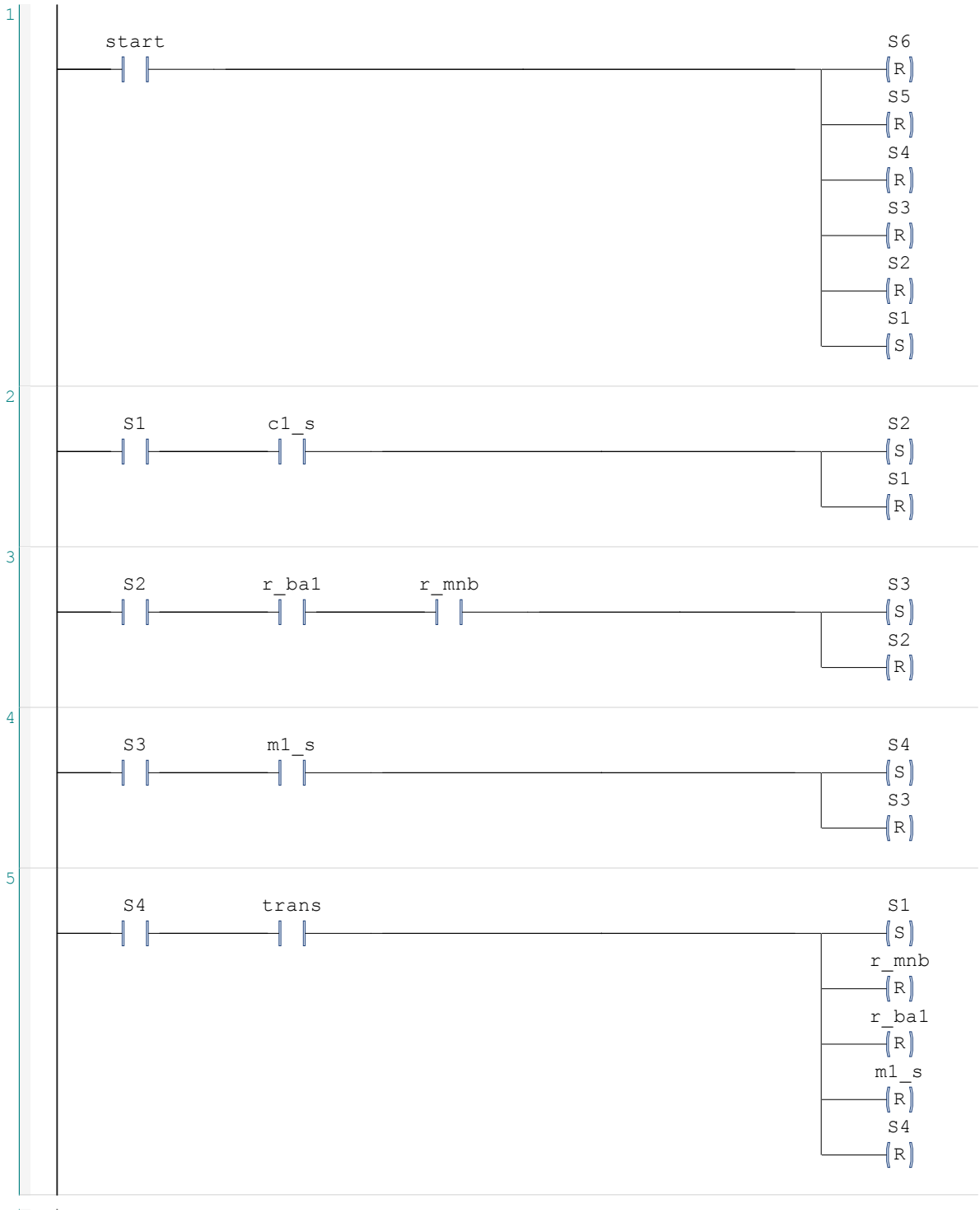
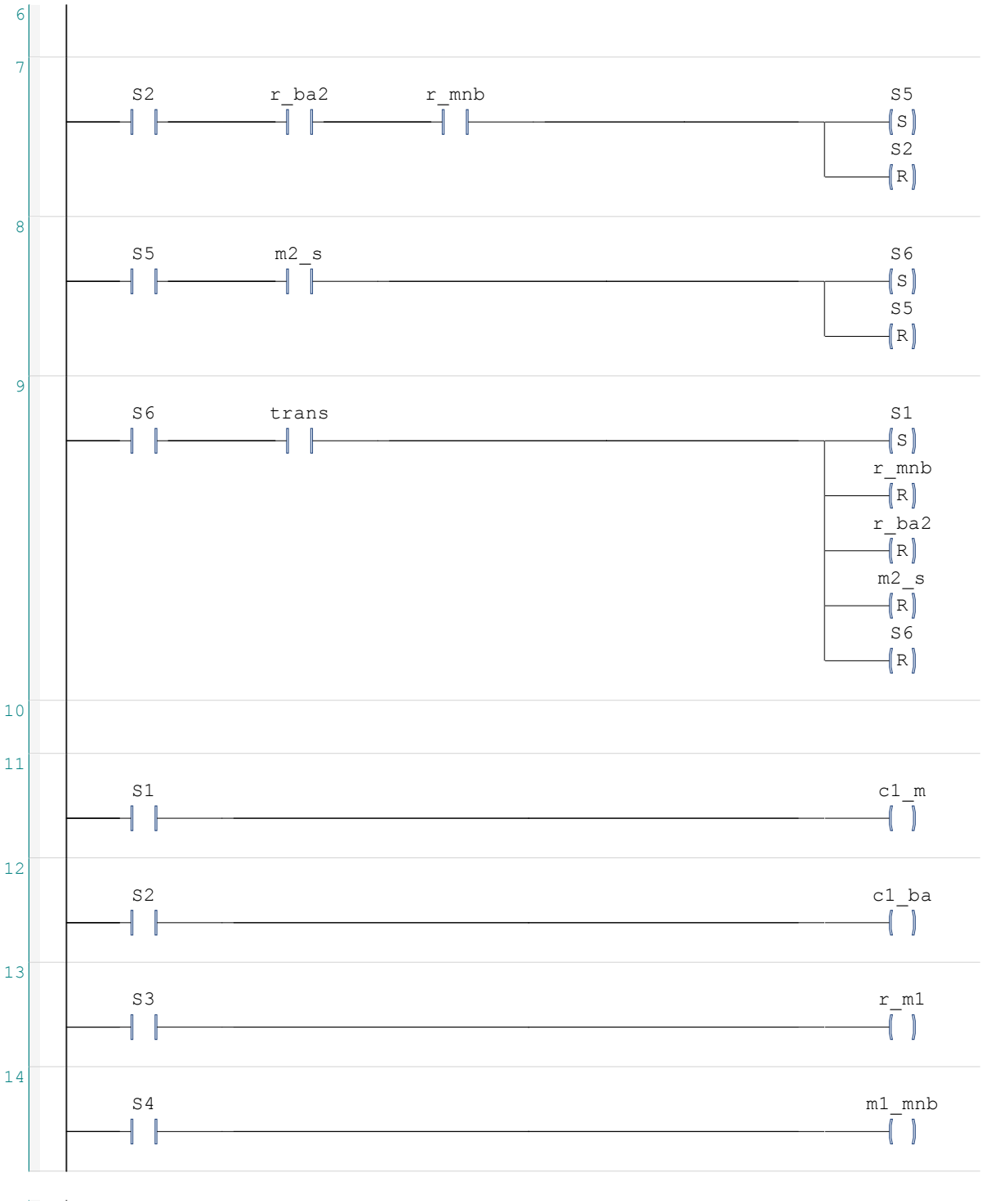
```
1   PROGRAM Main
2   VAR
3
4   (* Inputs *)
5   start : BOOL ; (* For starting the process*)
6   c1_s : BOOL ; (* Sensor of the conveyor *)
7   r_mnb : BOOL ; (* Signal from robot controller telling that robot is ready to
    take a workpiece - not busy *)
8   r_ba1 : BOOL ; (* Signal from robot controller telling that the workpiece is
    available to be loaded to M1 *)
9   r_ba2 : BOOL ; (* Signal from robot controller telling that the workpiece is
    available to be loaded to M2 *)
10  m1_s : BOOL ; (* Signal from M1 controller telling that the workpiece is present
    in the M1 *)
11  m2_s : BOOL ; (* Signal from M2 controller telling that the workpiece is present
    in the M2 *)
12  trans : BOOL ; (* Signal from M1 or M2 controller telling that the workpiece is
    transfered *)
13
14
15
16  (* Outputs *)
17  c1_m : BOOL ; (* Motor of the conveyor *)
18  c1_ba : BOOL ; (* Signal telling the robot controller that the workpiece is
