

Totally Integrated Automation Portal

project2 / PLC_1 [CPU 1215C DC/DC/DC] / Program blocks

Main [OB1]

Main Properties

General

Name	Main	Number	1	Type	OB
Language	LAD	Numbering	Automatic		

Information

Title	"Main Program Sweep (Cycle)"	Author		Comment	LOGIC GATES(AND,NOT,NAND,NOR,XOR,XNOR,OR)
Family		Version	0.1	User-defined ID	

Main

Name	Data type	Default value	Comment
▼ Input			
Initial_Call	Bool		Initial call of this OB
Remanence	Bool		=True, if remanent data are available
Temp			
Constant			

Network 1:

AND GATE

Network 2:

NOT GATE

Network 3:

NOR GATE

Network 4: OR_OUTPUT

OR GATE

Totally Integrated Automation Portal		
<div><div><div><div><div></div><div><div><div>%I0.5 "F"</div></div><div><div><div>%I0.6 "G"</div></div></div></div><div><div><div>%Q0.4 "OR_OUTPUT"</div></div></div></div></div></div></div>		
<div><div>Network 5:</div><div>NAND GATE</div><div><div><div><div><div></div><div><div><div>%I0.7 "H"</div></div><div><div><div>%I1.0 "I"</div></div></div></div><div><div><div>%Q0.5 "NAND_OUTPUT"</div></div></div></div></div></div></div></div>		
<div><div>Network 6:</div><div>XOR GATE</div><div><div><div><div><div><div><div>%I1.1 "k"</div></div><div><div><div>%I1.2 "j"</div></div></div></div><div><div><div>%I1.1 "k"</div></div><div><div><div>%I1.2 "j"</div></div></div></div></div><div><div><div>%Q0.6 "xor_out"</div></div></div></div></div></div></div>		
<div><div>Network 7:</div><div>XNOR GATE</div><div><div><div><div><div><div><div>%I1.3 "p"</div></div><div><div><div>%I1.4 "m"</div></div></div></div><div><div><div>%I1.3 "p"</div></div><div><div><div>%I1.4 "m"</div></div></div></div></div><div><div><div>%Q0.7 "XNOR_OUT"</div></div></div></div></div></div></div>		

4IN4OUT / PLC_1 [CPU 1215C DC/DC/DC] / Program blocks

Main [OB1]

Main Properties

General	
1	General
2	General
3	General
4	General
5	General
6	General
7	General
8	General
9	General
10	General
11	General
12	General
13	General
14	General
15	General
16	General
17	General
18	General
19	General
20	General
21	General
22	General
23	General
24	General
25	General
26	General
27	General
28	General
29	General
30	General
31	General
32	General
33	General
34	General
35	General
36	General
37	General
38	General
39	General
40	General
41	General
42	General
43	General
44	General
45	General
46	General
47	General
48	General
49	General
50	General
51	General
52	General
53	General
54	General
55	General
56	General
57	General
58	General
59	General
60	General
61	General
62	General
63	General
64	General
65	General
66	General
67	General
68	General
69	General
70	General
71	General
72	General
73	General
74	General
75	General
76	General
77	General
78	General
79	General
80	General
81	General
82	General
83	General
84	General
85	General
86	General
87	General
88	General
89	General
90	General
91	General
92	General
93	General
94	General
95	General
96	General
97	General
98	General
99	General
100	General

Name	Main	Number	1	Type	OB
Language	LAD	Numbering	Automatic		

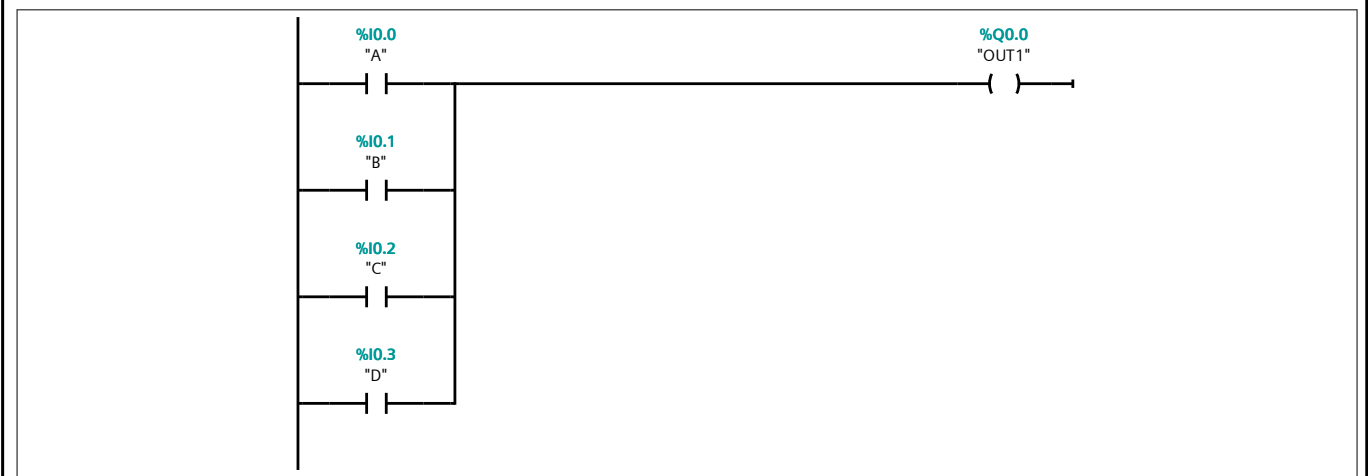
Information	
1	Information

Title	"Main Program Sweep (Cycle)"	Author		Comment	4 INPUT 4 OUTPUT
Family		Version	0.1	User-defined ID	

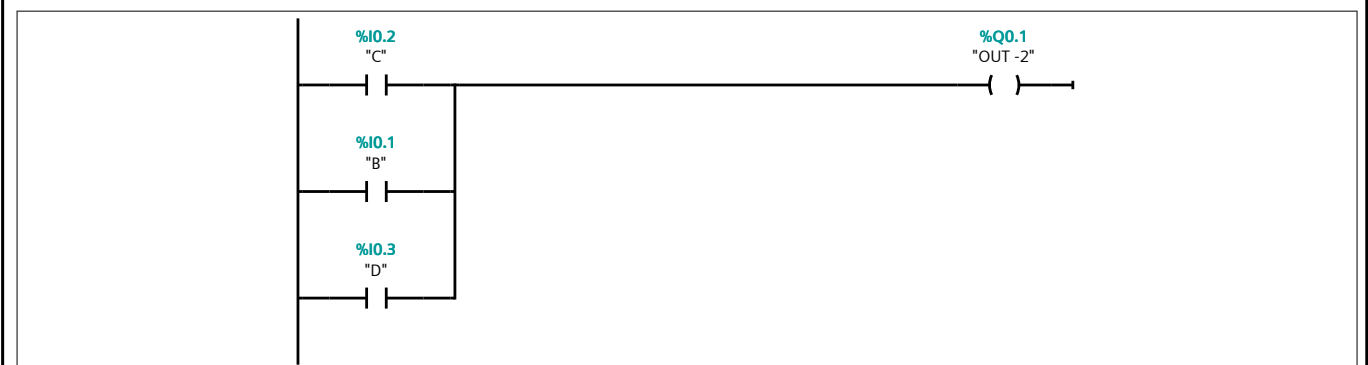
Main



Name	Data type	Default value	Comment
▼ Input			
Initial_Call	Bool		Initial call of this OB
Remanence	Bool		=True, if remanent data are available
Temp			
Constant			

Network 1:



Network 2:



Totally Integrated Automation Portal		
<div>Network 3:</div> <div></div>		
<div>Network 4:</div> <div></div>		

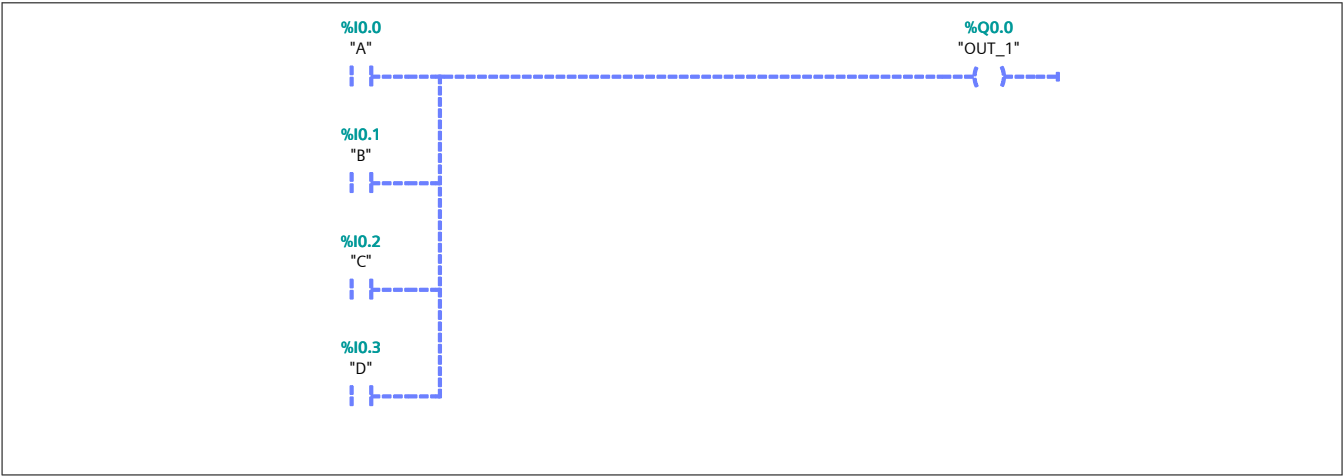
INOUT_OFF / PLC_1 [CPU 1215C DC/DC/DC] / Program blocks

Main [OB1]

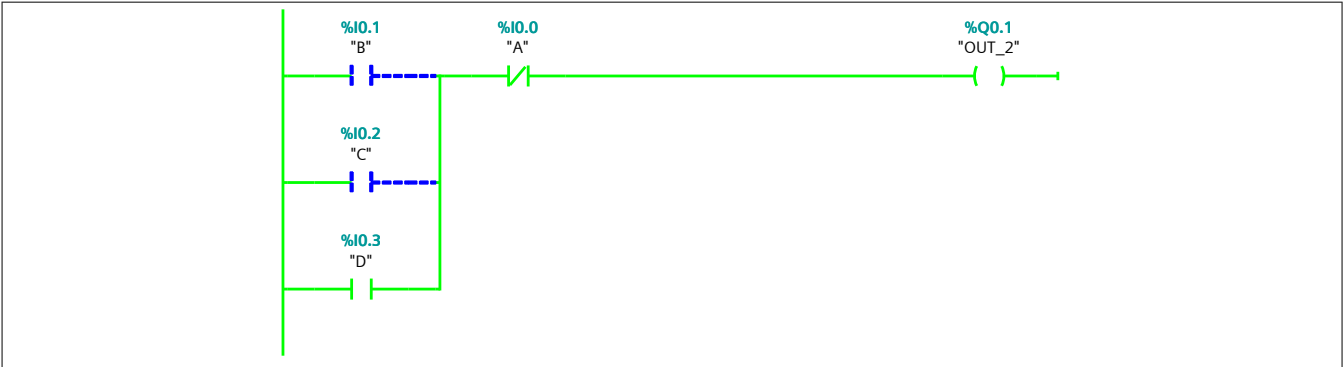
Main Properties					
General					
Name	Main	Number	1	Type	OB
Language	LAD	Numbering	Automatic		
Information					
Title	"Main Program Sweep (Cycle)"	Author		Comment	INPUT OUTPUT WITH OFF CONDITION
Family		Version	0.1	User-defined ID	

Main			
Name	Data type	Default value	Comment
▼ Input			
Initial_Call	Bool		Initial call of this OB
Remanence	Bool		=True, if remanent data are available
Temp			
Constant			

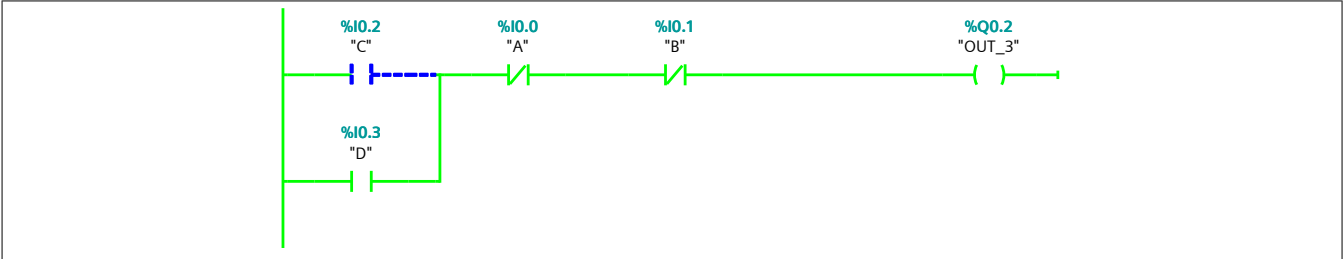
Network 1:



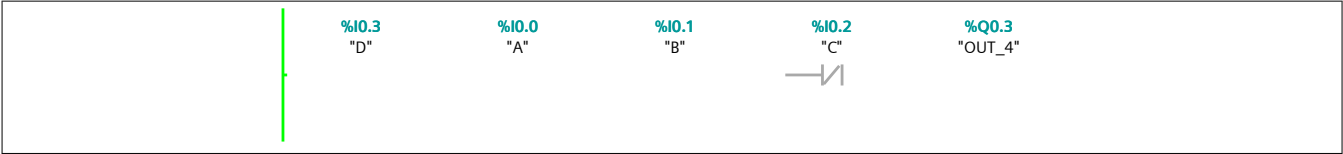
Network 2:



Network 3:



Network 4:



4IN4OUT / PLC_1 [CPU 1215C DC/DC/DC] / Program blocks

Main [OB1]

Main Properties	
1	...
2	...
3	...
4	...
5	...
6	...
7	...
8	...
9	...
10	...
11	...
12	...
13	...
14	...
15	...
16	...
17	...
18	...
19	...
20	...
21	...
22	...
23	...
24	...
25	...
26	...
27	...
28	...
29	...
30	...
31	...
32	...
33	...
34	...
35	...
36	...
37	...
38	...
39	...
40	...
41	...
42	...
43	...
44	...
45	...
46	...
47	...
48	...
49	...
50	...
51	...
52	...
53	...
54	...
55	...
56	...
57	...
58	...
59	...
60	...
61	...
62	...
63	...
64	...
65	...
66	...
67	...
68	...
69	...
70	...
71	...
72	...
73	...
74	...
75	...
76	...
77	...
78	...
79	...
80	...
81	...
82	...
83	...
84	...
85	...
86	...
87	...
88	...
89	...
90	...
91	...
92	...
93	...
94	...
95	...
96	...
97	...
98	...
99	...
100	...

General	
1	General
2	General
3	General
4	General
5	General
6	General
7	General
8	General
9	General
10	General
11	General
12	General
13	General
14	General
15	General
16	General
17	General
18	General
19	General
20	General
21	General
22	General
23	General
24	General
25	General
26	General
27	General
28	General
29	General
30	General
31	General
32	General
33	General
34	General
35	General
36	General
37	General
38	General
39	General
40	General
41	General
42	General
43	General
44	General
45	General
46	General
47	General
48	General
49	General
50	General
51	General
52	General
53	General
54	General
55	General
56	General
57	General
58	General
59	General
60	General
61	General
62	General
63	General
64	General
65	General
66	General
67	General
68	General
69	General
70	General
71	General
72	General
73	General
74	General
75	General
76	General
77	General
78	General
79	General
80	General
81	General
82	General
83	General
84	General
85	General
86	General
87	General
88	General
89	General
90	General
91	General
92	General
93	General
94	General
95	General
96	General
97	General
98	General
99	General
100	General

Name	Main	Number	1	Type	OB
Language	LAD	Numbering	Automatic		

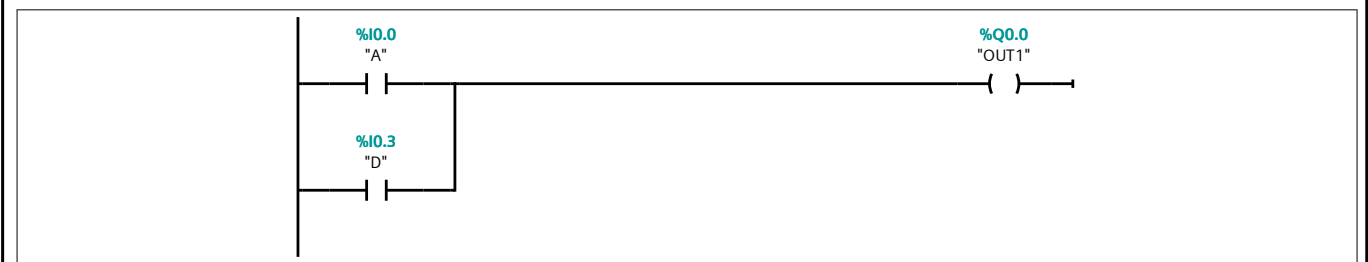
Information	
1	Information
2	Information
3	Information
4	Information
5	Information
6	Information
7	Information
8	Information
9	Information
10	Information
11	Information
12	Information
13	Information
14	Information
15	Information
16	Information
17	Information
18	Information
19	Information
20	Information
21	Information
22	Information
23	Information
24	Information
25	Information
26	Information
27	Information
28	Information
29	Information
30	Information
31	Information
32	Information
33	Information
34	Information
35	Information
36	Information
37	Information
38	Information
39	Information
40	Information
41	Information
42	Information
43	Information
44	Information
45	Information
46	Information
47	Information
48	Information
49	Information
50	Information
51	Information
52	Information
53	Information
54	Information
55	Information
56	Information
57	Information
58	Information
59	Information
60	Information
61	Information
62	Information
63	Information
64	Information
65	Information
66	Information
67	Information
68	Information
69	Information
70	Information
71	Information
72	Information
73	Information
74	Information
75	Information
76	Information
77	Information
78	Information
79	Information
80	Information
81	Information
82	Information
83	Information
84	Information
85	Information
86	Information
87	Information
88	Information
89	Information
90	Information
91	Information
92	Information
93	Information
94	Information
95	Information
96	Information
97	Information
98	Information
99	Information
100	Information

Title	"Main Program Sweep (Cycle)"	Author		Comment	4 INPUT 4 OUTPUT
Family		Version	0.1	User-defined ID	

