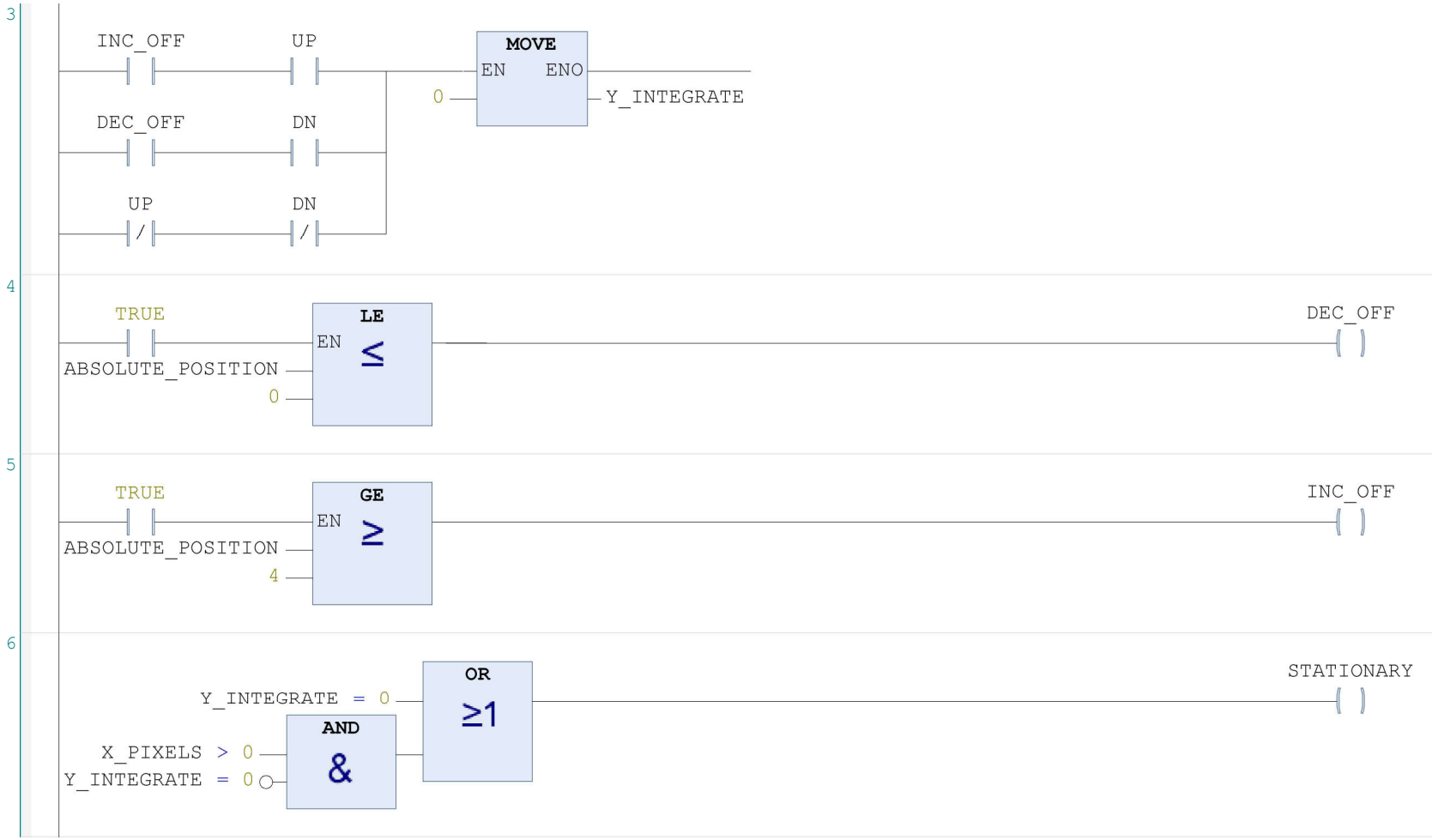
```
36          ERR :  REAL ;
37          STOP_INTEGRATION :  BOOL ;
38          DOOR_PB_IN :  BOOL ;
39          TOF_2 :  TOF ;
40          DOOR_PB_PRESSED :  BOOL ;
41          X_TMP :  INT ;
42          X_TIME :  INT ;
43          INTEGRAL_1 :  INTEGRAL ;
44          DOOR_REAL :  REAL ;
45          T1 :  BOOL ;
46          T2 :  BOOL ;
47          DOOR :  BOOL ;
48      END_VAR
49
```

