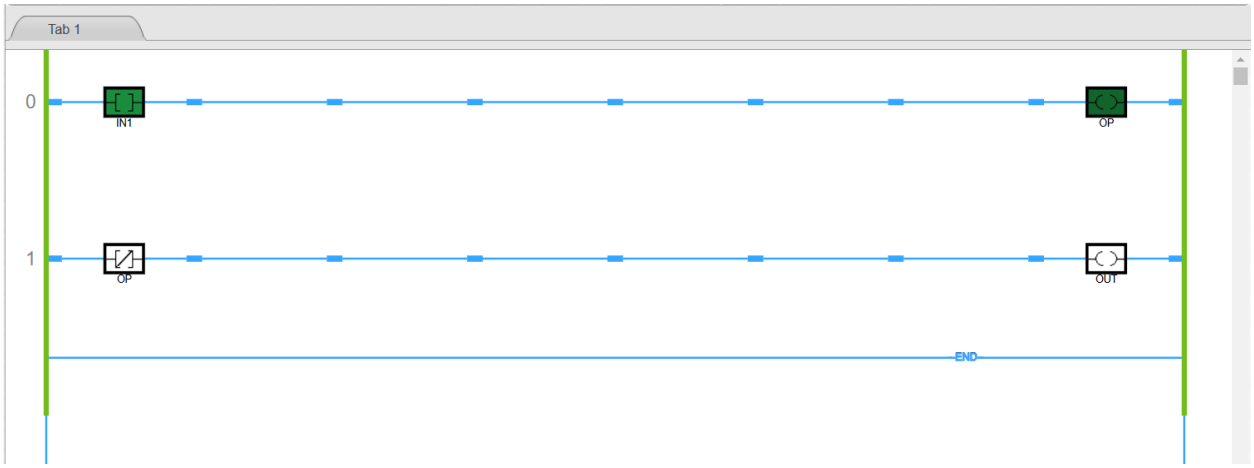
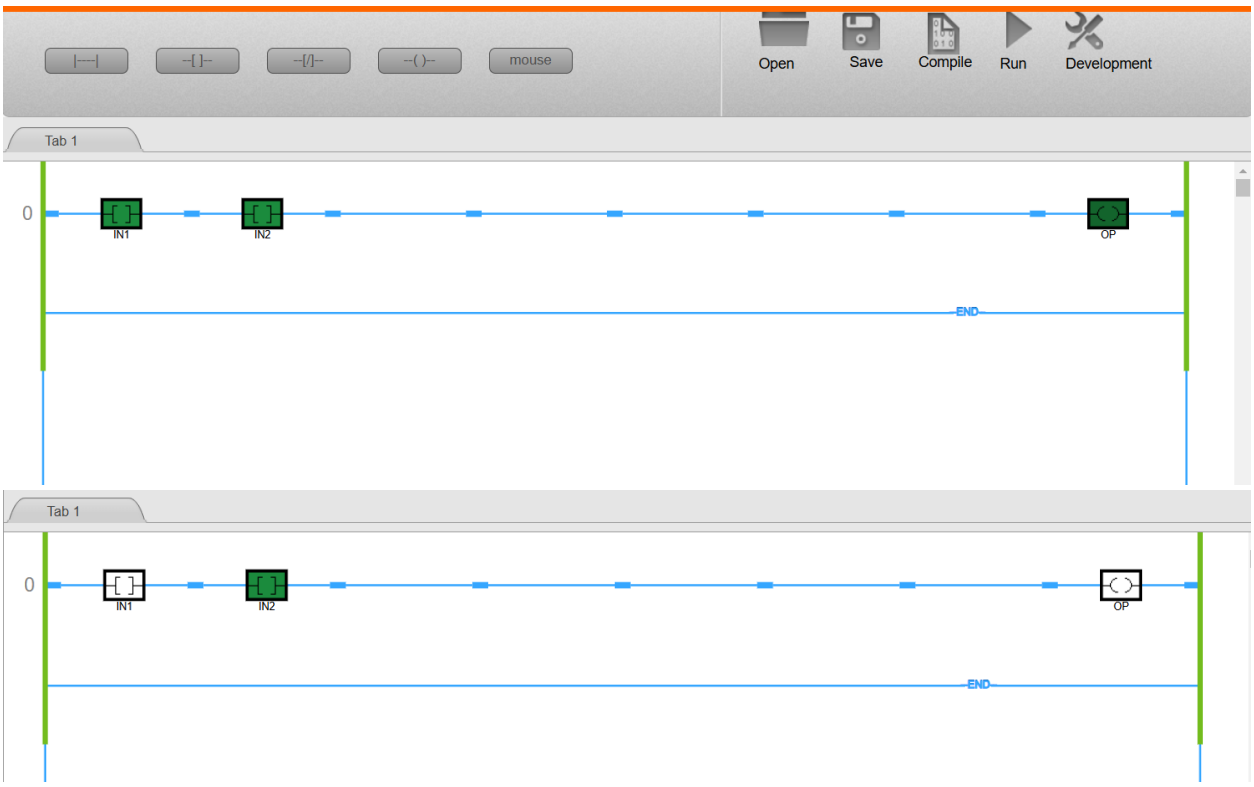
14/01/25