    available *)
19  r_m1 : BOOL ; (* Signal telling the robot that the workpiece should be unloaded
    to the M1 - used when unloading C1 to tell robot where the robot should proceed
    with the workpiece *)
20  r_m2 : BOOL ; (* Signal telling the robot that the workpiece should be unloaded
    to the M2 - used when unloading C1 to tell robot where the robot should proceed
    with the workpiece *)
21  m1_mnb : BOOL ; (* Signal telling the robot that the workpiece can be received by
     M1 *)
22  m2_mnb : BOOL ; (* Signal telling the robot that the workpiece can be received by
     M2 *)
23
24  (* States *)
25  S1 , S2 , S3 , S4 , S5 , S6 : BOOL ;
26
27  END_VAR
28
```


1
start
S6
R
S5
R
S4
R
S3
R
S2
R
S1
S
2
S1
c1_s
S2
S
S1
R
3
S2
r_ba1
r_mnb
S3
S
S2
R
4
S3
m1_s
S4
S
S3
R
5
S4
trans
S1
S
r_mnb
R
r_ba1
R
m1_s
R
S4
R


6
7
S2
r_ba2
r_mnb
S5
S
S2
R
8
S5
m2_s
S6
S
S5
R
9
S6
trans
S1
S
r_mnb
R
r_ba2
R
m2_s
R
S6
R
10
11
S1
c1_m
12
S2
c1_ba
13
S3
r_m1
14
S4
m1_mnb


15
S5
r_m2
16
S6
m2_mnb
17