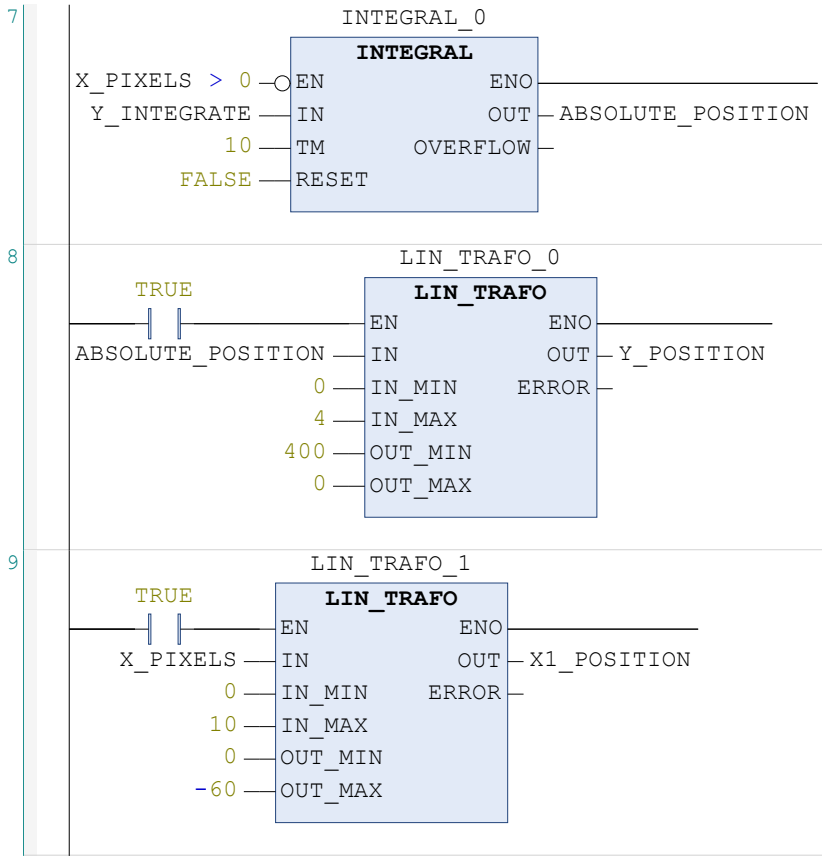
1

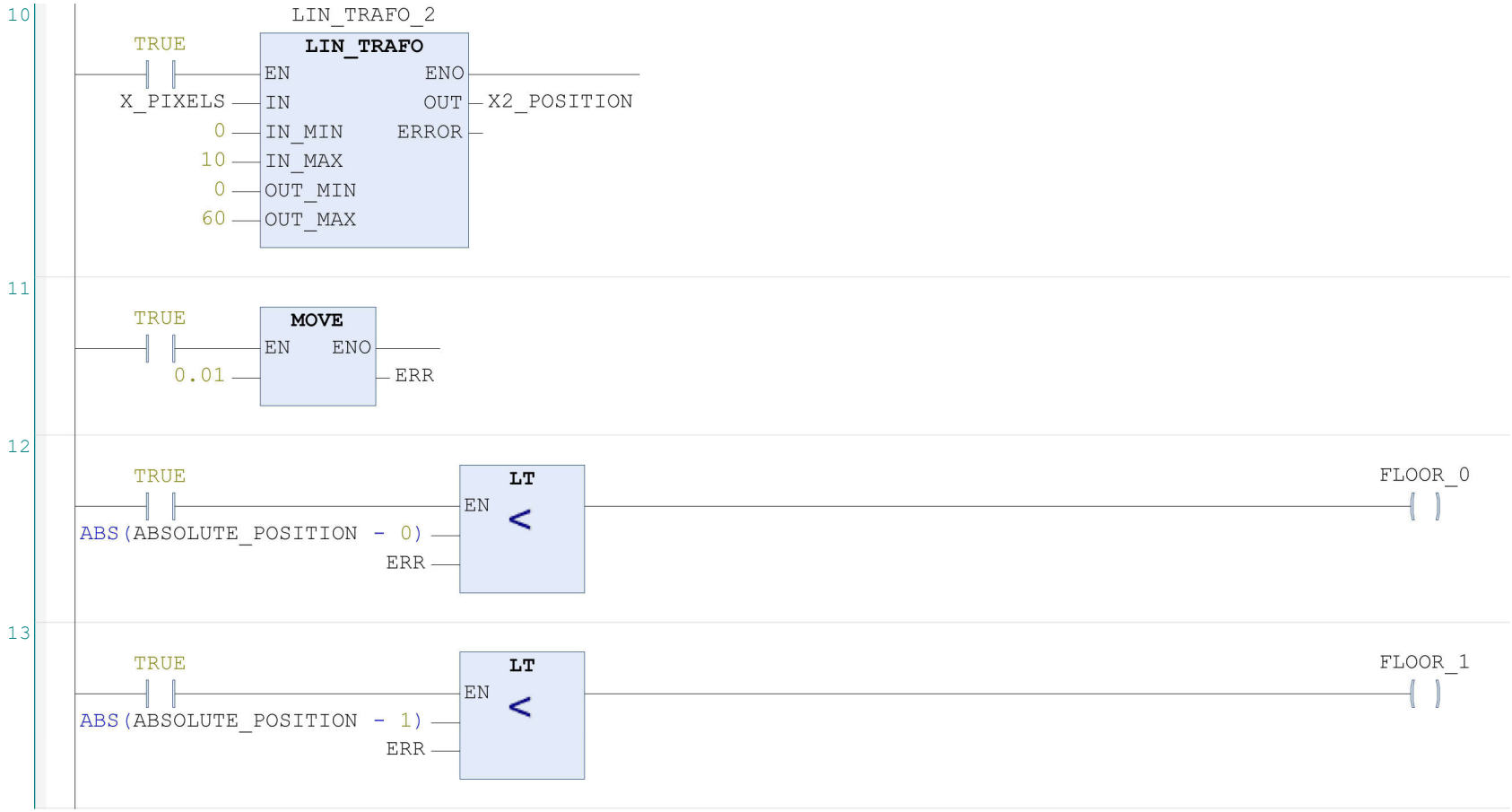


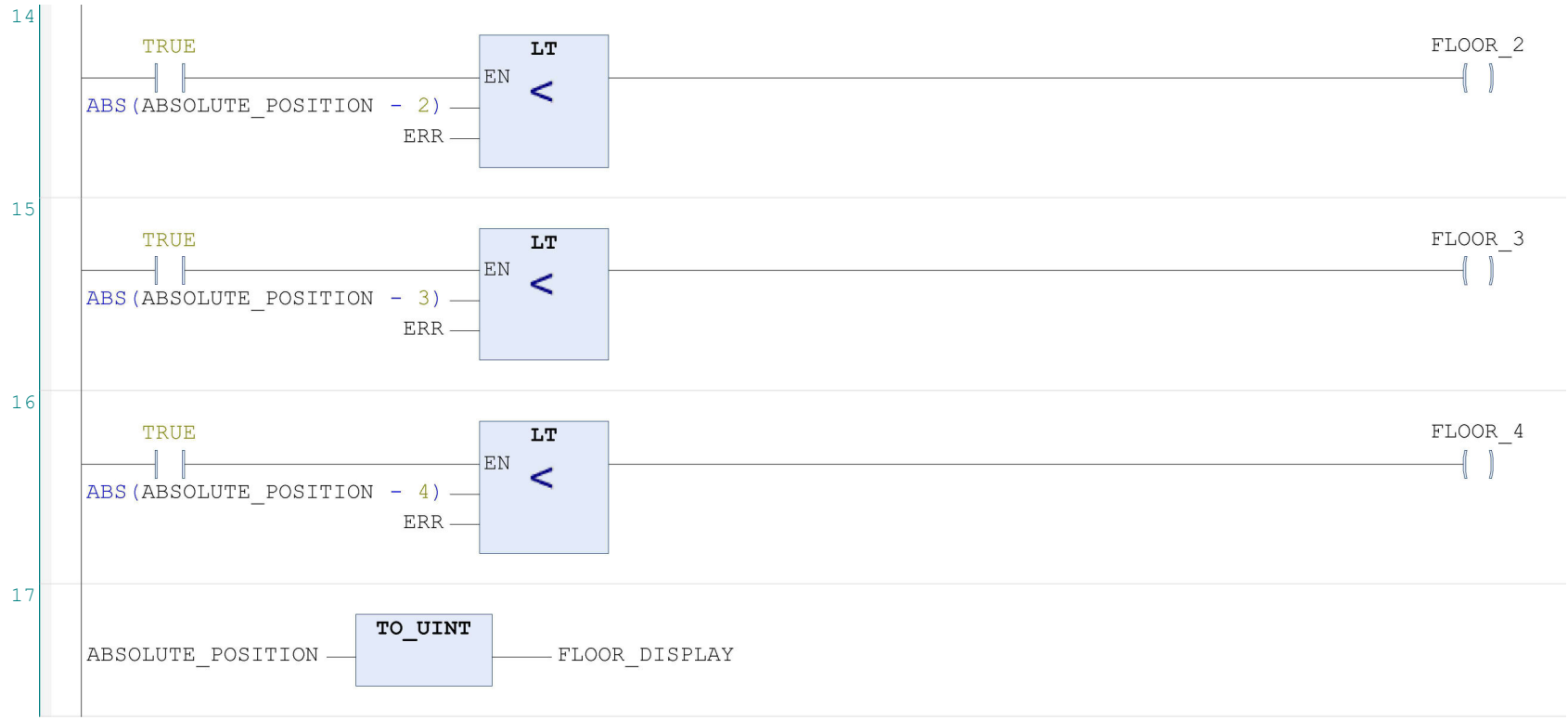
2

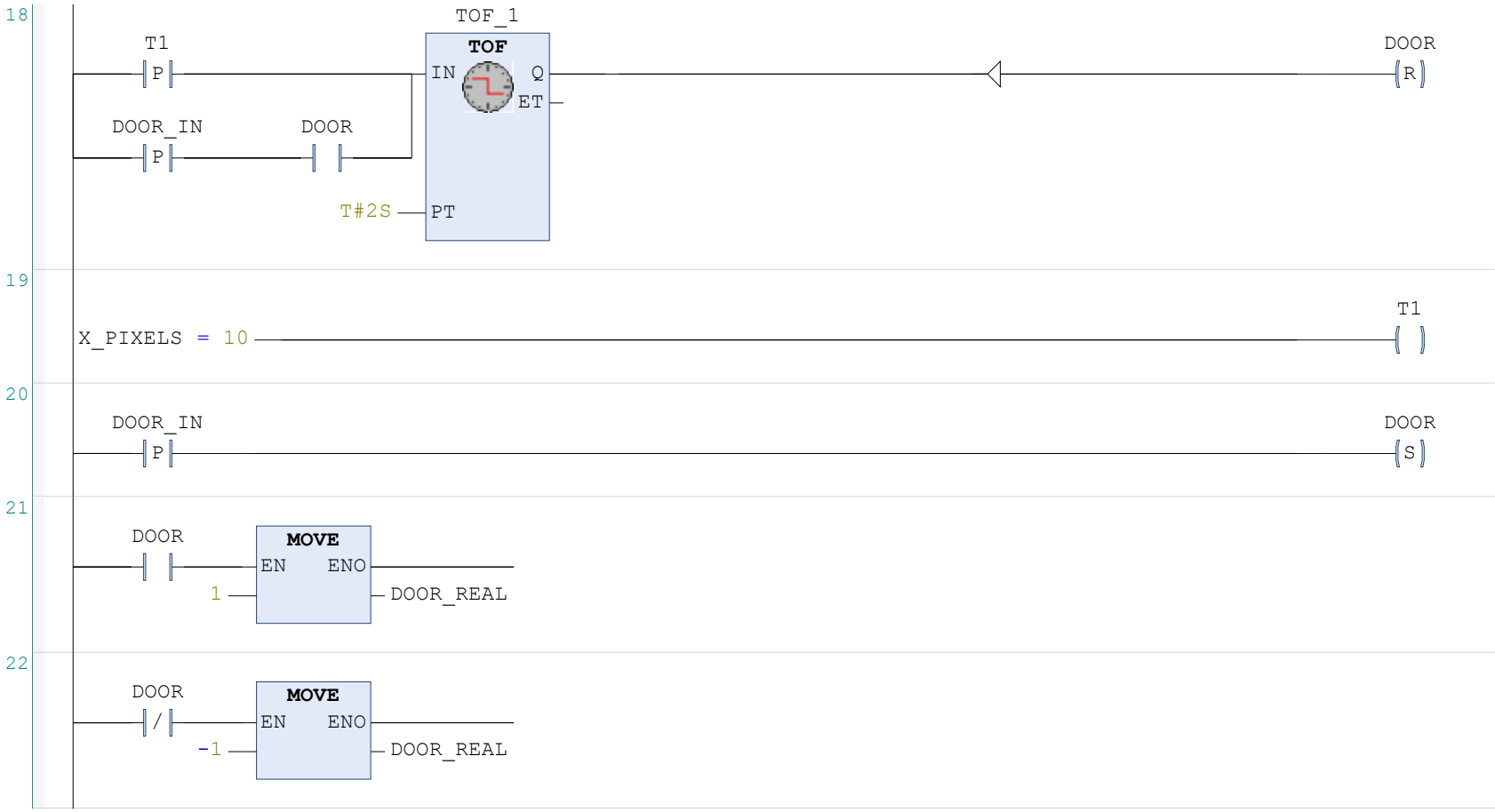


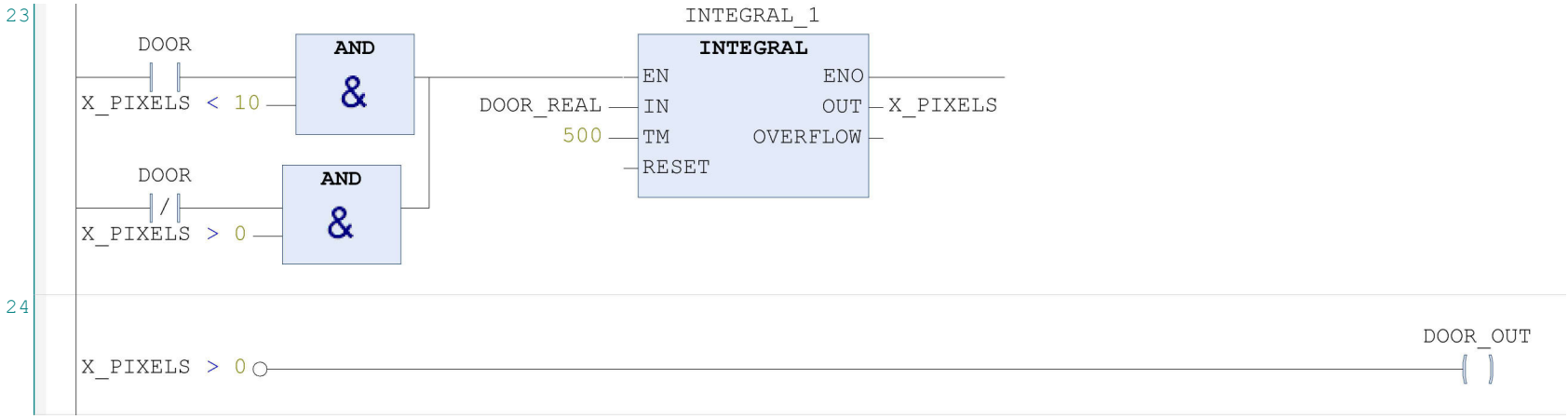

3
INC_OFF
UP
DEC_OFF
DN
UP
DN
MOVE
EN
ENO
0
Y_INTEGRATE
4
TRUE
LE
EN
≤
ABSOLUTE_POSITION
0
DEC_OFF
5
TRUE
GE
EN
≥
ABSOLUTE_POSITION
4
INC_OFF
6
Y_INTEGRATE = 0
OR
≥1