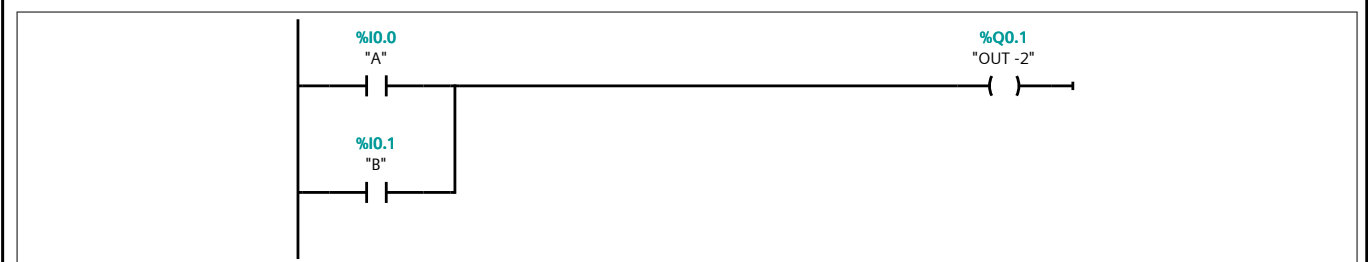
Main

Name	Data type	Default value	Comment
▼ Input			
Initial_Call	Bool		Initial call of this OB
Remanence	Bool		=True, if remanent data are available
Temp			
Constant			

Network 1:



Network 2:



Network 3:

Totally Integrated Automation Portal		
<div><div><div><div><div><div></div></div><div><div><div><div><div>%I0.1 "B"</div></div><div><div><div><div>%Q0.2 "OUT_3"</div></div></div></div></div><div><div><div><div>%I0.2 "C"</div></div><div><div><div><div>%Q0.3 "OUT_4"</div></div></div></div></div></div></div></div></div></div></div></div>		
<p>Network 4:</p>		
<div><div><div><div><div><div></div></div><div><div><div><div>%I0.2 "C"</div></div><div><div><div><div>%Q0.3 "OUT_4"</div></div></div></div></div><div><div><div><div>%I0.3 "D"</div></div><div><div><div><div>%Q0.3 "OUT_4"</div></div></div></div></div></div></div></div></div></div></div>		

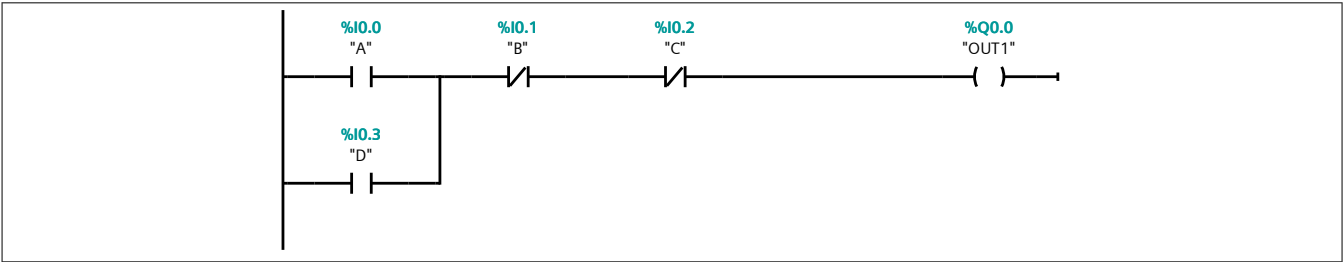
4IN4OUT / PLC_1 [CPU 1215C DC/DC/DC] / Program blocks

Main [OB1]

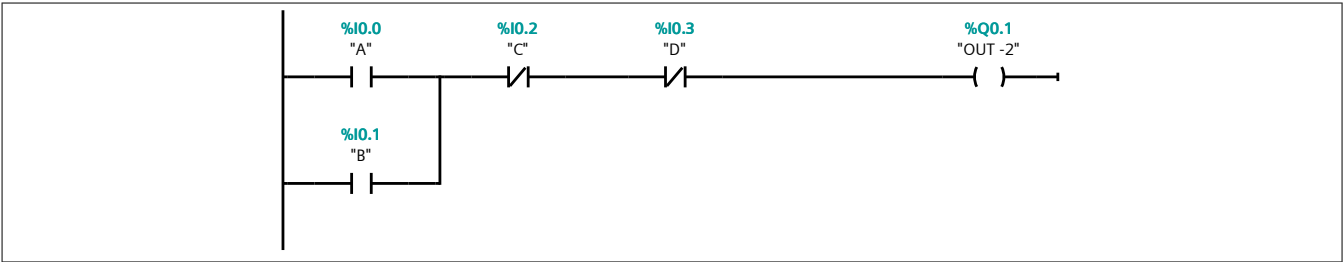
Main Properties					
General					
Name	Main	Number	1	Type	OB
Language	LAD	Numbering	Automatic		
Information					
Title	"Main Program Sweep (Cycle)"	Author		Comment	4 INPUT 4 OUTPUT
Family		Version	0.1	User-defined ID	

Main			
Name	Data type	Default value	Comment
▼ Input			
Initial_Call	Bool		Initial call of this OB
Remanence	Bool		=True, if remanent data are available
Temp			
Constant			

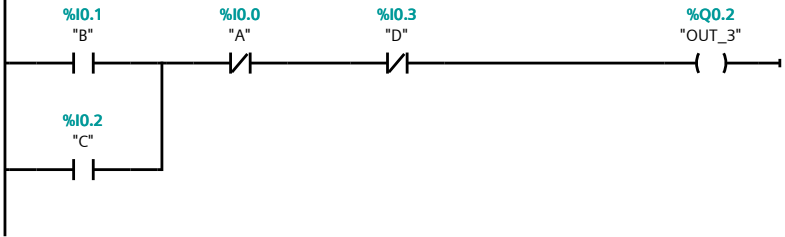
Network 1:



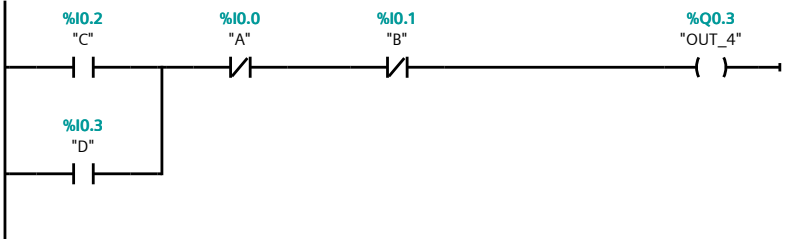
Network 2:



Network 3:



Network 4:



date_5_june / PLC_1 [CPU 1215C DC/DC/DC] / Program blocks

Main [OB1]

Main Properties					
General					
Name	Main	Number	1	Type	OB
Language	LAD	Numbering	Automatic		
Information					
Title	"Main Program Sweep (Cycle)"	Author		Comment	Write a ladder logic diagram, there are 3 inputs switches S1, S2,S3 and 3 output's L1, L2, L3.
Family		Version	0.1	User-defined ID	

Main			
Name	Data type	Default value	Comment
▼ Input			
Initial_Call	Bool		Initial call of this OB
Remanence	Bool		=True, if remanent data are available
Temp			
Constant			

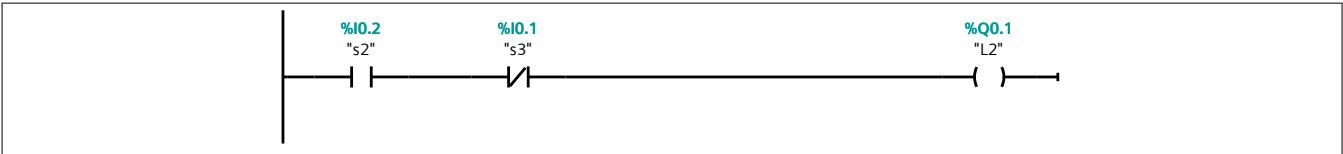
Network 1:

i) When S1 is pressed L1 turns ON



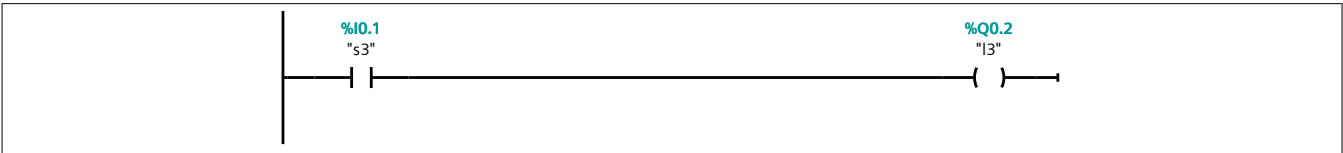
Network 2:

ii) When S2 is pressed L2 turns ON



Network 3:

iii) When S3 is pressed L3 turns ON and L1 and L2 turns OFF



date_5_june / PLC_1 [CPU 1215C DC/DC/DC] / Program blocks

Main [OB1]

Main Properties

General					
Name	Main	Number	1	Type	OB
Language	LAD	Numbering	Automatic		
Information					
Title	"Main Program Sweep (Cycle)"	Author		Comment	There are 2 input switches S1 and S2
Family		Version	0.1	User-defined ID	

Main

Name	Data type	Default value	Comment
▼ Input			
Initial_Call	Bool		Initial call of this OB
Remanence	Bool		=True, if remanent data are available
Temp			
Constant			

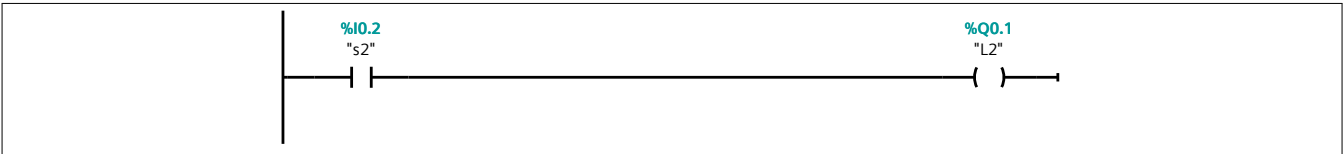
Network 1:

i) Without pressing S1 motor must turn ON

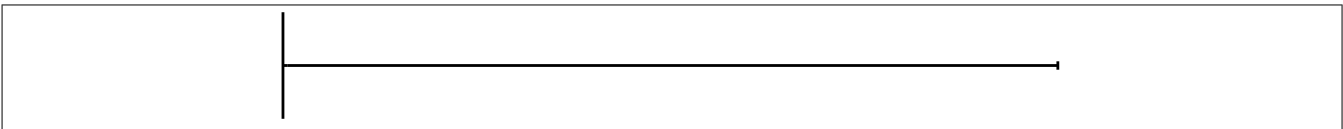


Network 2:

ii) While pressing S2 lamp must turn ON and motor turns OFF



Network 3:



date_5_june / PLC_1 [CPU 1215C DC/DC/DC] / Program blocks

Main [OB1]

Main Properties					
General					
Name	Main	Number	1	Type	OB
Language	LAD	Numbering	Automatic		
Information					
Title	"Main Program Sweep (Cycle)"	Author		Comment	There are 2 input switches S1 and S2
Family		Version	0.1	User-defined ID	

Main			
Name	Data type	Default value	Comment
▼ Input			
Initial_Call	Bool		Initial call of this OB
Remanence	Bool		=True, if remanent data are available
Temp			
Constant			

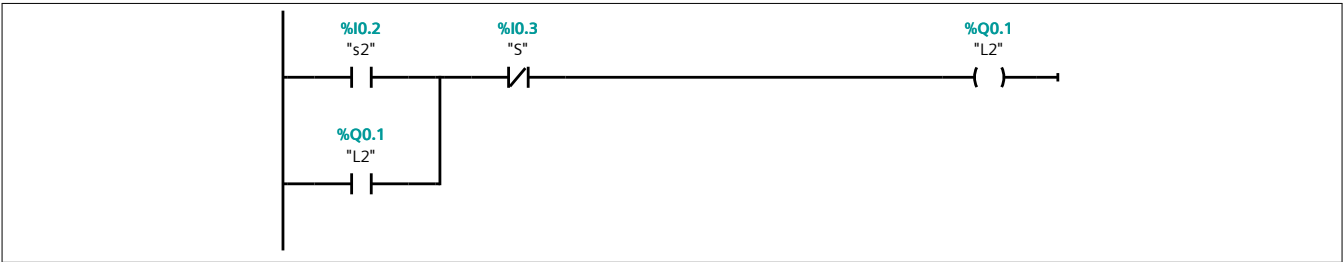
Network 1:

i) Without pressing S1 motor must turn ON

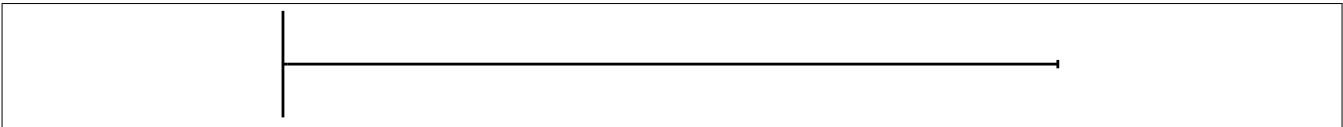


Network 2:

LATCHING



Network 3:



Totally Integrated Automation Portal		
--------------------------------------	--	--

JUNE_5(1) / PLC_1 [CPU 1215C DC/DC/DC] / Program blocks

Main [OB1]

Main Properties

General

Name	Main	Number	1	Type	OB
Language	LAD	Numbering	Automatic		

Information

Title	"Main Program Sweep (Cycle)"	Author		Comment	There are 3 inputs S1,S2,S3 and 3 outputs L1,L2,L3 i)while pressing any one switch L1 must turn ON. ii)While pressing any 2 switch L2 must turn ON and L1,L3 must turn OFF. iii)While pressing all the three switches L3 must turn ON and L1,L2 must turn OFF
Family		Version	0.1	User-defined ID	

Main

Name	Data type	Default value	Comment
▼ Input			
Initial_Call	Bool		Initial call of this OB
Remanence	Bool		=True, if remanent data are available
Temp			
Constant			

Network 1:

i

%I0.0
"S1"

%I0.1
"S2"

%I0.2
"S3"

%Q0.1
"L2"

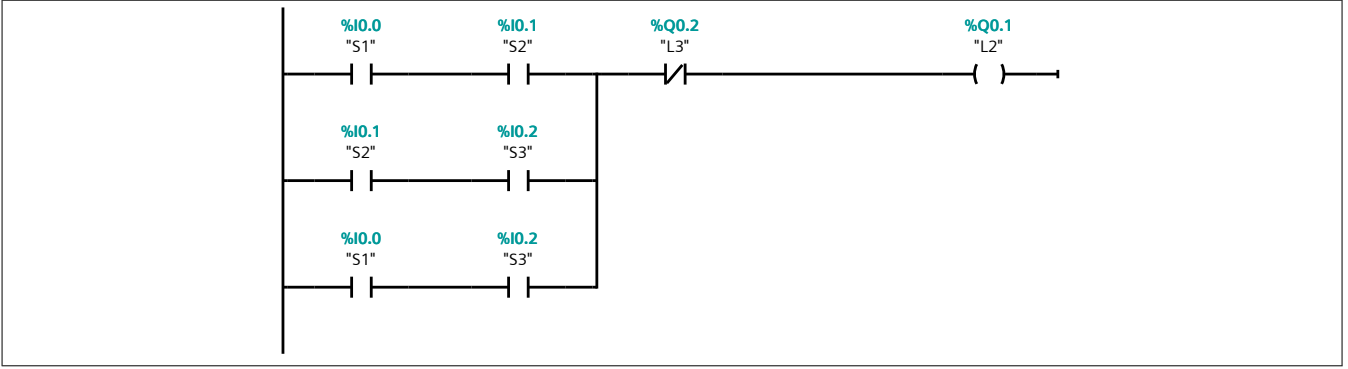
%Q0.2
"L3"

%Q0.0
"L1"

Network 2:

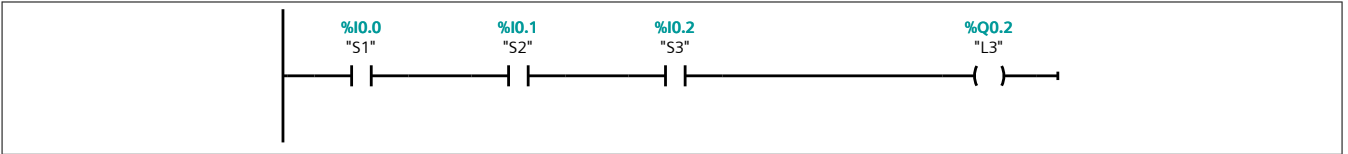
ii

--	--	--



Network 3:

iii



3fans,comtactor / PLC_1 [CPU 1215C DC/DC/DC] / Program blocks

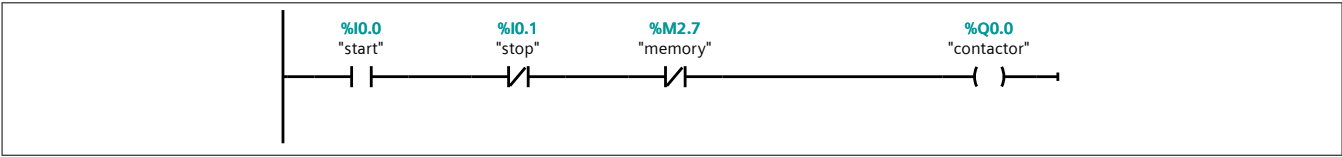
Main [OB1]

Main Properties					
General					
Name	Main	Number	1	Type	OB
Language	LAD	Numbering	Automatic		
Information					
Title	"Main Program Sweep (Cycle)"	Author		Comment	There are 3 fans F1, F2 and a standby fan F3 with a m,ain contactor. Start and Stop switch is used to turn ON main contactor 2 fans F1 F2 will start only after main contactor is started. If any 1 fan fails F1 or F2 then standby fan F3 goes ON. If any 2 fans from F1, F2 and F3 fails then main contactor must stop and lamp must flash at 5 HZ frequency.
Family		Version	0.1	User-defined ID	

Main			
Name	Data type	Default value	Comment
▼ Input			
Initial_Call	Bool		Initial call of this OB
Remanence	Bool		=True, if remanent data are available
Temp			
Constant			

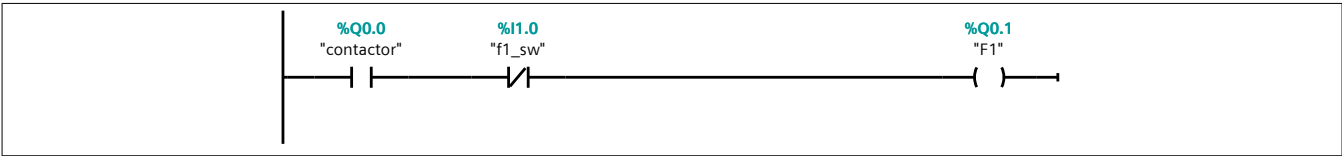
Network 1:

Starting the contactor using Start and Stop switch and turning contactor OFF if any 2 fans fails



Network 2:

If contactor is ON Start fan1



Network 3:

If contactor is ON Start fan2

--	--	--

Totally Integrated Automation Portal		
<div><div><div><div><div><div></div><div><div><div><div><div>%Q0.0 "contactor"</div></div></div><div><div><div><div>%I1.1 "f2_sw"</div></div></div><div><div><div><div>%Q0.2 "F2"</div></div></div></div></div></div></div></div></div></div></div></div>		
<div><div><div><div><div><div>Network 4:</div></div></div><div>Any 1 or F1 and F2 fails F3 turns ON</div><div><div><div><div><div><div></div><div><div><div><div>%Q0.0 "contactor"</div></div></div><div><div><div><div>%Q0.1 "F1"</div></div><div><div><div><div>%I1.2 "f3_sw"</div></div></div><div><div><div><div>%Q0.3 "F3"</div></div></div></div></div></div><div><div><div><div>%Q0.2 "F2"</div></div></div></div></div></div></div></div></div></div></div></div></div></div>		
<div><div><div><div><div><div>Network 5:</div></div></div><div>Any 2 fans from F1, F2 and F3 fails, the output is stored in memory</div><div><div><div><div><div><div></div><div><div><div><div>%I1.0 "f1_sw"</div></div><div><div><div><div>%I1.1 "f2_sw"</div></div></div><div><div><div><div>%M2.7 "memory"</div></div></div></div></div></div><div><div><div><div>%I1.1 "f2_sw"</div></div><div><div><div><div>%I1.2 "f3_sw"</div></div></div></div></div></div><div><div><div><div>%I1.0 "f1_sw"</div></div><div><div><div><div>%I1.2 "f3_sw"</div></div></div></div></div></div></div></div></div></div></div></div></div></div></div>		
<div><div><div><div><div><div>Network 6:</div></div></div><div>Based on memory the lamp flashes at 5 Hz</div><div><div><div><div><div><div></div><div><div><div><div>%M2.7 "memory"</div></div><div><div><div><div>%M0.1 "Clock_5Hz"</div></div></div><div><div><div><div>%Q0.4 "Lamp"</div></div></div></div></div></div></div></div></div></div></div></div></div></div></div>		

6june_timers / PLC_1 [CPU 1215C DC/DC/DC] / Program blocks

Main [OB1]

Main Properties

General

Name	Main	Number	1	Type	OB
Language	LAD	Numbering	Automatic		

Information

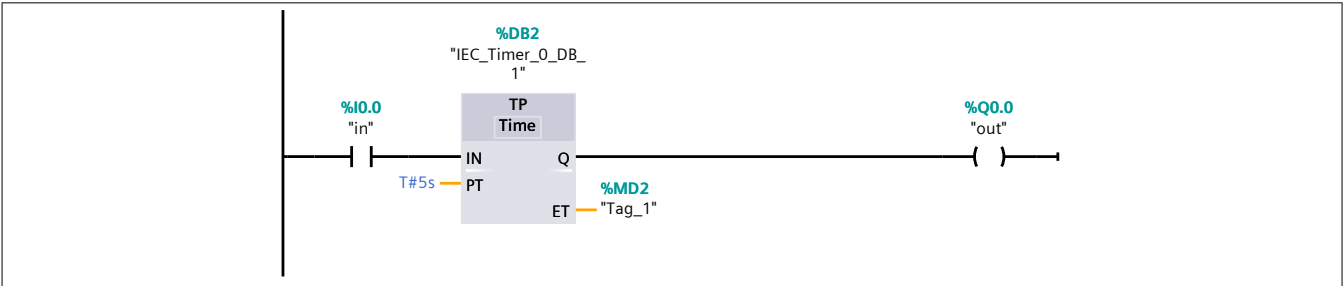
Title	"Main Program Sweep (Cycle)"	Author		Comment	TIMERS
Family		Version	0.1	User-defined ID	

Main

Name	Data type	Default value	Comment
▼ Input			
Initial_Call	Bool		Initial call of this OB
Remanence	Bool		=True, if remanent data are available
Temp			
Constant			

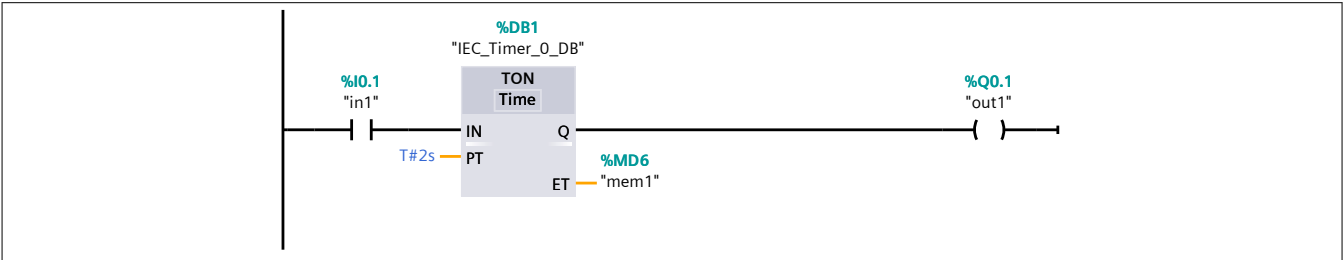
Network 1:

1) Time Pluse (TP)



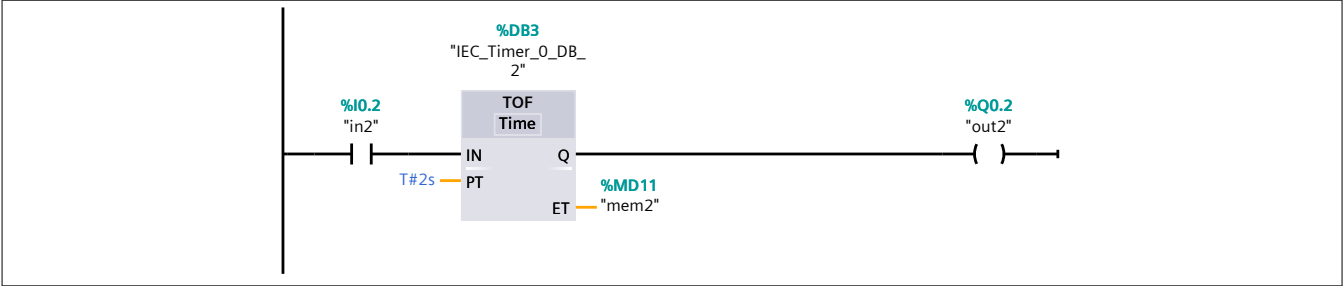
Network 2:

2) ON Delay Time (TON)



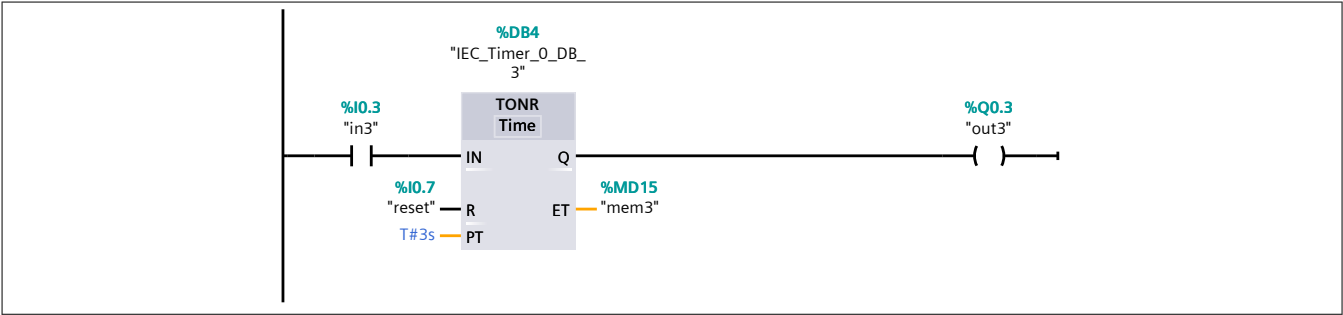
Network 3:

3) OFF Delay Time (TOF)

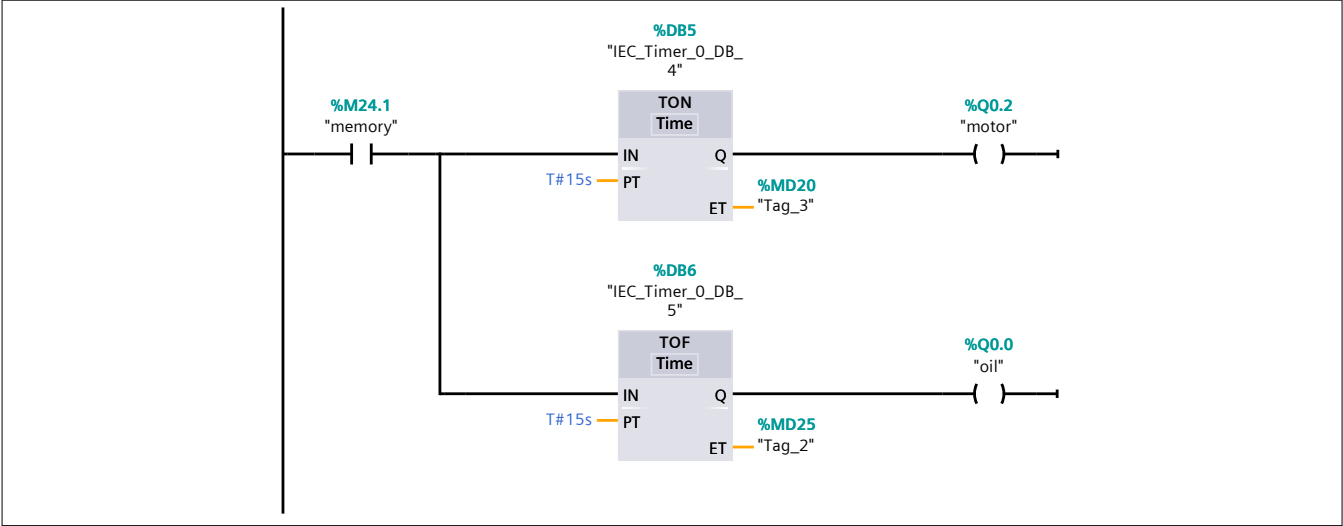


Network 4:

4) ON Delay Time with Reset (TONR)



Totally Integrated Automation Portal					
6june_timers / PLC_1 [CPU 1215C DC/DC/DC] / Program blocks					
Main [OB1]					
Main Properties					
General					
Name	Main	Number	1	Type	OB
Language	LAD	Numbering	Automatic		
Information					
Title	"Main Program Sweep (Cycle)"	Author		Comment	An oil pum should start after pressing stat push button. The main motor will start automatically after 15s. After pressing stop push button, main motor will stop and oil pump will stop after 15s
Family		Version	0.1	User-defined ID	
Main					
Name		Data type	Default value	Comment	
▼ Input					
Initial_Call		Bool		Initial call of this OB	
Remanence		Bool		=True, if remanent data are available	
Temp					
Constant					
Network 1:					
Storing the start and stop condition in memory					
<div><div><div><div><div><div>%I1.0</div><div>"start_push"</div></div><div><div>%M24.1</div><div>"memory"</div></div></div><div><div>%I1.1</div><div>"STOP_PUSH"</div></div></div><div><div><div>%M24.1</div><div>"memory"</div></div><div><div>%M24.1</div><div>"memory"</div></div></div><div><div><div></div><div></div></div><div><div></div><div></div></div></div><div><div><div></div><div></div></div><div><div></div><div></div></div></div></div></div>					
Network 2:					
Based on memory, motor and oil pump is turned on and off according to the mentioned condition					



Network 3:



Network 4:



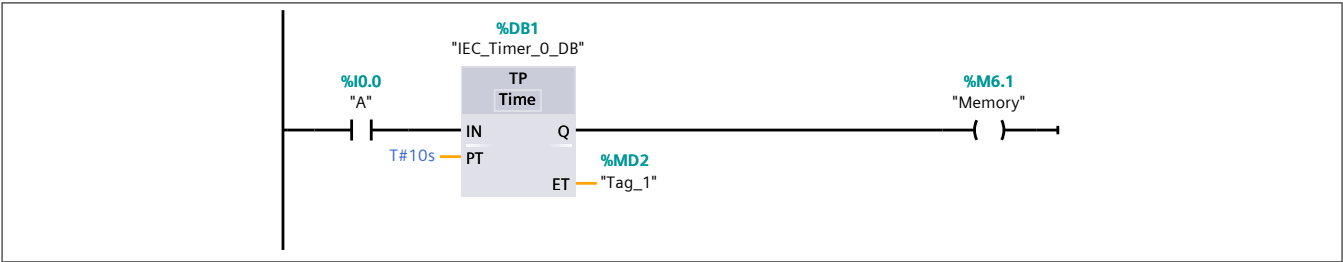
Project_june_9 / PLC_1 [CPU 1215C DC/DC/DC] / Program blocks

Main [OB1]

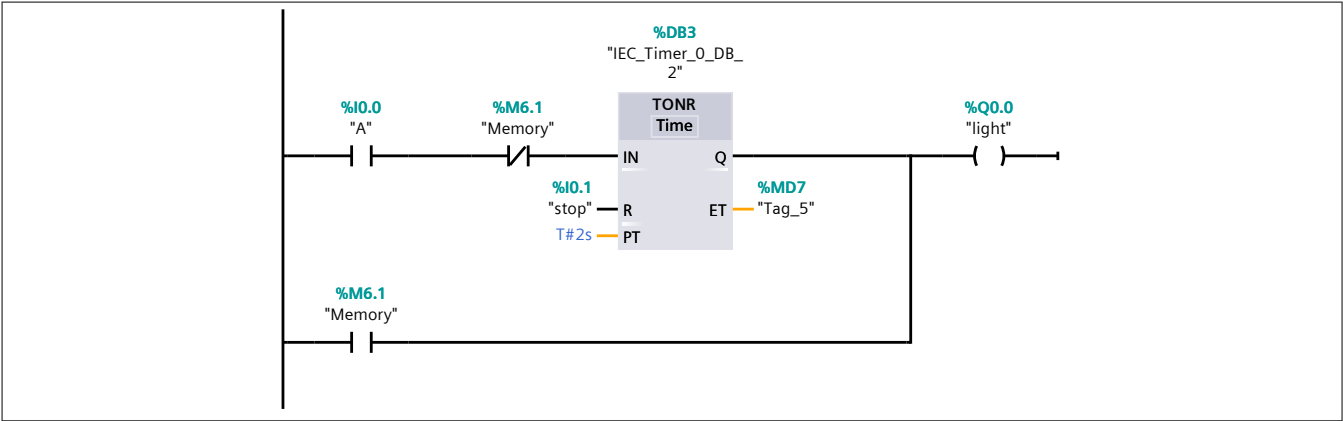
Main Properties					
General					
Name	Main	Number	1	Type	OB
Language	LAD	Numbering	Automatic		
Information					
Title	"Main Program Sweep (Cycle)"	Author		Comment	Design a program when input A is turned ON, light should be ON for 10 seconds later it will be OFF for 2 seconds and again continuously ON until a stop button is pressed.
Family		Version	0.1	User-defined ID	

Main			
Name	Data type	Default value	Comment
▼ Input			
Initial_Call	Bool		Initial call of this OB
Remanence	Bool		=True, if remanent data are available
Temp			
Constant			

Network 1:



Network 2:



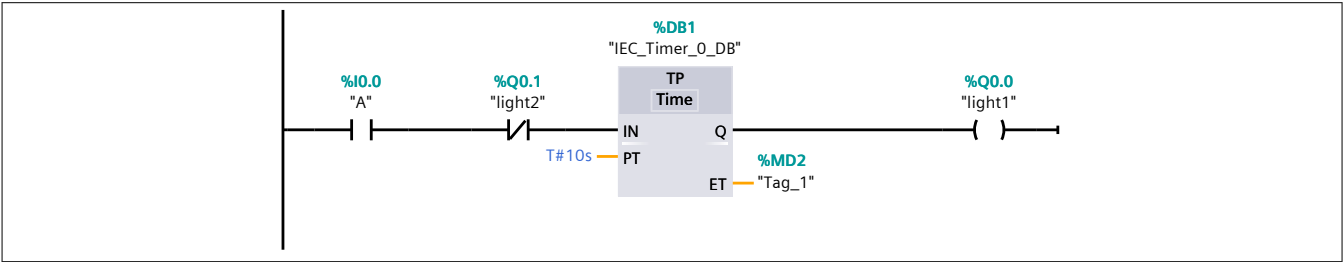
Project_june_9 / PLC_1 [CPU 1215C DC/DC/DC] / Program blocks

Main [OB1]

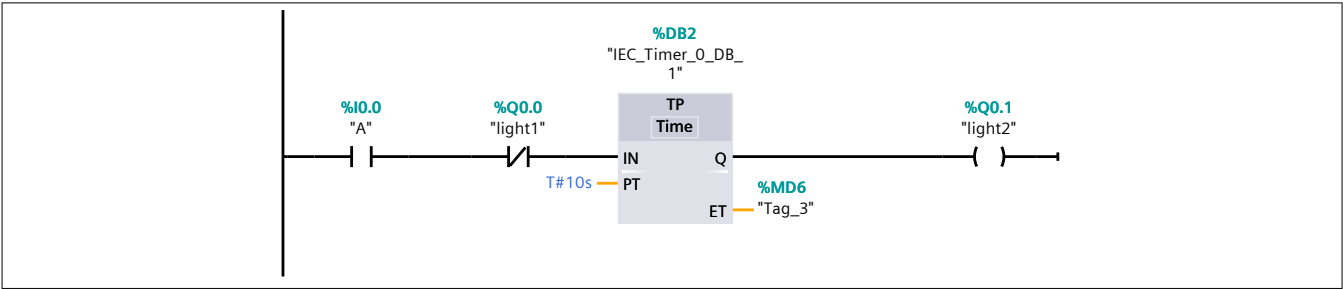
Main Properties					
General					
Name	Main	Number	1	Type	OB
Language	LAD	Numbering	Automatic		
Information					
Title	"Main Program Sweep (Cycle)"	Author		Comment	There are TWO lights which must glow for 10 seconds alternatively.
Family		Version	0.1	User-defined ID	

Main			
Name	Data type	Default value	Comment
▼ Input			
Initial_Call	Bool		Initial call of this OB
Remanence	Bool		=True, if remanent data are available
Temp			
Constant			

Network 1:



Network 2:



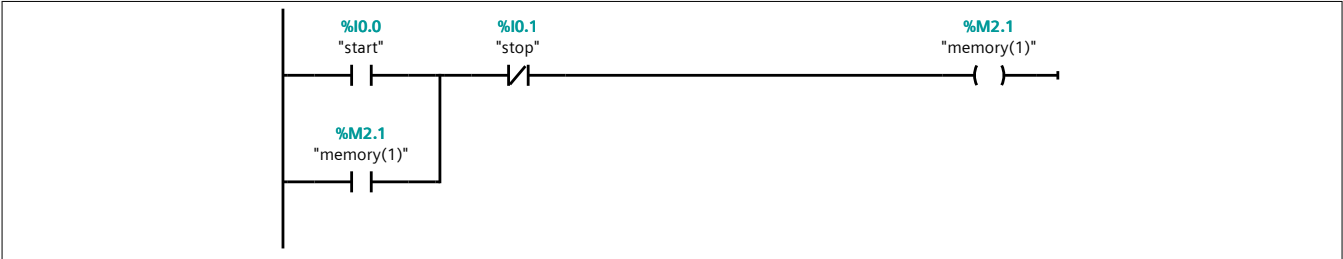
Project_june_9 / PLC_1 [CPU 1215C DC/DC/DC] / Program blocks