https://plc-coep.vlabs.ac.in/exp/implementation-logic-gates/simulation.html

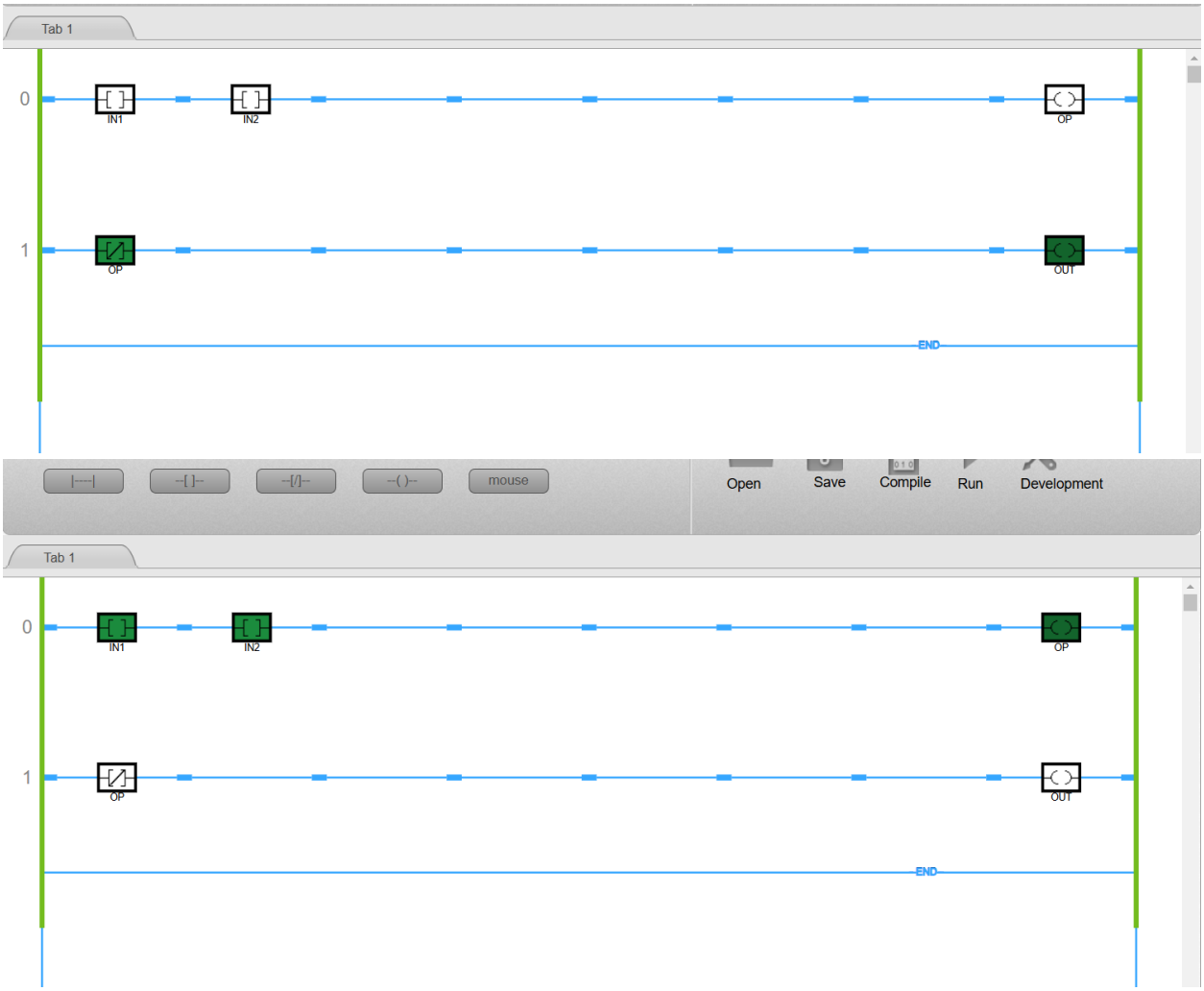
Not gate



AND GATE

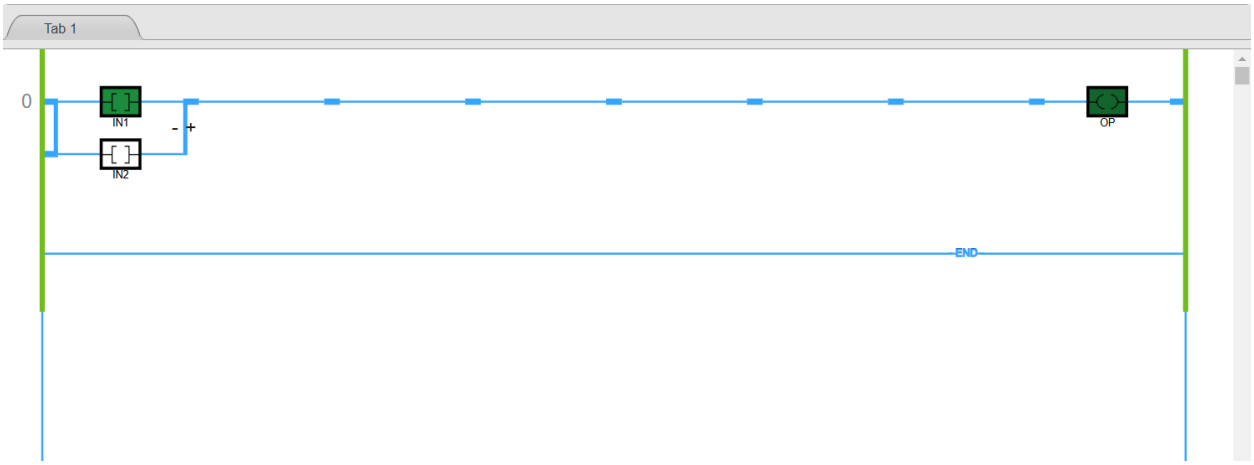


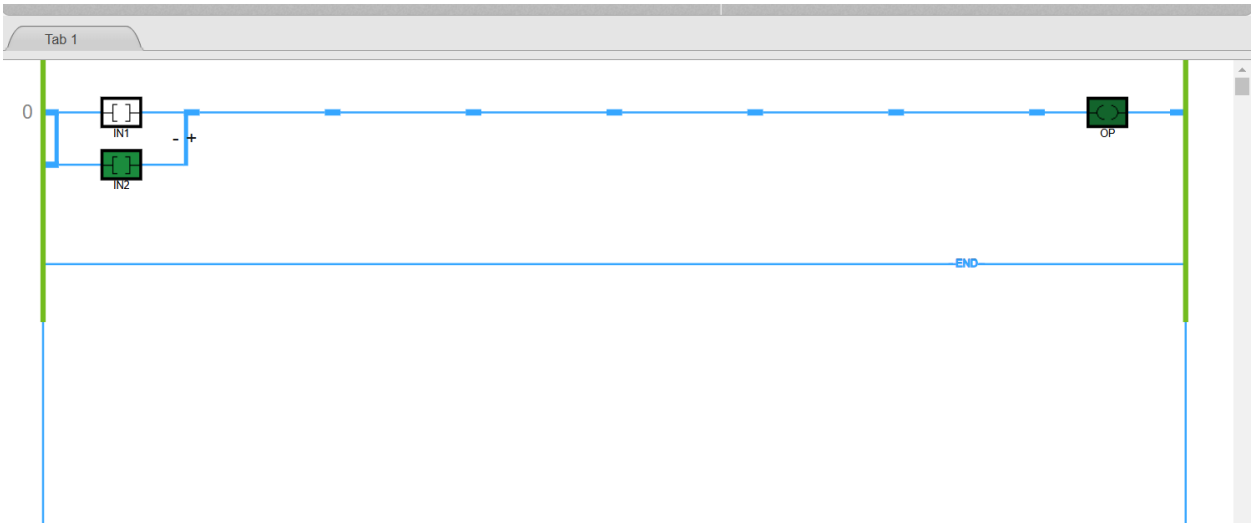
NAND GATE


Tab 1
0
IN1
IN2
OP
1
OP
OUT
END
|----|
--[ ]--
--[/]--
--( )--
mouse