X_PIXELS > 0
Y_INTEGRATE = 0
AND
&
STATIONARY

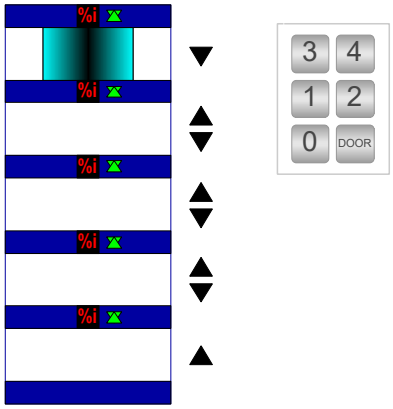

7
INTEGRAL_0
INTEGRAL
X_PIXELS > 0
EN
ENO
Y_INTEGRATE
IN
OUT
ABSOLUTE_POSITION
10
TM
OVERFLOW
FALSE
RESET
8
LIN_TRAFO_0
LIN_TRAFO
TRUE
EN
ENO
ABSOLUTE_POSITION
IN
OUT
Y_POSITION
0
IN_MIN
ERROR
4
IN_MAX
400
OUT_MIN
0
OUT_MAX
9
LIN_TRAFO_1
LIN_TRAFO
TRUE
EN
ENO
X_PIXELS
IN
OUT
X1_POSITION
0
IN_MIN
ERROR