Main [OB1]

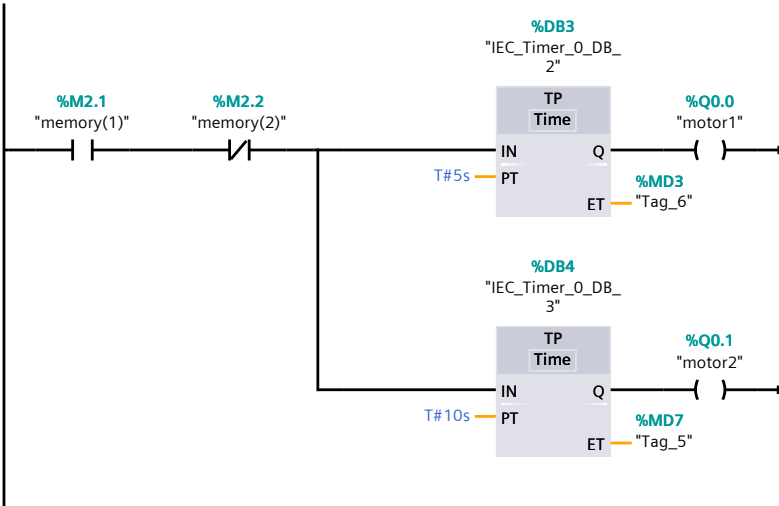
Main Properties					
General					
Name	Main	Number	1	Type	OB
Language	LAD	Numbering	Automatic		
Information					
Title	"Main Program Sweep (Cycle)"	Author		Comment	In a food process plant, when start switch is pressed motor1 turns ON for 5s and motor2 for 10s. After motor2 turns OFF motor3 must turn ON after 5s and motor4 after 10s ,then there must be 2s of delay and process must repeat until stop switch is pressed.
Family		Version	0.1	User-defined ID	

Main			
Name	Data type	Default value	Comment
▼ Input			
Initial_Call	Bool		Initial call of this OB
Remanence	Bool		=True, if remanent data are available
Temp			
Constant			

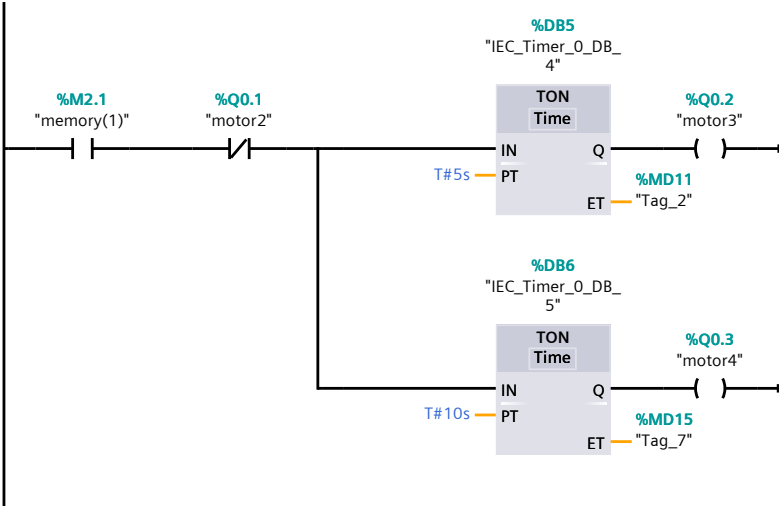
Network 1:



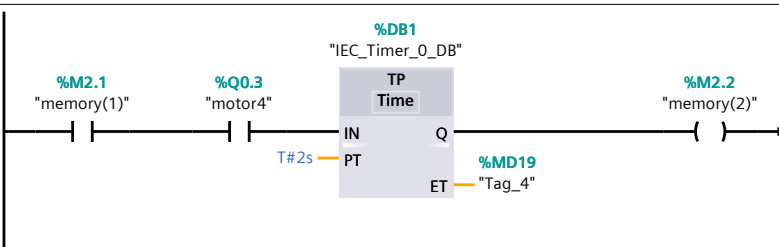
Network 2:



Network 3:



Network 4:



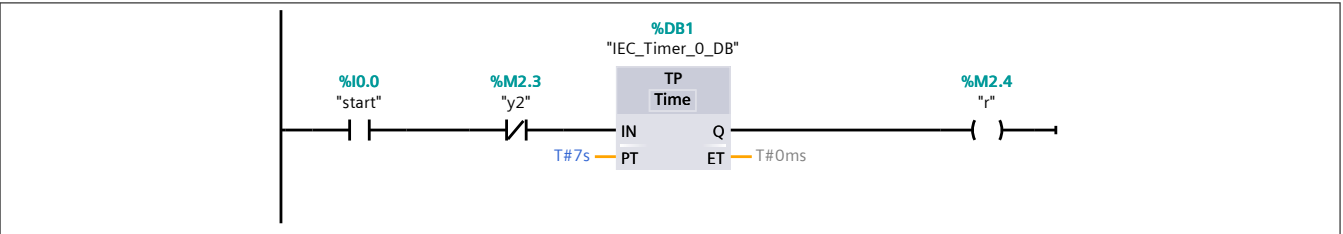
Project11141_june10 / PLC_1 [CPU 1215C DC/DC/DC] / Program blocks

Main [OB1]

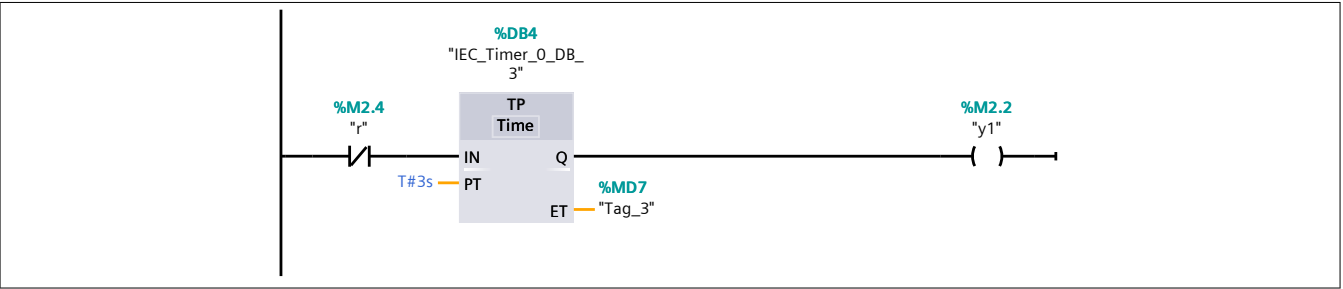
Main Properties					
General					
Name	Main	Number	1	Type	OB
Language	LAD	Numbering	Automatic		
Information					
Title	"Main Program Sweep (Cycle)"	Author		Comment	Traffic lights where red light glows for 7s then yellow light glows fpor 3s then green light glows for 10s then yellow light glows for 3s then red light glows for 7s then repeats
Family		Version	0.1	User-defined ID	

Main			
Name	Data type	Default value	Comment
▼ Input			
Initial_Call	Bool		Initial call of this OB
Remanence	Bool		=True, if remanent data are available
Temp			
Constant			

Network 1:



Network 2:



Network 4:

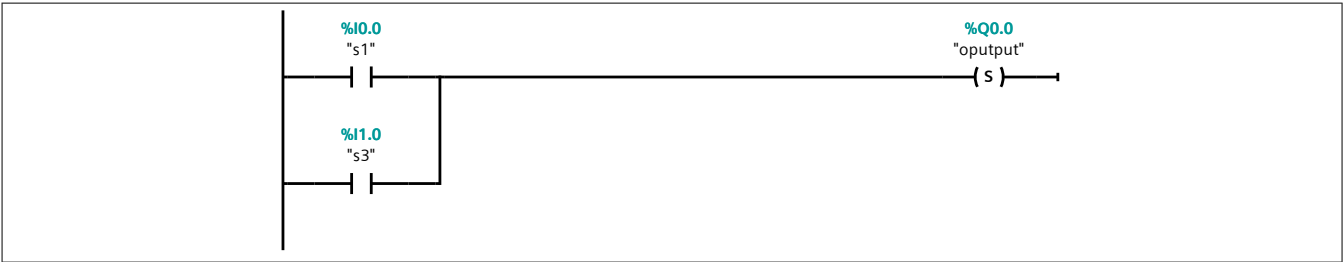
Project29 / PLC_1 [CPU 1215C DC/DC/DC] / Program blocks

Main [OB1]

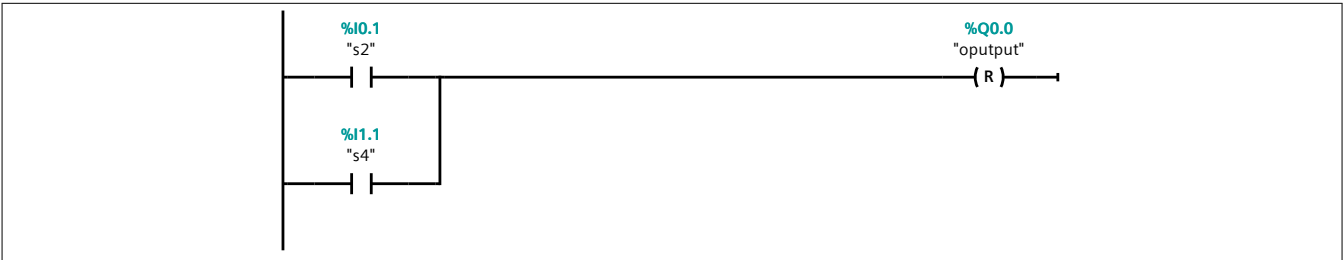
Main Properties					
General					
Name	Main	Number	1	Type	OB
Language	LAD	Numbering	Automatic		
Information					
Title	"Main Program Sweep (Cycle)"	Author		Comment	the conveyor belt that can be activated electrically. There are 2 push buttons at the beginning of the conveyor belt S1 for start and S2 for stop. There are also 2 push buttons at the end of the conveyor. S3 for start and S4 for stop. it is possible to start and stop the conveyor belt from either end.
Family		Version	0.1	User-defined ID	

Main			
Name	Data type	Default value	Comment
▼ Input			
Initial_Call	Bool		Initial call of this OB
Remanence	Bool		=True, if remanent data are available
Temp			
Constant			

Network 1:



Network 2:



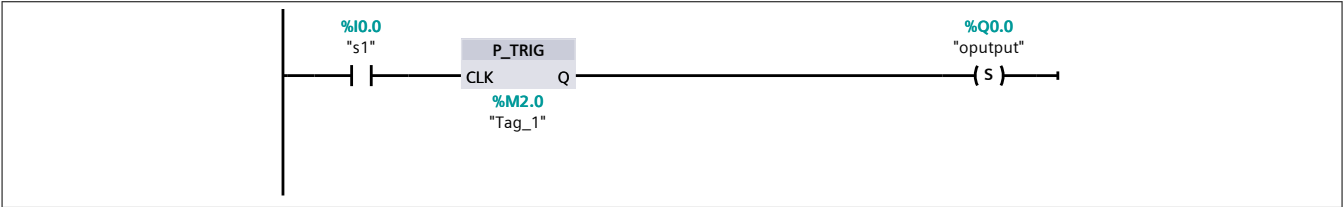
Project29 / PLC_1 [CPU 1215C DC/DC/DC] / Program blocks

Main [OB1]

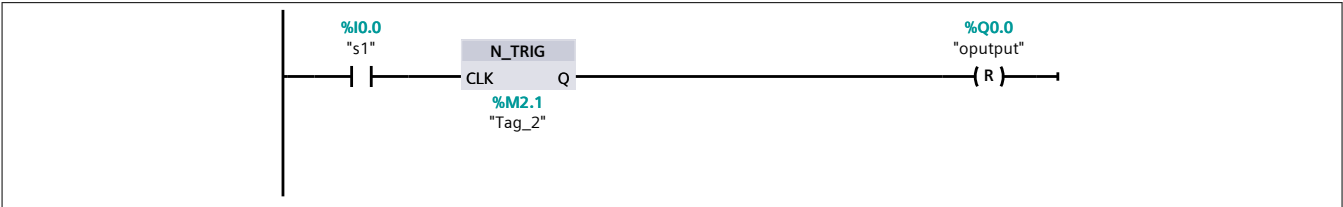
Main Properties					
General					
Name	Main	Number	1	Type	OB
Language	LAD	Numbering	Automatic		
Information					
Title	"Main Program Sweep (Cycle)"	Author		Comment	Using single switch motor needs to turn ON and OFF. (i) When switch is pressed the motor will turn ON and stay ON. (ii) When switch is pressed again the motor will turn OFF.
Family		Version	0.1	User-defined ID	

Main			
Name	Data type	Default value	Comment
▼ Input			
Initial_Call	Bool		Initial call of this OB
Remanence	Bool		=True, if remanent data are available
Temp			
Constant			

Network 1:



Network 2:



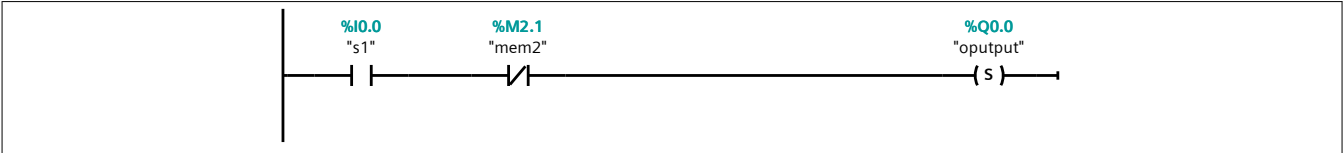
Project29 / PLC_1 [CPU 1215C DC/DC/DC] / Program blocks

Main [OB1]

Main Properties					
General					
Name	Main	Number	1	Type	OB
Language	LAD	Numbering	Automatic		
Information					
Title	"Main Program Sweep (Cycle)"	Author		Comment	When start switch is pressed motor will turn ON and when stop switch is pressed motor will turn OFF. The condition is that once stop is pressed motor should not turn ON for 10s. This is to prevent damage.
Family		Version	0.1	User-defined ID	

Main			
Name	Data type	Default value	Comment
▼ Input			
Initial_Call	Bool		Initial call of this OB
Remanence	Bool		=True, if remanent data are available
Temp			
Constant			

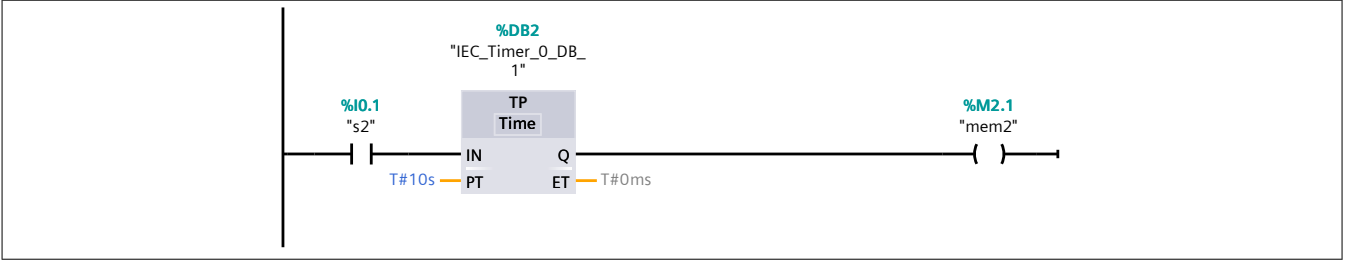
Network 1:



Network 2:



Network 3:



Network 4:



Project30 / PLC_1 [CPU 1215C DC/DC/DC] / Program blocks

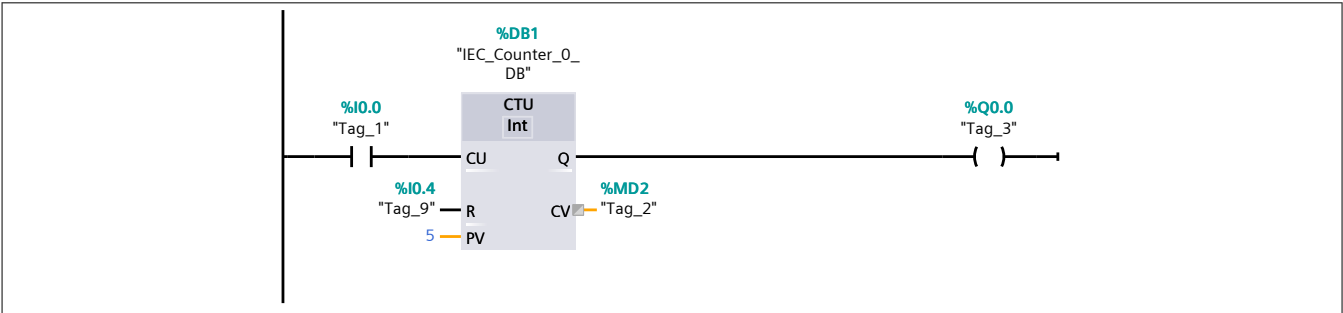
Main [OB1]

Main Properties					
General					
Name	Main	Number	1	Type	OB
Language	LAD	Numbering	Automatic		
Information					
Title	"Main Program Sweep (Cycle)"	Author		Comment	3 Types of Counter
Family		Version	0.1	User-defined ID	

Main			
Name	Data type	Default value	Comment
▼ Input			
Initial_Call	Bool		Initial call of this OB
Remanence	Bool		=True, if remanent data are available
Temp			
Constant			