Open
Save
Compile
Run
Development

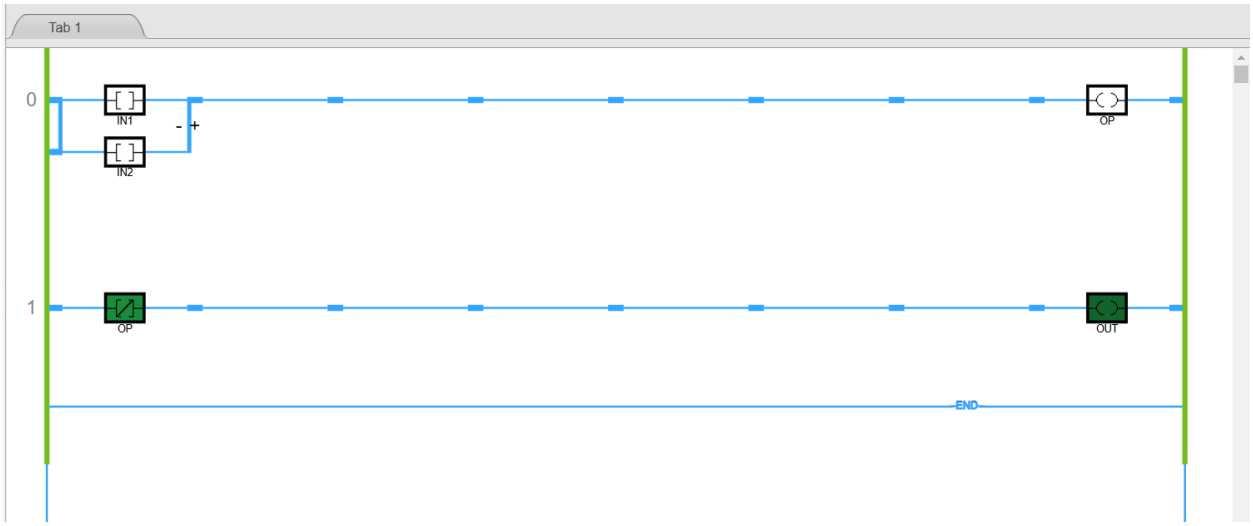
Tab 1
0
IN1
IN2
OP
1
OP
OUT
END

OR GATE


Tab 1
0
IN1
IN2
OP
END



NOR GATE



PRETEST

Aim
Theory
Pretest
Procedure
Simulation
Posttest
References
Feedback

The scan time of PLC depends upon:

- a: Processor speed and program length
- b: I/O density
- c: None of these
- d: Both a and b

The programming device must be connected to the controller

- a: At all times
- b: When entering the program
- c: When program is running
- d: When program is stopped

The ----- will account for the most of the total memory of a given PLC program.