10
IN_MAX
0
OUT_MIN
-60
OUT_MAX


10
LIN_TRAFO_2
LIN_TRAFO
TRUE
EN
ENO
X_PIXELS
IN
OUT
X2_POSITION
0
IN_MIN
ERROR
10
IN_MAX
0
OUT_MIN
60
OUT_MAX
11
MOVE
TRUE
EN
ENO
0.01
ERR
12
LT
TRUE
EN
<
ABS(ABSOLUTE_POSITION - 0)
ERR
FLOOR_0
13
LT
TRUE
EN
<
ABS(ABSOLUTE_POSITION - 1)
ERR
FLOOR_1


14
TRUE
ABS(ABSOLUTE_POSITION - 2)
ERR
LT
EN
<
FLOOR_2
15
TRUE
ABS(ABSOLUTE_POSITION - 3)
ERR
LT
EN
<
FLOOR_3
16
TRUE
ABS(ABSOLUTE_POSITION - 4)
ERR
LT
EN
<
FLOOR_4
17
ABSOLUTE_POSITION
TO_UINT
FLOOR_DISPLAY


18
T1
P
TOF_1
TOF
IN
Q
ET
DOOR
R
DOOR_IN
P
DOOR
T#2S
PT
19
X_PIXELS = 10
T1
20
DOOR_IN
P
DOOR
S
21
DOOR
MOVE
EN
ENO
1
DOOR_REAL
22
DOOR
/
MOVE
EN
ENO
-1
DOOR_REAL


23
DOOR
X_PIXELS < 10
AND
&
DOOR
X_PIXELS > 0
AND
&
INTEGRAL_1
INTEGRAL
EN
ENO
DOOR_REAL
IN
OUT
X_PIXELS
500
TM
OVERFLOW
RESET
24
X_PIXELS > 0
DOOR_OUT



General
Visualization size algorithm version: Respecting scrollbar location
Background
Use background color: False
Background color: 16777215
Interface
VAR_IN_OUT

END_VAR
Visualization Element List
Rectangle Id: 227
Element name: GenElemInst_192
Tab Order: default
Static optimized: True
Type of element: Rectangle
Position
X: 10
Y: 20
Width: 220