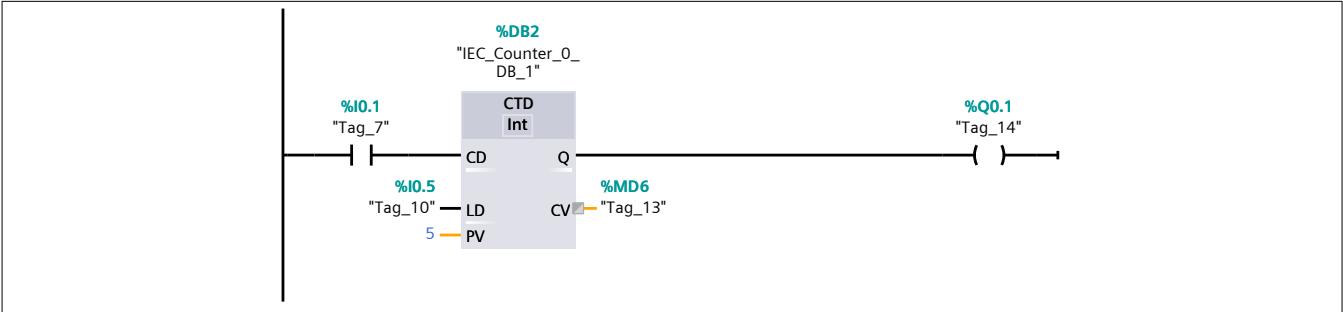
Network 1:

i)Up Counter



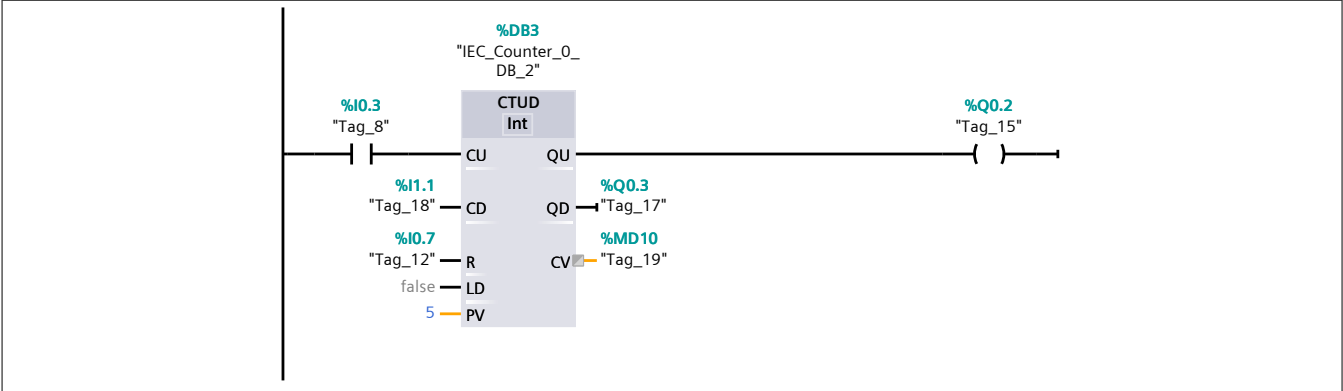
Network 2:

ii)Down Counter



Network 3:

iii)Up-Down Counter



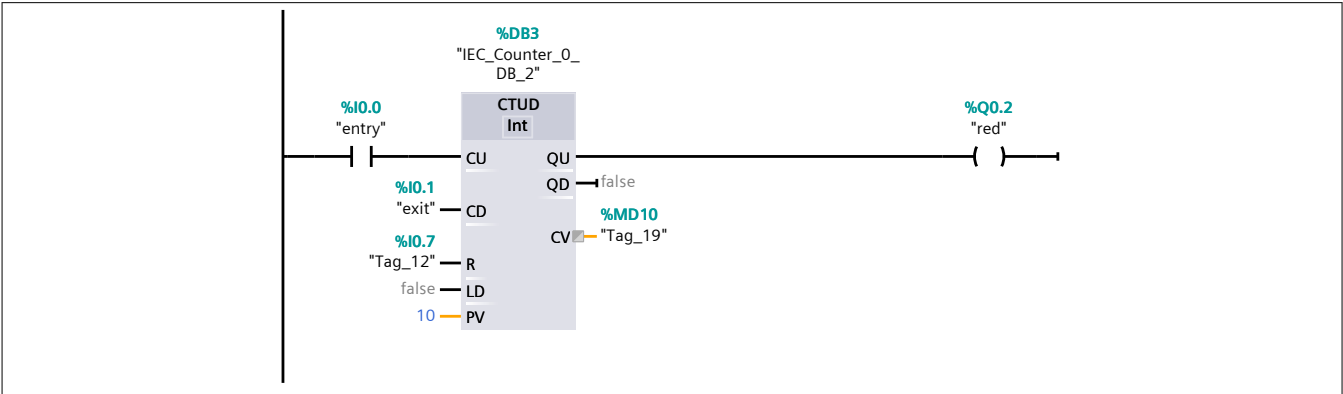
Project30 / PLC_1 [CPU 1215C DC/DC/DC] / Program blocks

Main [OB1]

Main Properties					
General					
Name	Main	Number	1	Type	OB
Language	LAD	Numbering	Automatic		
Information					
Title	"Main Program Sweep (Cycle)"	Author		Comment	a classroom has capacity of 10 students there are 2 doors, 1 for entry and other for exit. When number of students in the classroom is less than 10, entry door has green light on it which remain ON, when number of students in classroom is 10 or more than that red light goes ON and turn OFF green light which indicates that the classroom has reached it's maximum capacity
Family		Version	0.1	User-defined ID	

Main			
Name	Data type	Default value	Comment
▼ Input			
Initial_Call	Bool		Initial call of this OB
Remanence	Bool		=True, if remanent data are available
Temp			
Constant			

Network 1:



Network 2:

Totally Integrated Automation Portal		
<div><div><div><div><div></div><div><div><div>%Q0.2 "red"</div></div><div><div><div>%Q0.3 "green"</div></div></div></div><div><div><div></div><div></div><div></div></div><div><div><div></div><div></div><div></div></div></div></div></div></div></div></div>		

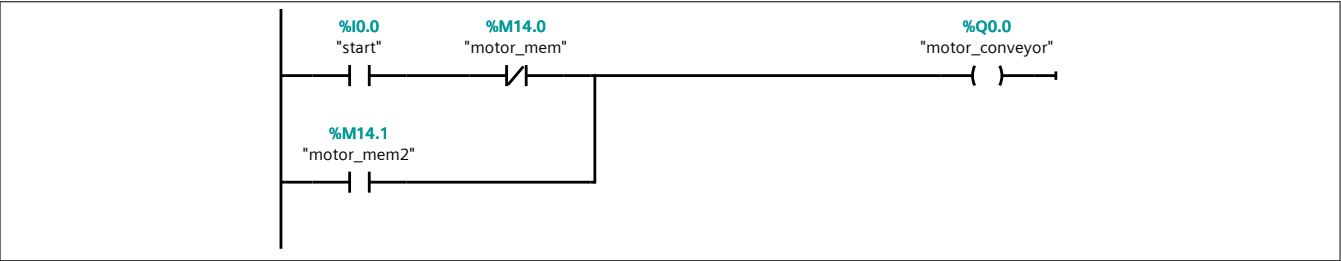
Projec_june_12 / PLC_1 [CPU 1215C DC/DC/DC] / Program blocks

Main [OB1]

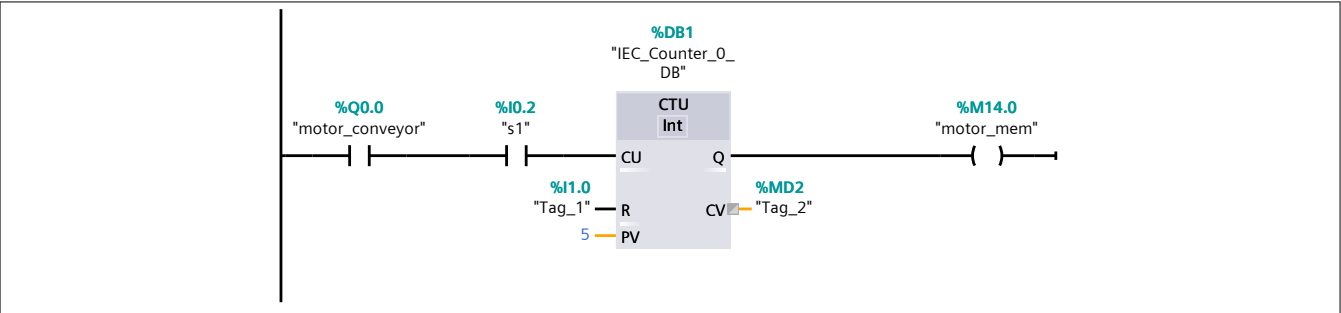
Main Properties					
General					
Name	Main	Number	1	Type	OB
Language	LAD	Numbering	Automatic		
Information					
Title	"Main Program Sweep (Cycle)"	Author		Comment	When start button is pressed, motor conveyor must turn ON. S1 is an input sensor to count the parts, when count reaches 5motor conveyor runs for 10s. Motor2 must run for 15s after the motor conveyor.
Family		Version	0.1	User-defined ID	

Main			
Name	Data type	Default value	Comment
▼ Input			
Initial_Call	Bool		Initial call of this OB
Remanence	Bool		=True, if remanent data are available
Temp			
Constant			

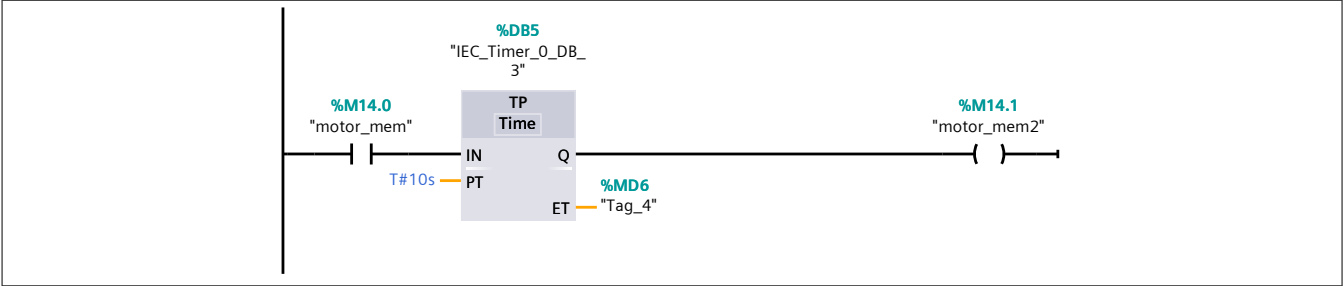
Network 1:



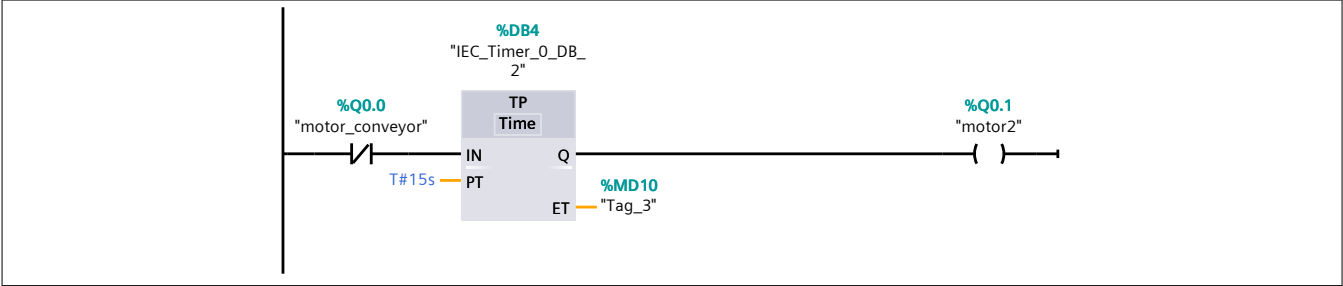
Network 2:



Network 3:



Network 4:



Totally Integrated Automation Portal

Projec_june_12 / PLC_1 [CPU 1215C DC/DC/DC] / Program blocks

Main [OB1]

Main Properties

General

Name	Main	Number	1	Type	OB
Language	LAD	Numbering	Automatic		

Information

Title	"Main Program Sweep (Cycle)"	Author		Comment	Write a ladder logic for bottle filling process. Start and Stop push button is used to start and stop the process. When start button is pressed, conveyor starts moving until the proximity sensor is ON. The solenoid valve is open for 5s. After 5s, conveyor starts moving. The above process should continue till 3 bottle are filled.
Family		Version	0.1	User-defined ID	

Main

Name	Data type	Default value	Comment
▼ Input			
Initial_Call	Bool		Initial call of this OB
Remanence	Bool		=True, if remanent data are available
Temp			
Constant			

Network 1:

%I0.0
"start"

%I0.1
"stop"

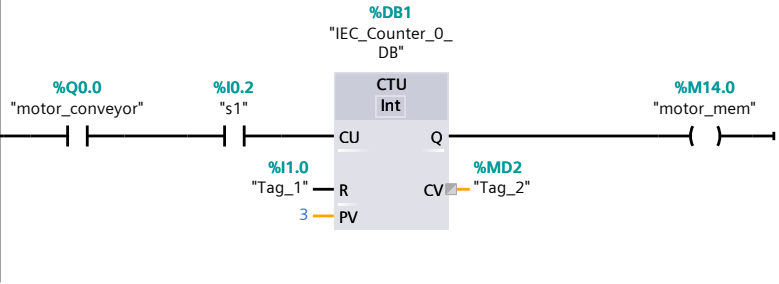
%I0.2
"s1"

%M14.0
"motor_mem"

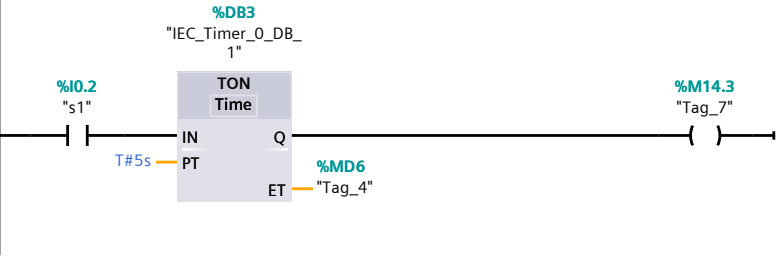
%Q0.0
"motor_conveyor"

%M14.3
"Tag_7"

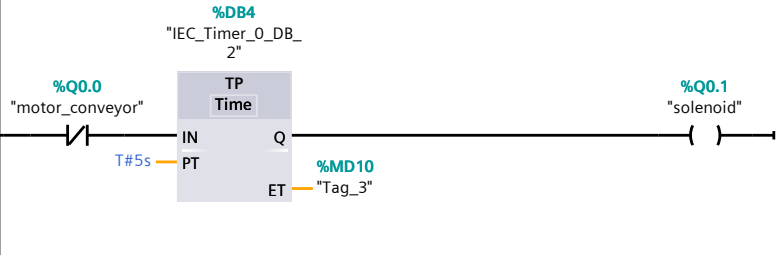
Network 2:



Network 3:



Network 4:



Project_june_13 / PLC_1 [CPU 1215C DC/DC/DC] / Program blocks

Main [OB1]

Main Properties

General

Name	Main	Number	1	Type	OB
Language	LAD	Numbering	Automatic		

Information

Title	"Main Program Sweep (Cycle)"	Author		Comment	When start switch is pressed
Family		Version	0.1	User-defined ID	

Main

Name	Data type	Default value	Comment
▼ Input			
Initial_Call	Bool		Initial call of this OB
Remanence	Bool		=True, if remanent data are available
Temp			
Constant			

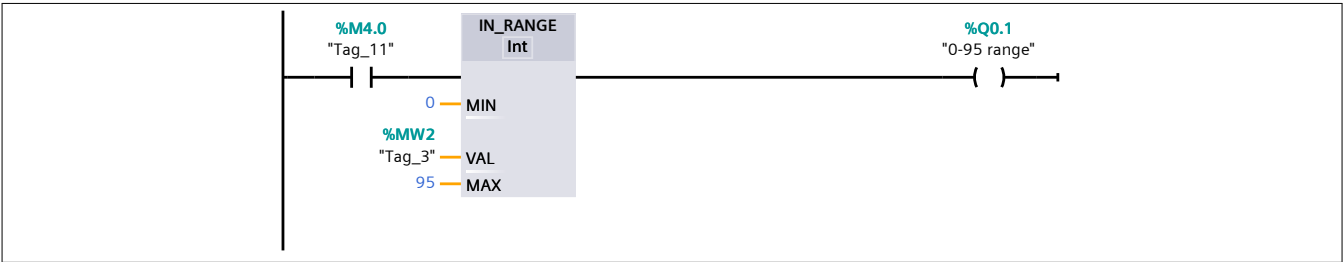
Network 1:

i) If water level is 0, motor should turn ON till water level reaches 95



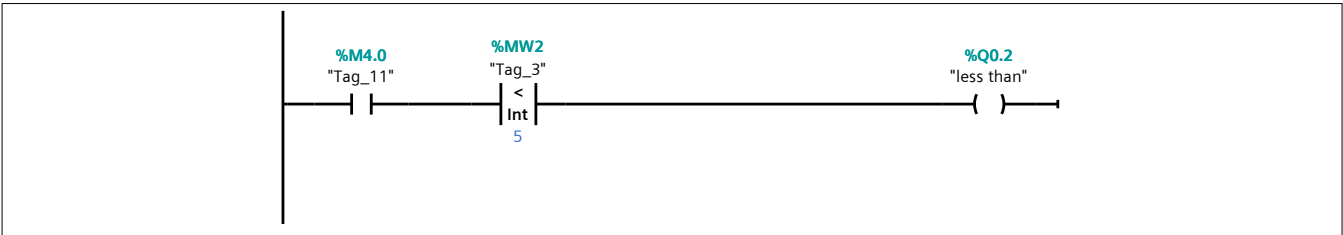
Network 2:

ii) If water level indicates the value below 5 low level water alarm should ON



Network 3:

iii) If water level indicates the value above 95 high level water alarm should ON



Network 4:

Totally Integrated Automation Portal		
<div><div></div><div><div><div>%M4.0 "Tag_11"</div><div>%MW2 "Tag_3"</div><div>%Q0.3 "greater"</div></div><div><div>></div><div>Int</div><div>95</div></div><div></div></div></div>		
<div><div>Network 5:</div><div>iv) If water level is exactly at 95 steamer should turn ON</div><div><div></div><div><div><div>%M4.0 "Tag_11"</div><div>%MW2 "Tag_3"</div><div>%Q0.4 "equal"</div></div><div><div>==</div><div>Int</div><div>95</div></div><div></div></div></div></div>		
<div><div>Network 6:</div><div>v) System under control indication should always ON when water level is not equals to 100.</div><div><div></div><div><div><div>%M4.0 "Tag_11"</div><div>%MW2 "Tag_3"</div><div>%Q0.5 "not equal"</div></div><div><div><></div><div>Int</div><div>100</div></div><div></div></div></div></div>		

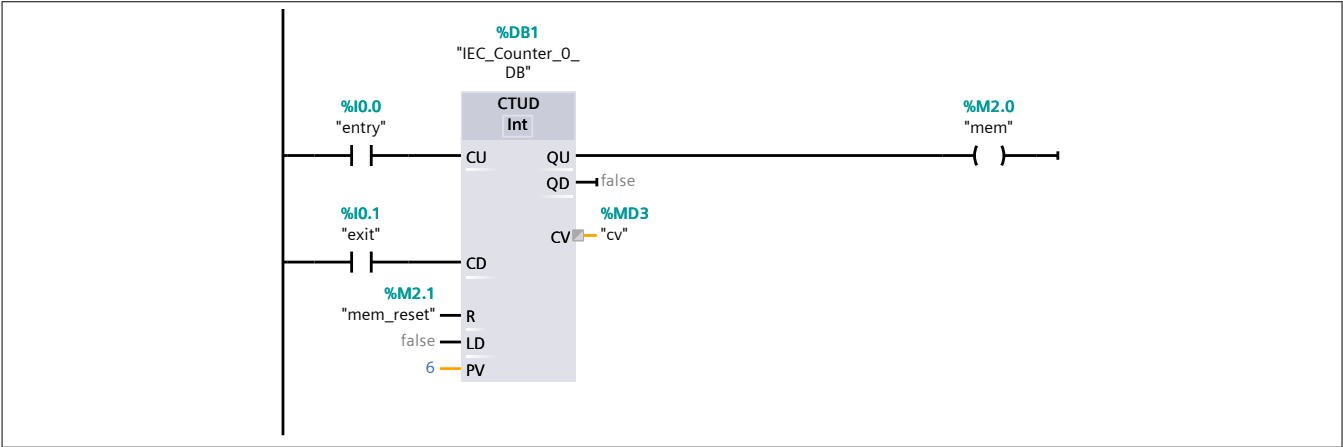
Project / PLC_1 [CPU 1215C DC/DC/DC] / Program blocks