- a: User program
- b: Output image table
- c: Input image table
- d: All of these

While developing the ladder program the contacts are in:

- a: Any state (either energised or de-enrgised)
- b: Energised state
- c: De-energised state
- d: All of these

Which of the following is not a factor in determining the total scan time of a PLC:

- a: Total no. of inputs and outputs
- b: Programming method
- c: Program Length
- d: All of these

Submit Quiz

Score: 5 out of 5

Aim
Theory
Pretest
Procedure
Simulation
Posttest
References
Feedback

The logical AND function is similar to:

- a: Combination of series- parallel contacts
- b: Contacts in parallel
- c: Contacts in series
- d: None of these

The logical OR function is similar to:

- a: Contacts in parallel
- b: Contacts in series
- c: Combination of series- parallel contacts
- d: None of these

Which of the following logic operators are available in PLC?

- a: AND, OR
- b: NOT
- c: All of the above
- d: None of these

What is the output of NOR block if any one of the input is high or active or true?

- a: 1
- b: 0
- c: Can't say

What is the output of NAND block if any one of the two inputs is high or active or true?

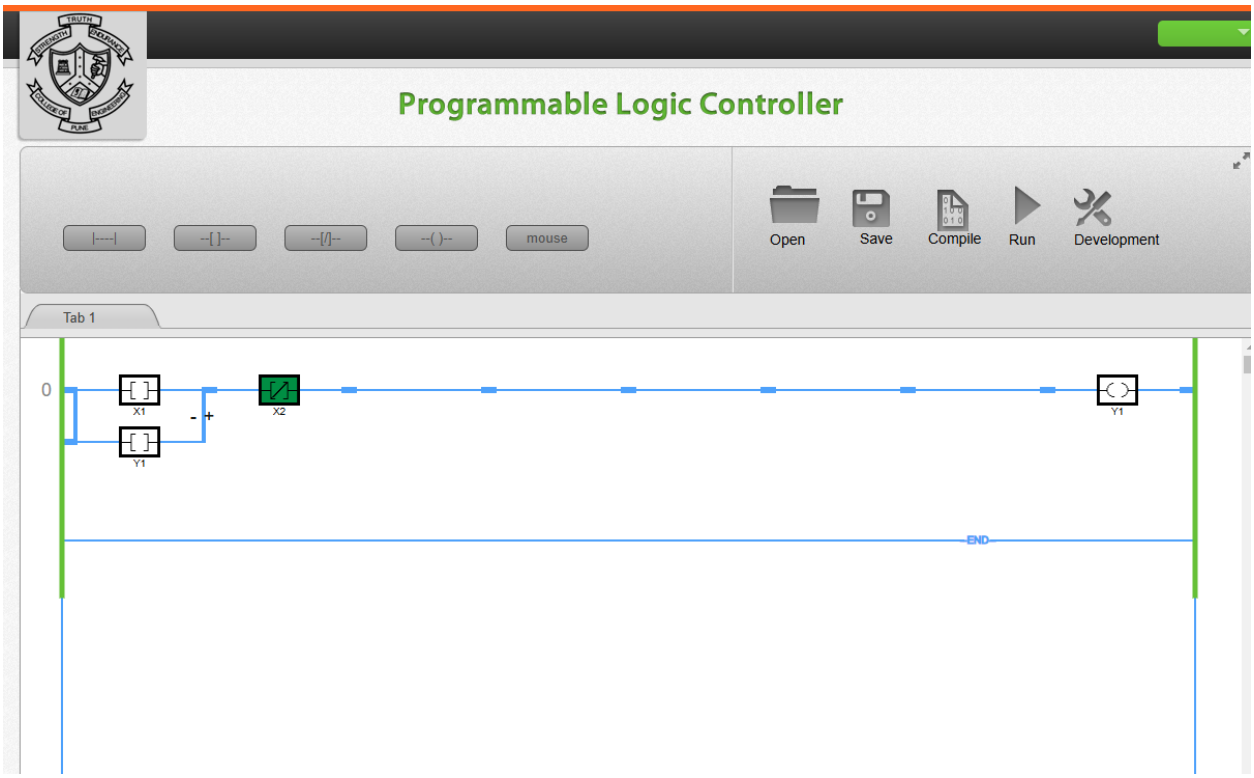
- a: 1
- b: 0
- c: Can't say

Submit Quiz

Score: 5 out of 5

21/01/25

Ladder logic for start stop

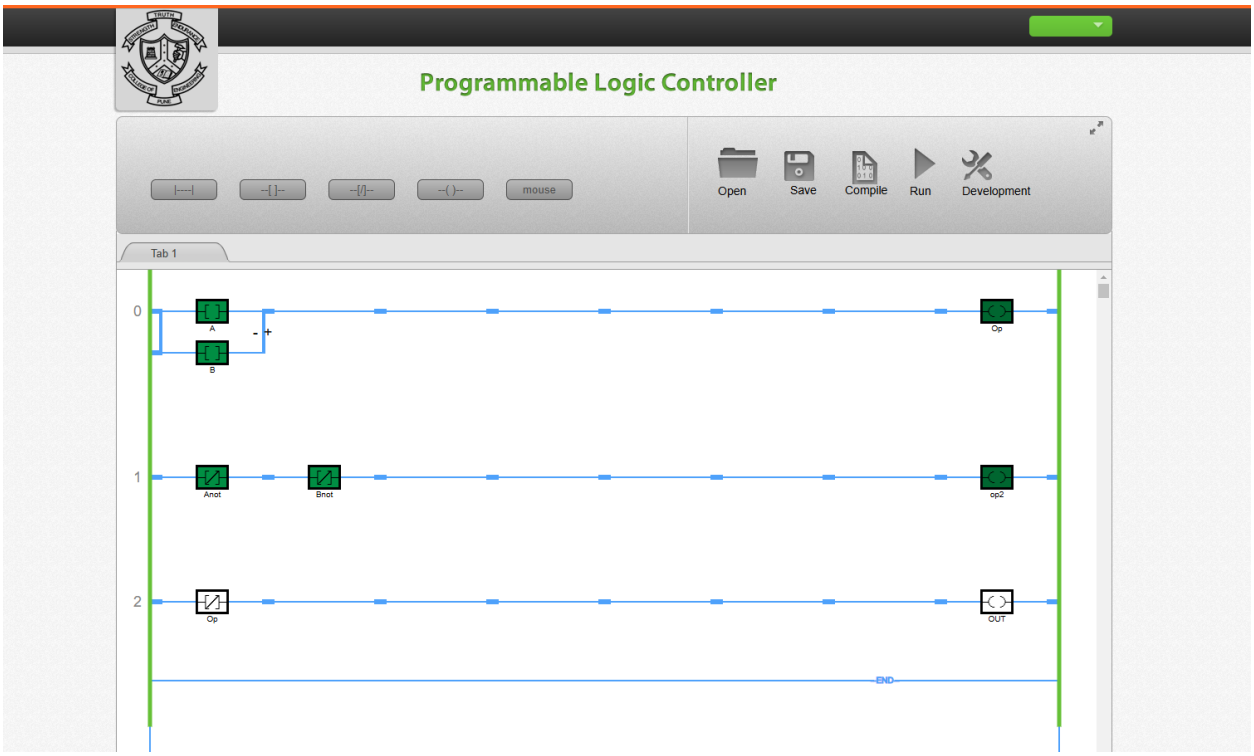


Cumulative law:

X+Y=Y+X

Tt:

A	B	A+B
0	0	0
0	1	1
1	0	1
1	1	1

De morgans law:

A	B	A·B	(A·B)	A′	B′	A′+B′
0	0	0	1	1	1	1
0	1	0	1	1	0	1
1	0	0	1	0	1	1
1	1	1	0	0	0	0