Main [OB1]

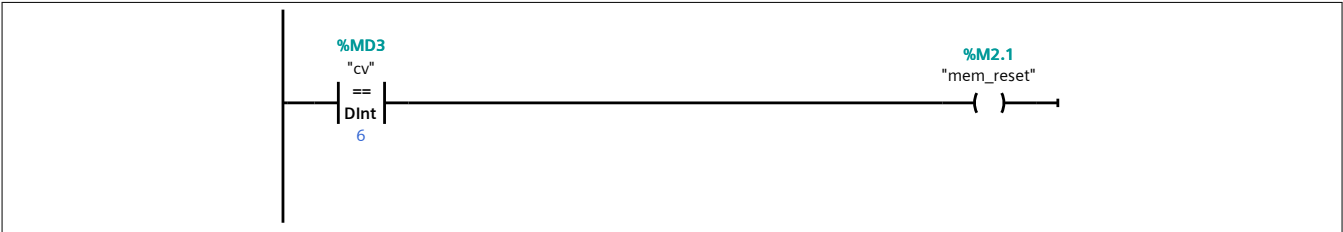
Main Properties					
General					
Name	Main	Number	1	Type	OB
Language	LAD	Numbering	Automatic		
Information					
Title	"Main Program Sweep (Cycle)"	Author		Comment	A parking plot has total capacity of 5 cars. Number of empty spots are displayed outside the parking plot and which spot are available is to be indicated by led's. Implemented this in PLC using ladder logic diagram.
Family		Version	0.1	User-defined ID	

Main			
Name	Data type	Default value	Comment
▼ Input			
Initial_Call	Bool		Initial call of this OB
Remanence	Bool		=True, if remanent data are available
Temp			
Constant			

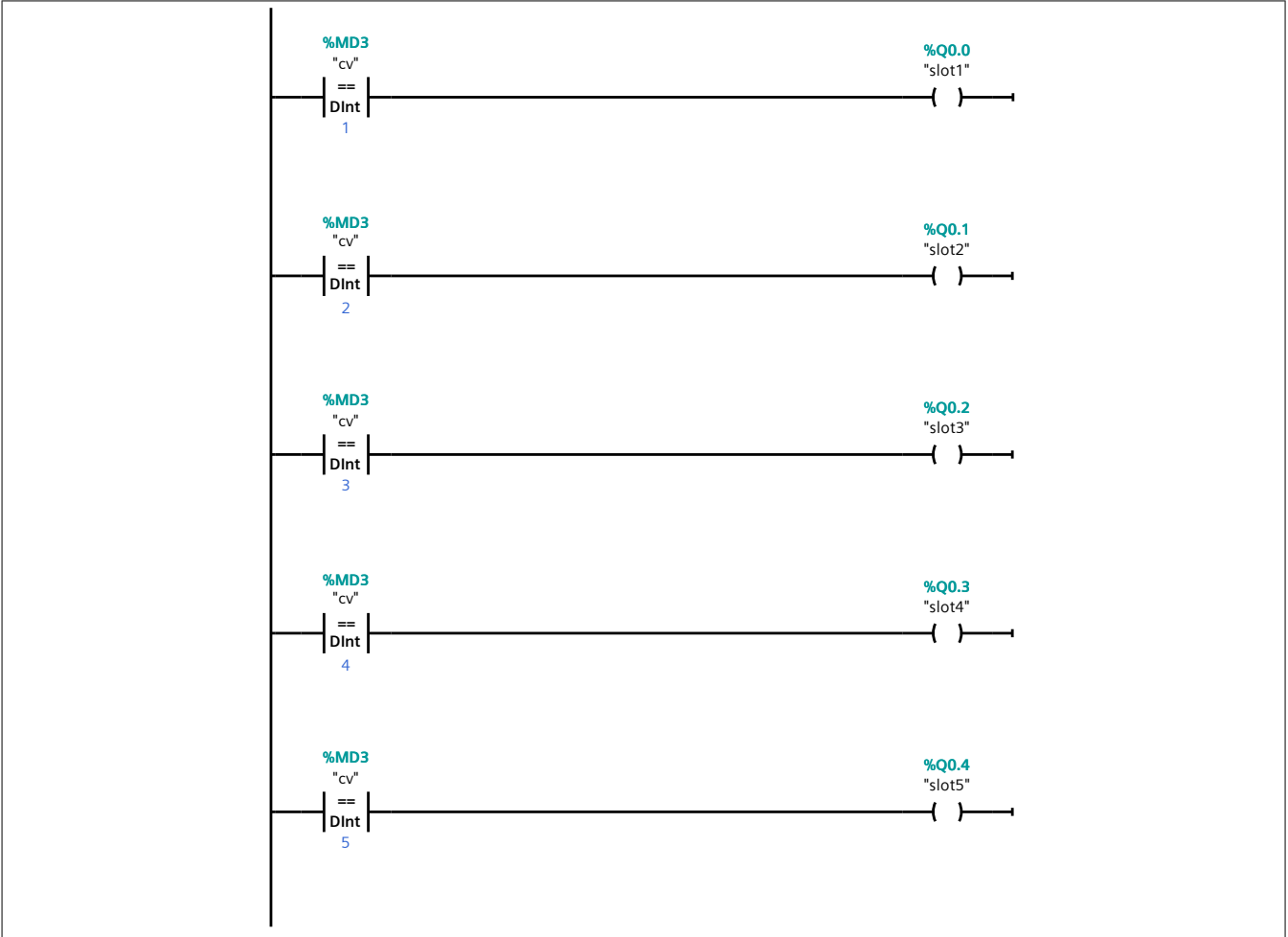
Network 1:



Network 2:



Network 3:



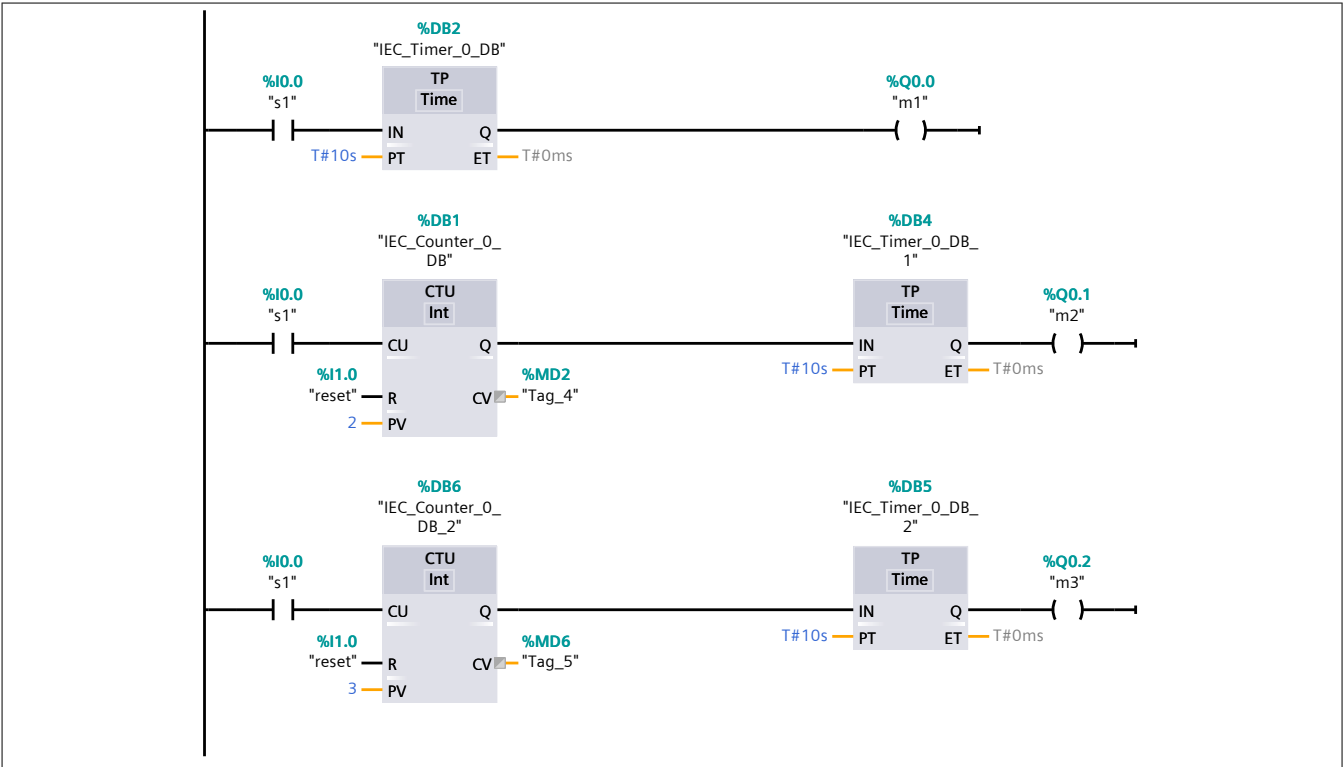
Project / PLC_1 [CPU 1215C DC/DC/DC] / Program blocks

Main [OB1]

Main Properties					
General					
Name	Main	Number	1	Type	OB
Language	LAD	Numbering	Automatic		
Information					
Title	"Main Program Sweep (Cycle)"	Author		Comment	When S1 is pressed i) Once M1 will turn ON for 10s. ii) Twice M1, M2 will turn ON for 10s each. iii) Thrice M1, M2, M3 will turn ON for 10s each.
Family		Version	0.1	User-defined ID	

Main			
Name	Data type	Default value	Comment
▼ Input			
Initial_Call	Bool		Initial call of this OB
Remanence	Bool		=True, if remanent data are available
Temp			
Constant			

Network 1:



june_16 / PLC_1 [CPU 1215C DC/DC/DC] / Program blocks

Main [OB1]

Main Properties

General

Name	Main	Number	1	Type	OB
Language	LAD	Numbering	Automatic		

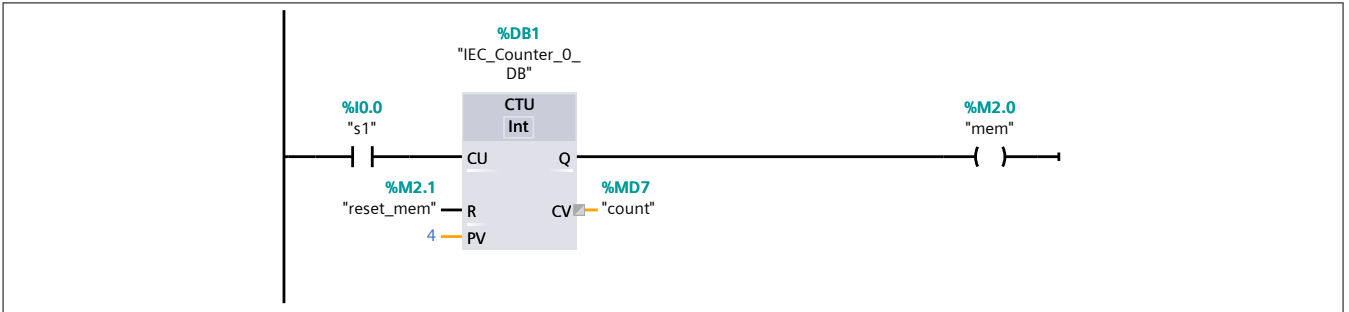
Information

Title	"Main Program Sweep (Cycle)"	Author		Comment	When S1 is pressed i) Once M 1 will turn ON for 10s ii) Twice M1, M2 will turn on for 10s each iii) Thrice M1, M2 and M3 will turn on for 10s each
Family		Version	0.1	User-defined ID	

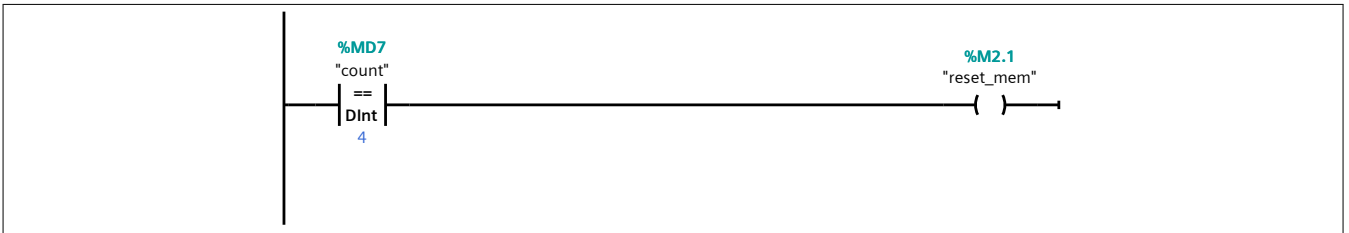
Main

Name	Data type	Default value	Comment
▼ Input			
Initial_Call	Bool		Initial call of this OB
Remanence	Bool		=True, if remanent data are available
Temp			
Constant			

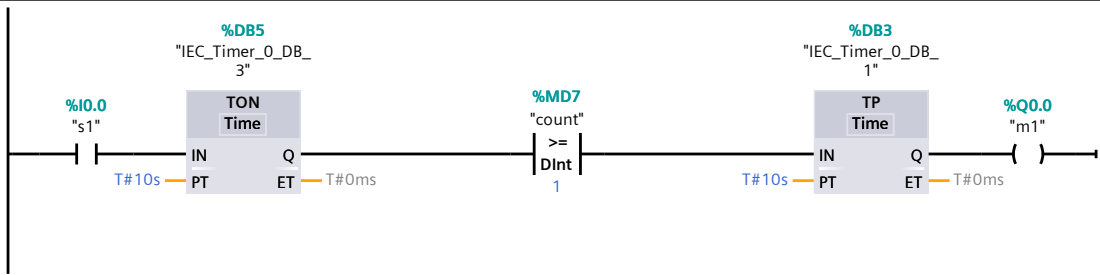
Network 1:



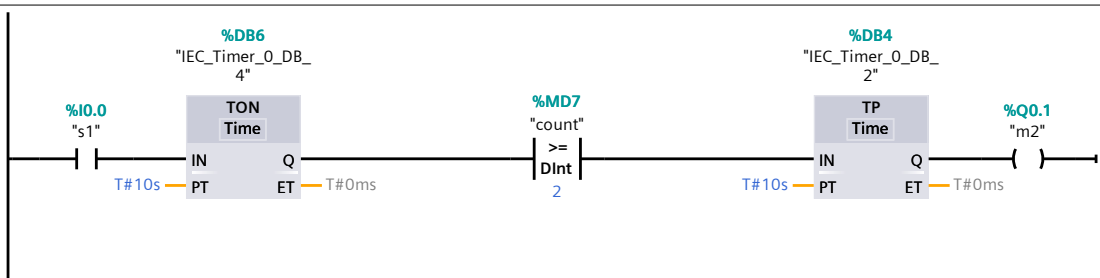
Network 2:



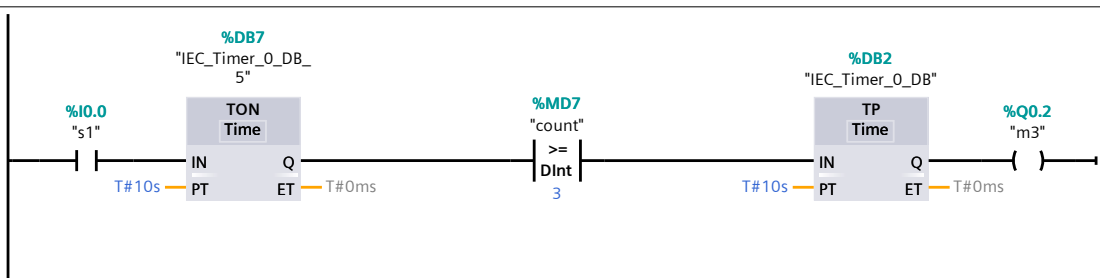
Network 3:



Network 4:



Network 5:



june_16 / PLC_1 [CPU 1215C DC/DC/DC] / Program blocks

Main [OB1]

Main Properties

General

Name	Main	Number	1	Type	OB
Language	LAD	Numbering	Automatic		

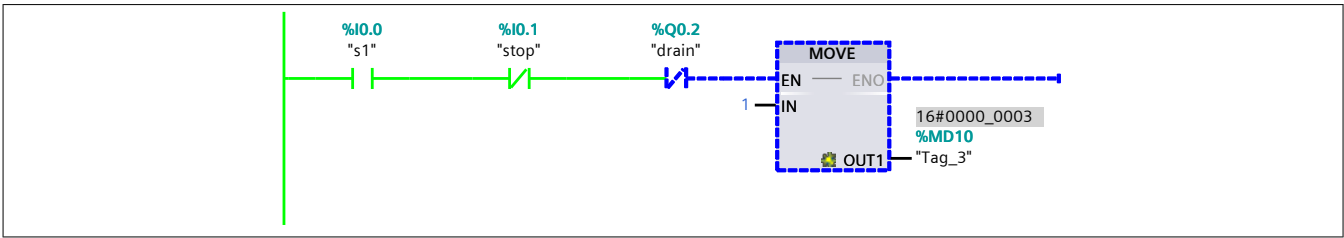
Information

Title	"Main Program Sweep (Cycle)"	Author		Comment	When start button is pressed pump must turn ON for 5s, mixer must turn ON for 7s and then drain must turn ON for 9s. Process must repeat untill stop button is pressed. Use move operation, comparator and timer.
Family		Version	0.1	User-defined ID	

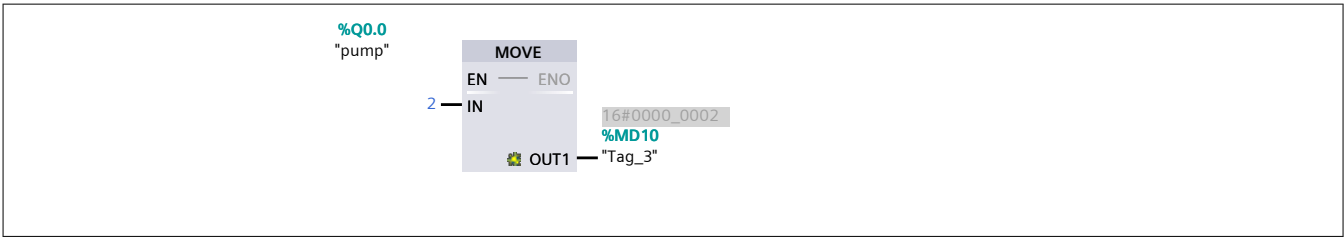
Main

Name	Data type	Default value	Comment
▼ Input			
Initial_Call	Bool		Initial call of this OB
Remanence	Bool		=True, if remanent data are available
Temp			
Constant			

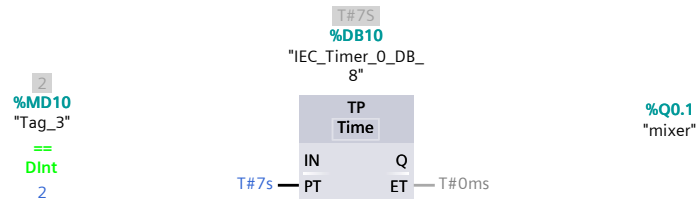
Network 1:



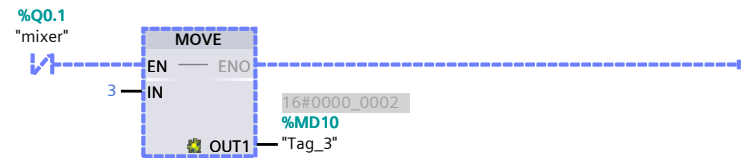
Network 3:



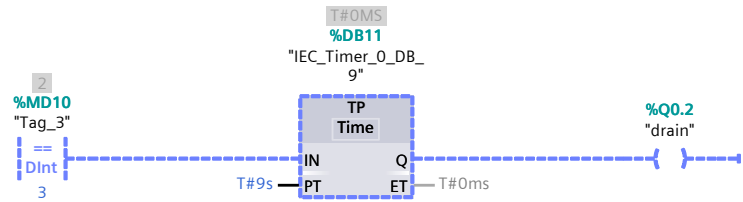
Network 4:



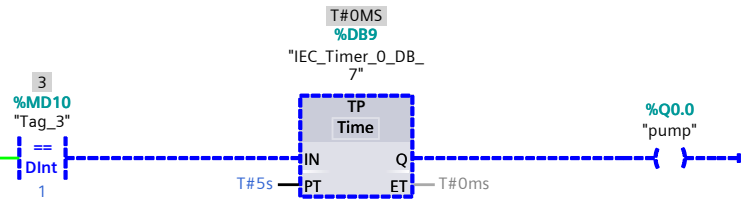
Network 5:



Network 6:



Network 2:



Project_june_17 / PLC_1 [CPU 1215C DC/DC/DC] / Program blocks

Main [OB1]

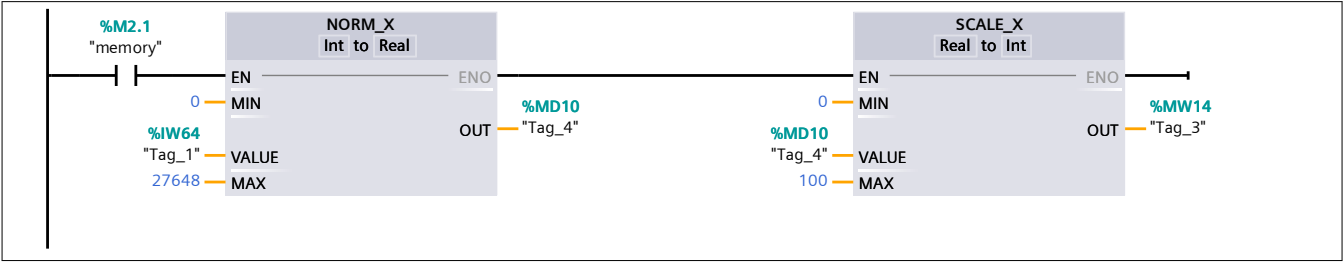
Main Properties					
General					
Name	Main	Number	1	Type	OB
Language	LAD	Numbering	Automatic		
Information					
Title	"Main Program Sweep (Cycle)"	Author		Comment	A water tank application, where sensor is used to monitor the water level in the tank.To this tank pump is fitted to supply water from main tank when start push button is pressed.Condition is when water level is above 95 motor should not run.
Family		Version	0.1	User-defined ID	

Main			
Name	Data type	Default value	Comment
▼ Input			
Initial_Call	Bool		Initial call of this OB
Remanence	Bool		=True, if remanent data are available
Temp			
Constant			

Network 1:



Network 2:



Network 3:

--	--	--

Totally Integrated Automation Portal

Project_june_17 / PLC_1 [CPU 1215C DC/DC/DC] / Program blocks

Main [OB1]

Main Properties

General

Name	Main	Number	1	Type	OB
Language	LAD	Numbering	Automatic		

Information

Title	"Main Program Sweep (Cycle)"	Author		Comment	A path inspection station for path height fitted with linear displacement transfuser, whose output is 0-10V DC and two cylinders, C1 for accept and C2 for reject, The height of a path lies between 45 to 50 mm, then C1 has to turn ON and should OFF after 5 seconds. If path height is other than that the reject cylinder C2 should ON and should OFF after 5 seconds.
Family		Version	0.1	User-defined ID	

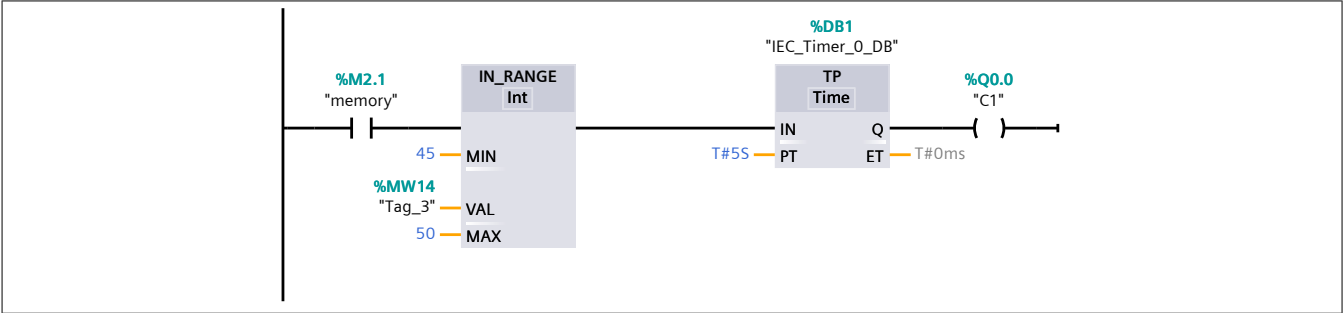
Main

Name	Data type	Default value	Comment
▼ Input			
Initial_Call	Bool		Initial call of this OB
Remanence	Bool		=True, if remanent data are available
Temp			
Constant			

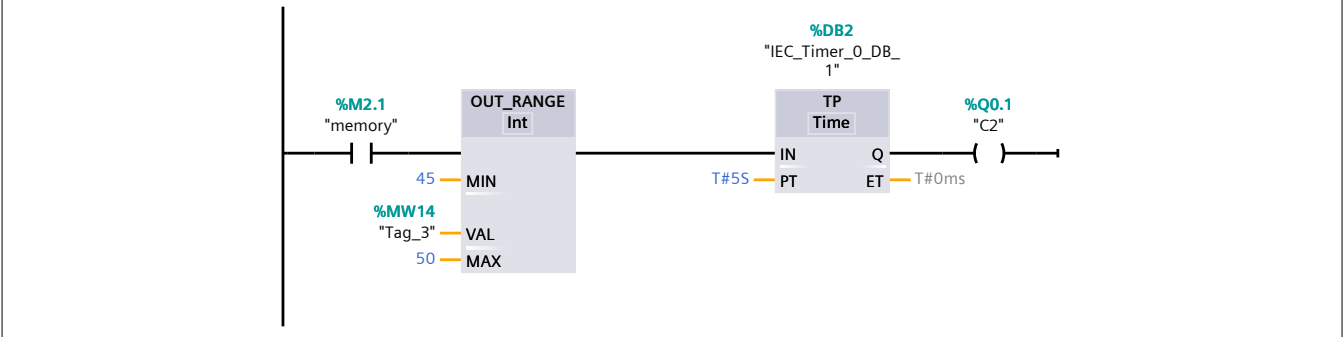
Network 1:

Network 2:

Network 3:



Network 4:



Project_june_17 / PLC_1 [CPU 1215C DC/DC/DC] / Program blocks

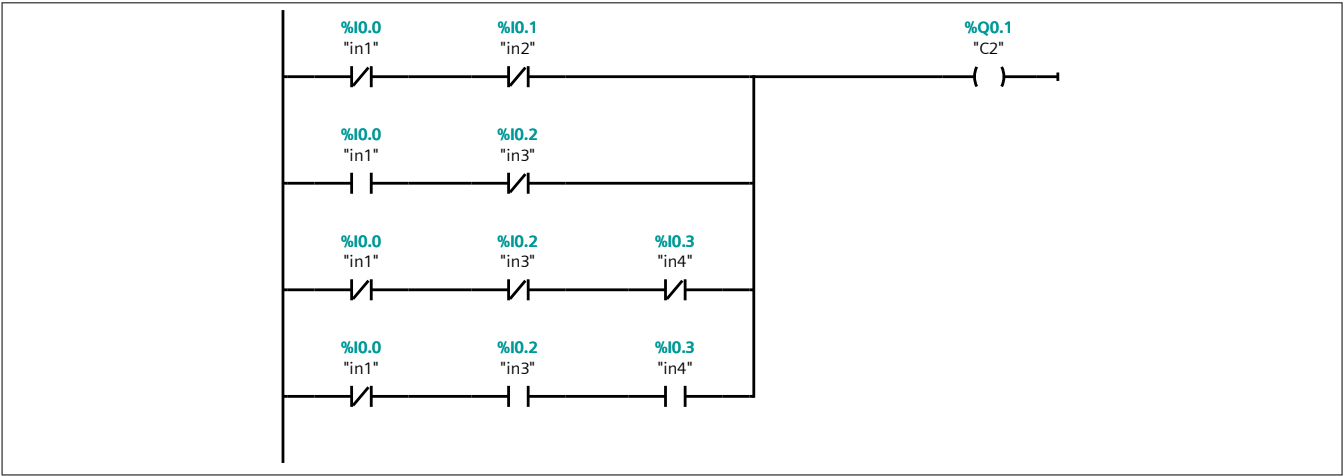
Main [OB1]

Main Properties					
General					
Name	Main	Number	1	Type	OB
Language	LAD	Numbering	Automatic		
Information					
Title	"Main Program Sweep (Cycle)"	Author		Comment	7 segment display using 4 inputs
Family		Version	0.1	User-defined ID	

Main			
Name	Data type	Default value	Comment
▼ Input			
Initial_Call	Bool		Initial call of this OB
Remanence	Bool		=True, if remanent data are available
Temp			
Constant			

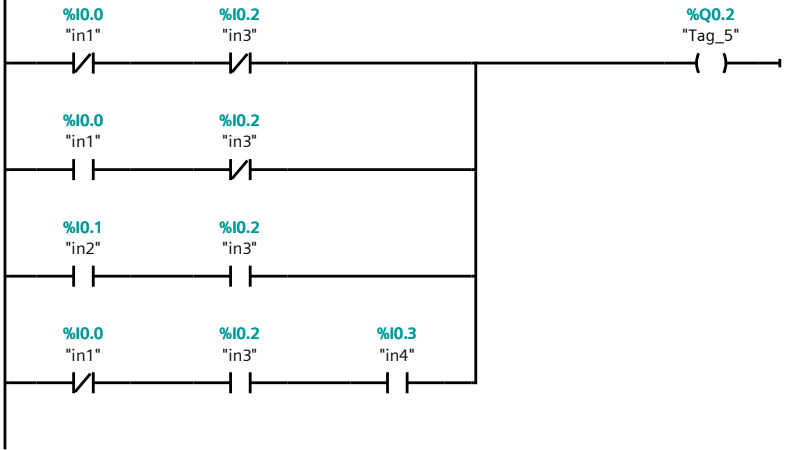
Network 2:

b



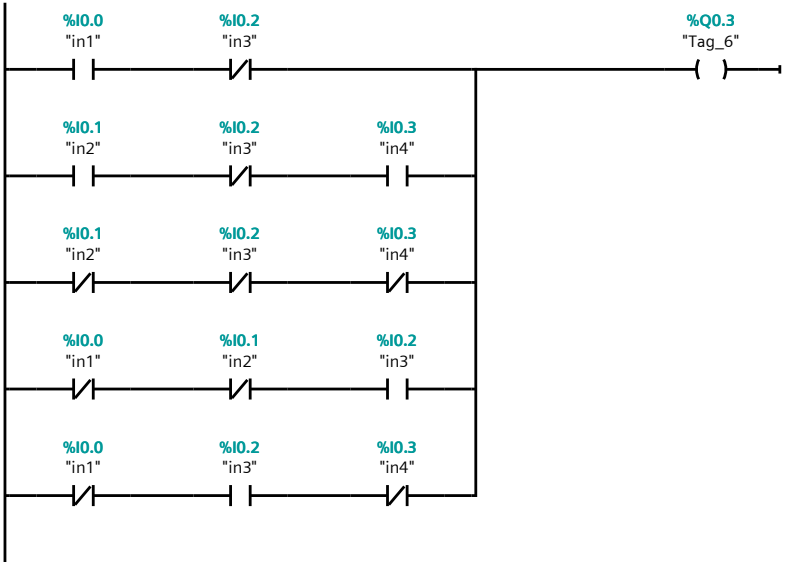
Network 3:

c



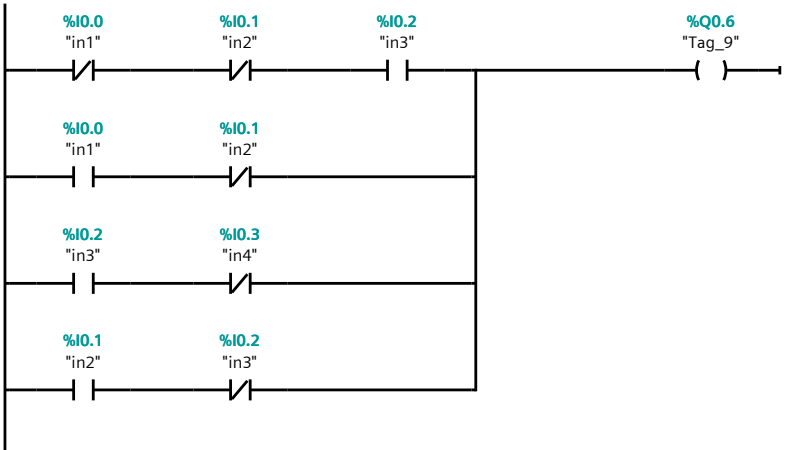
Network 4:

d



Network 5:

g



Network 6:

f

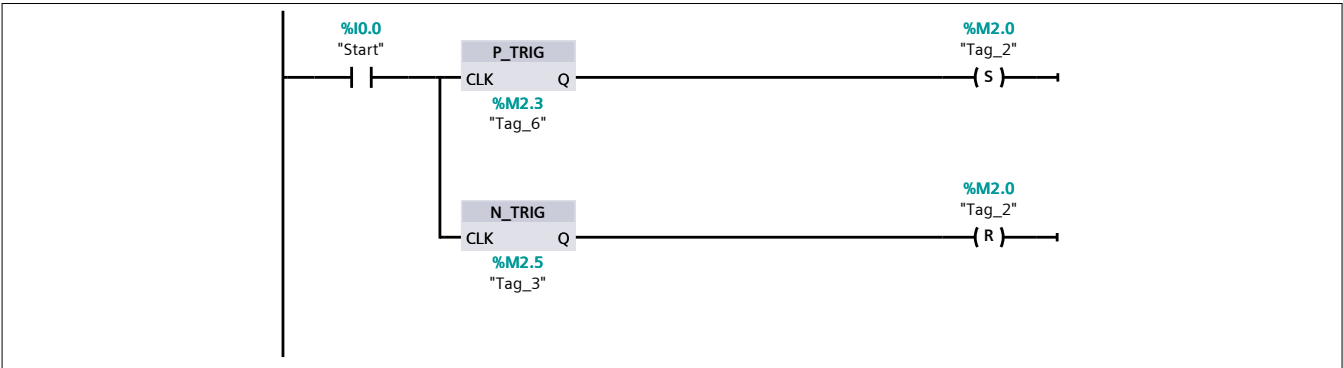
Project_june18 / PLC_1 [CPU 1215C DC/DC/DC] / Program blocks

Main [OB1]

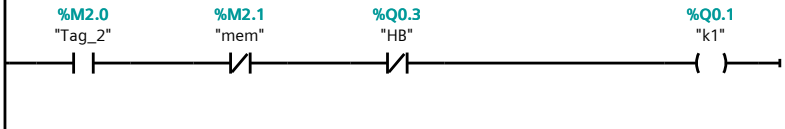
Main Properties					
General					
Name	Main	Number	1	Type	OB
Language	LAD	Numbering	Automatic		
Information					
Title	"Main Program Sweep (Cycle)"	Author		Comment	Consider the industrial application of parking system, sensor 1is used for counting parts and hot air blower is used to shrink the package. When start p[ush button is pressed, conveyor motor k1 will start. When conveyor take parts, sensor 1 senses and produce signal which is counted by counter. When it reaches 5 parts the conveyor has to run for 15s and whole system has to go OFF.
Family		Version	0.1	User-defined ID	

Main			
Name	Data type	Default value	Comment
▼ Input			
Initial_Call	Bool		Initial call of this OB
Remanence	Bool		=True, if remanent data are available
Temp			
Constant			

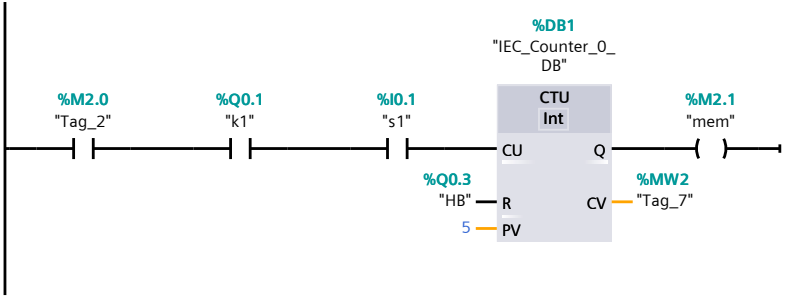
Network 1:



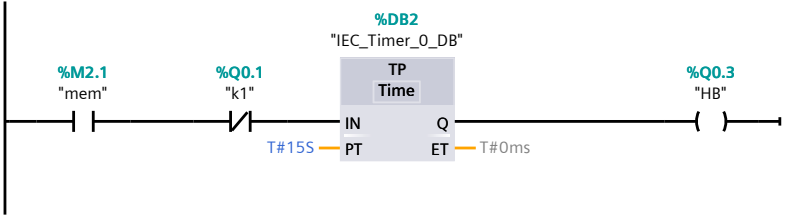
Network 2:



Network 3:



Network 4:



Project_june18 / PLC_1 [CPU 1215C DC/DC/DC] / Program blocks

Main [OB1]

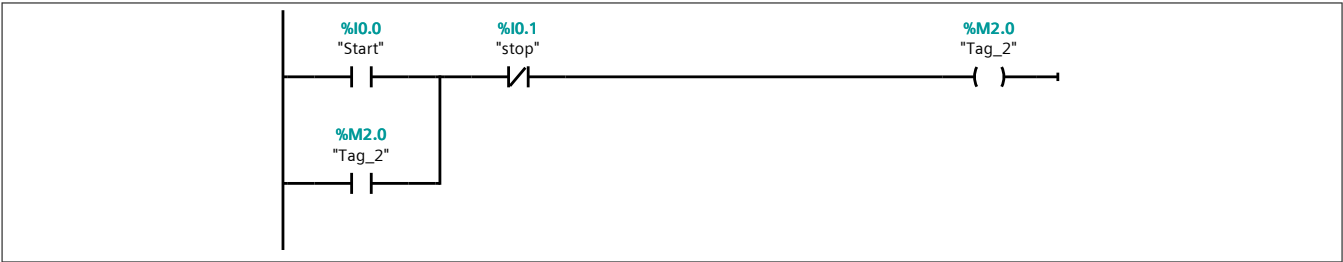
Main Properties

General					
Name	Main	Number	1	Type	OB
Language	LAD	Numbering	Automatic		
Information					
Title	"Main Program Sweep (Cycle)"	Author		Comment	The system to be controlled by PLC consists of 2 belts. If the start button is pressed, conveyor belt 1 wil begin to run, after 5 sec, conveyor belt 2 will be active, after the whole system runs for 15 sec, conveyor belt 1 will stop then conveyer belt 2 continues to move for 5 sec and then it will stop also the system reset by stop button at any time.
Family		Version	0.1	User-defined ID	

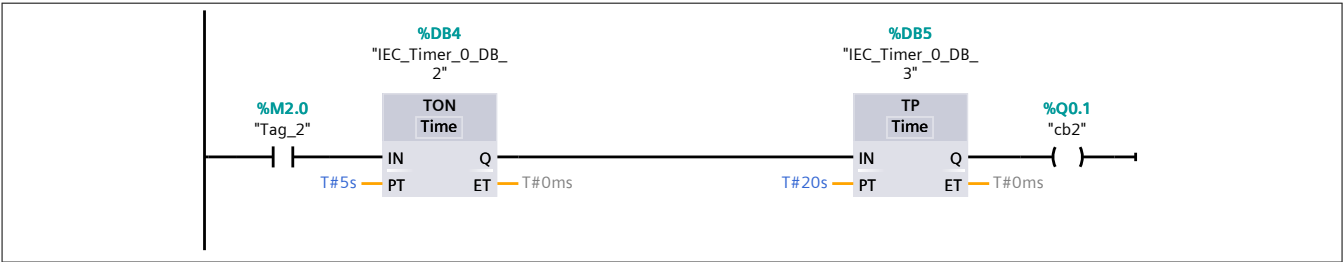
Main

Name	Data type	Default value	Comment
▼ Input			
Initial_Call	Bool		Initial call of this OB
Remanence	Bool		=True, if remanent data are available
Temp			
Constant			

Network 1:



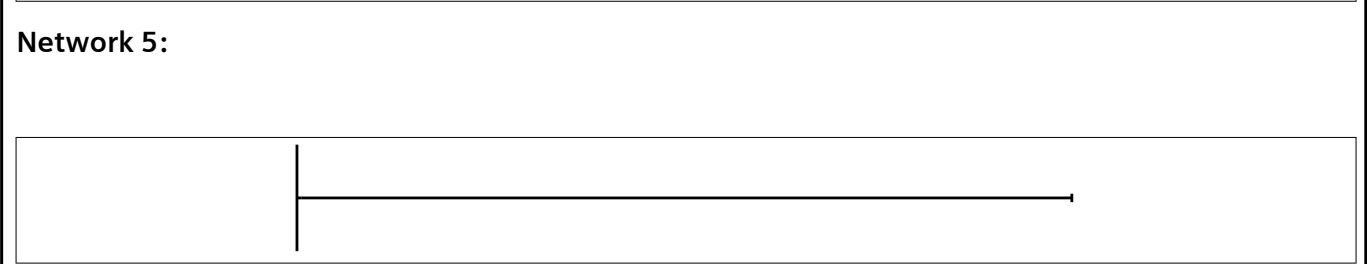
Network 3:



Network 4:

```

graph LR
    I01["%I0.1  
\"stop\""] --- J1(( ))
    J1 --- DB5["%DB5  
\"IEC_Timer_0_DB_3\"  
[ RT ]"]
    J1 --- DB3["%DB3  
\"IEC_Timer_0_DB_1\"  
[ RT ]"]
  
```



Network 2:

```

graph LR
    M20["%M2.0  
\"Tag_2\""] --- IN
    subgraph Timer ["%DB3  
\"IEC_Timer_0_DB_1\""]
        direction TB
        TP["TP  
Time"]
        PT["PT"]
        ET["ET"]
    end
    IN --- PT
    ET --- Q["%Q0.0  
\"cb1\""]
    PT --- T20s["T#20s"]
    Q --- T0ms["T#0ms"]

```

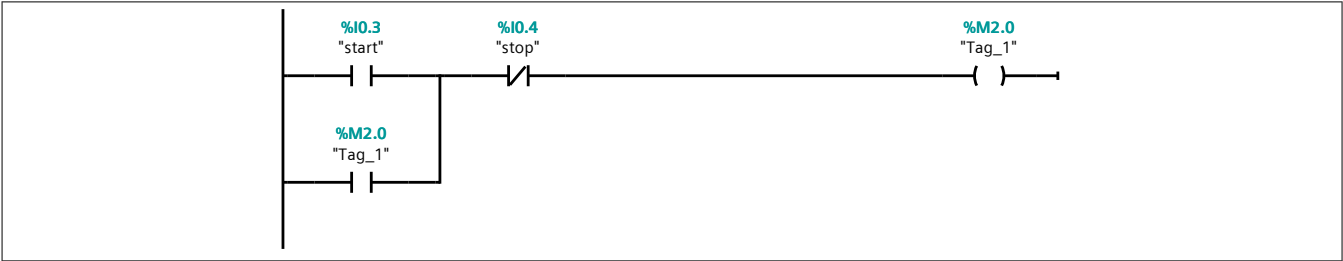
Project_june_19 / PLC_1 [CPU 1215C DC/DC/DC] / Program blocks

Main [OB1]

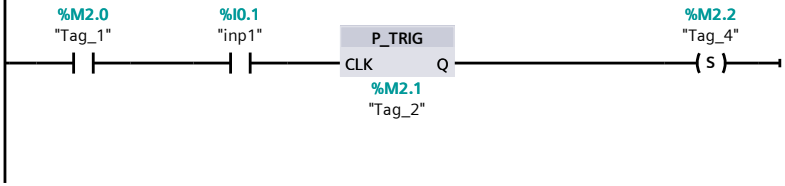
Main Properties					
General					
Name	Main	Number	1	Type	OB
Language	LAD	Numbering	Automatic		
Information					
Title	"Main Program Sweep (Cycle)"	Author		Comment	When the start button is pressed, solenoid a energizes to start filling the tank. As the tank fills, the empty level sensor switch closes. When the tank is full, the full level switch closes. Solenoid a is de-energized. The mixer motor starts and runs for 30sec to mix the liquid. When the mixer motor stops, Solenoid b is energized to empty the tank. When the tank is completely empty, the empty sensor switch opens to de-energize solenoid b. Start button is pressed to repeat the sequence
Family		Version	0.1	User-defined ID	

Main			
Name	Data type	Default value	Comment
▼ Input			
Initial_Call	Bool		Initial call of this OB
Remanence	Bool		=True, if remanent data are available
Temp			
Constant			

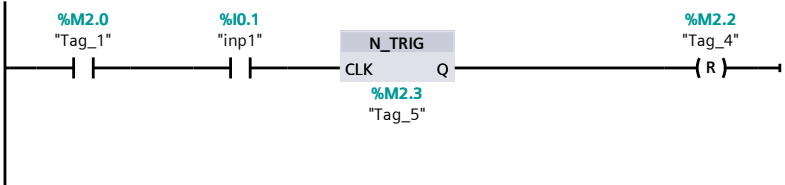
Network 1:



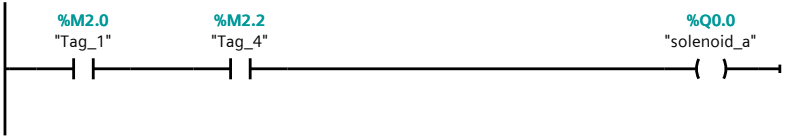
Network 2:



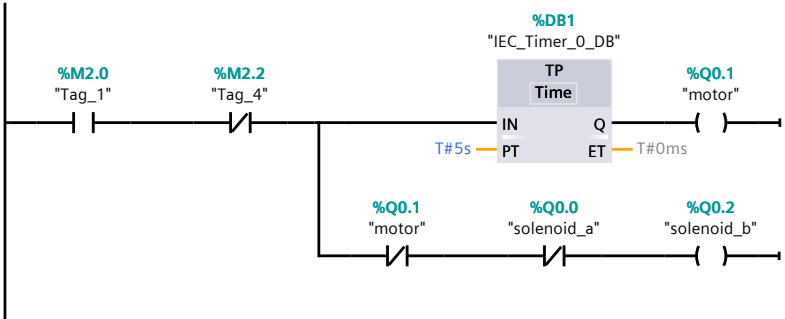
Network 3:



Network 4:



Network 5:



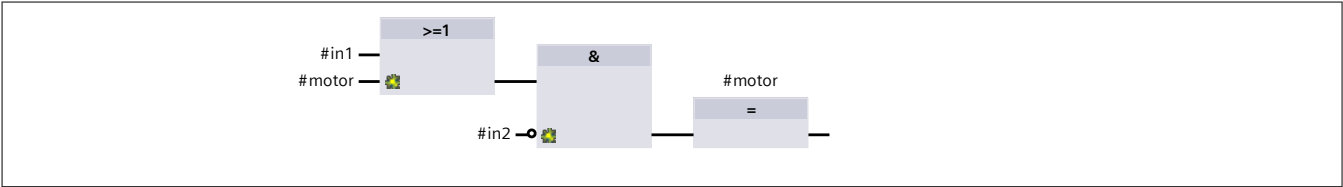
Project30 / PLC_1 [CPU 1215C DC/DC/DC] / Program blocks

Block_3 [FB2]

Block_3 Properties					
General					
Name	Block_3	Number	2	Type	FB
Language	FBD	Numbering	Automatic		
Information					
Title		Author		Comment	
Family		Version	0.1	User-defined ID	

Block_3									
Name	Data type	Default value	Retain	Access- ible from HMI/OP C UA/We b API	Wri- ta- ble fro m HM I/O PC UA/ We b API	Visible in HMI engi- neer- ing	Set- point	Su- per- vi- sion	Comment
▼ Input									
in1	Bool	false	Non-retain	True	True	True	False		
in2	Bool	false	Non-retain	True	True	True	False		
Input_2	Bool	false	Non-retain	True	True	True	False		
Output									
▼ InOut									
motor	Bool	false	Non-retain	True	True	True	False		
Static									
Temp									
Constant									

Network 1:



Network 2:

Totally Integrated Automation Portal		

Project31 / PLC_1 [CPU 1215C DC/DC/DC] / Program blocks

Main [OB1]

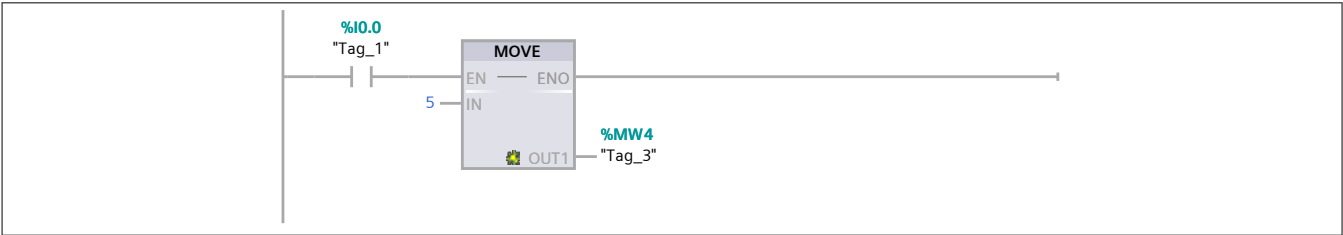
Main Properties

General					
Name	Main	Number	1	Type	OB
Language	LAD	Numbering	Automatic		
Information					
Title	"Main Program Sweep (Cycle)"	Author		Comment	
Family		Version	0.1	User-defined ID	

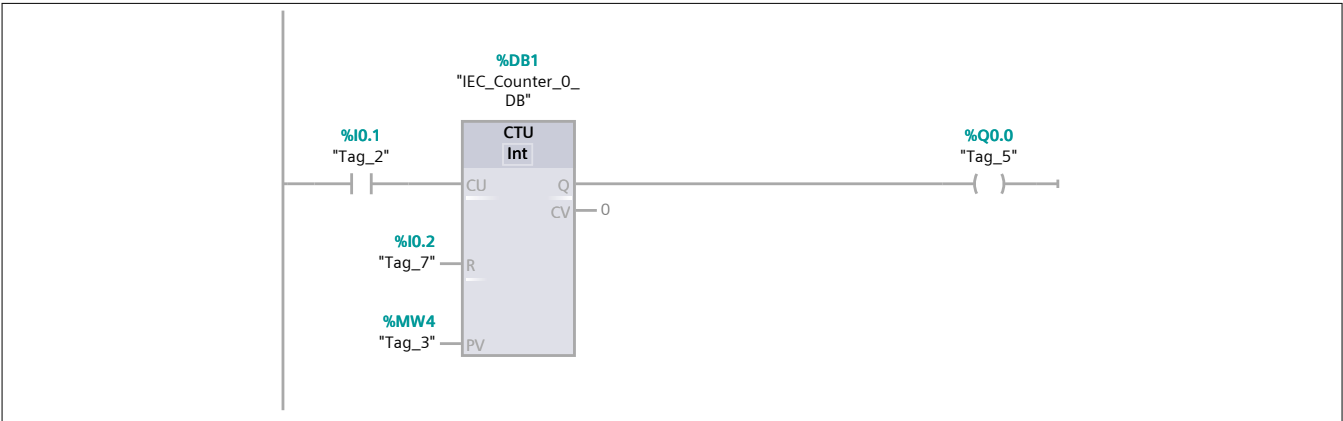
Main

Name	Data type	Default value	Comment
▼ Input			
Initial_Call	Bool		Initial call of this OB
Remanence	Bool		=True, if remanent data are available
Temp			
Constant			

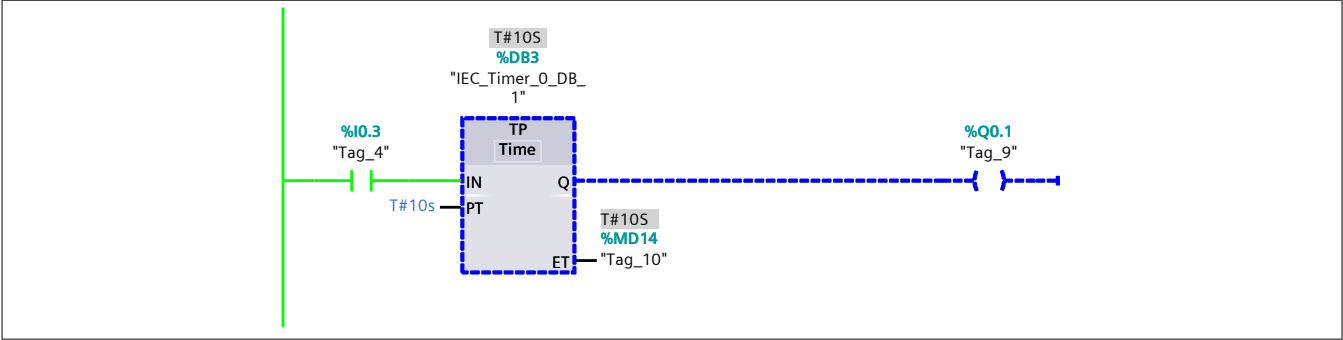
Network 1:



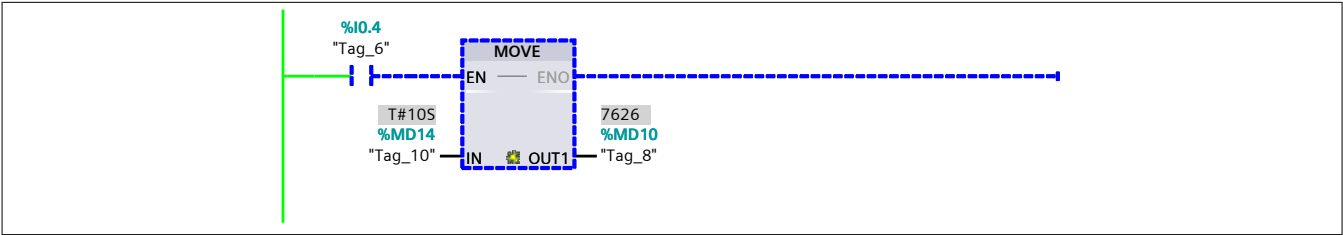
Network 2:



Network 3:



Network 4:



Project11137 / PLC_1 [CPU 1215C DC/DC/DC] / Program blocks

Main [OB1]

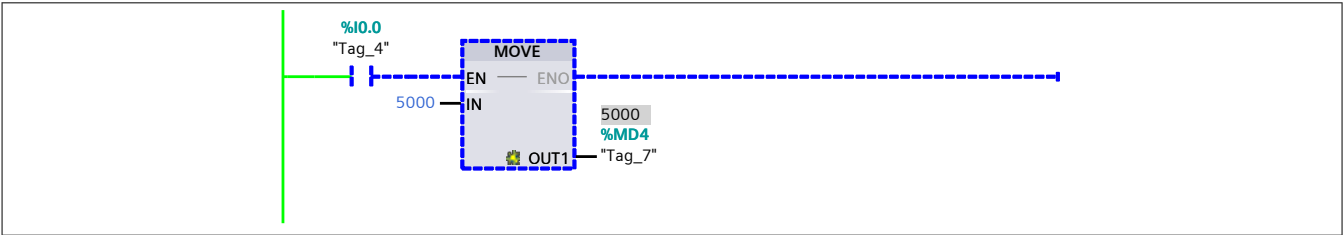
Main Properties

General					
Name	Main	Number	1	Type	OB
Language	LAD	Numbering	Automatic		
Information					
Title	"Main Program Sweep (Cycle)"	Author		Comment	
Family		Version	0.1	User-defined ID	

Main

Name	Data type	Default value	Comment
▼ Input			
Initial_Call	Bool		Initial call of this OB
Remanence	Bool		=True, if remanent data are available
Temp			
Constant			

Network 1:



Network 2:

