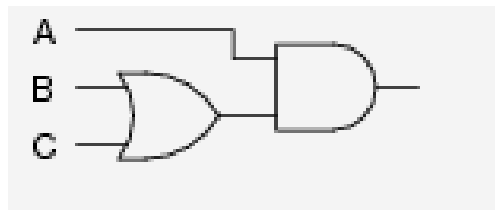


## Examples

### From Logic Circuit to Expression



First, identify the gates: OR gate, AND gate

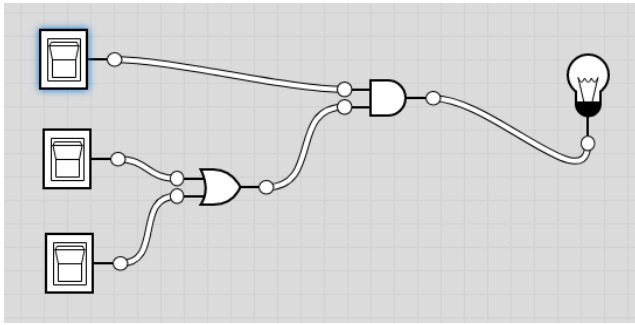
Logic Expression= $(A).(B+C)$

Truth Table

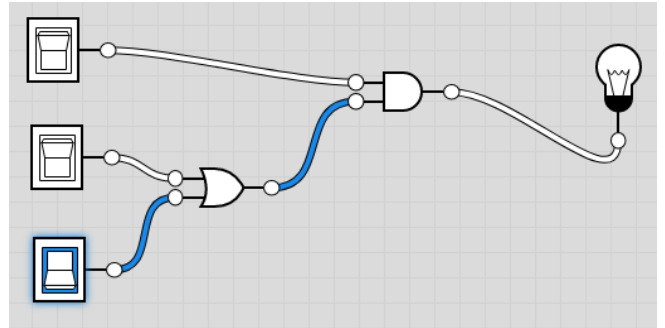
A	B	C	Output
0	0	0	0
0	0	1	0
0	1	0	0
0	1	1	
1	0	0	
1	0	1	1
1	1	0	
1	1	1	

**Screenshots from Logicly** (Give all the combinations you have identified as in the above truth table and check the output of the circuit and fill in the table)

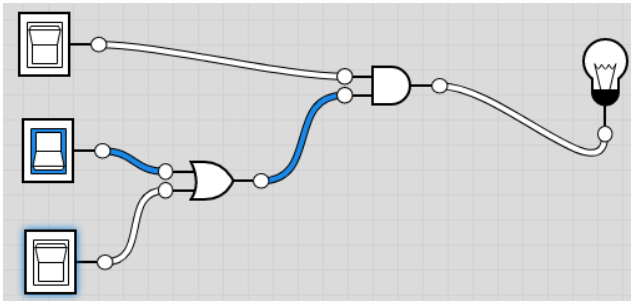
ABC=000, the output is 0



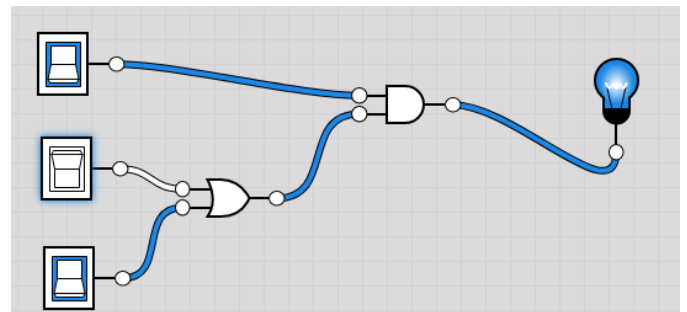
ABC=001, the output is 0



ABC=010, the output is 0

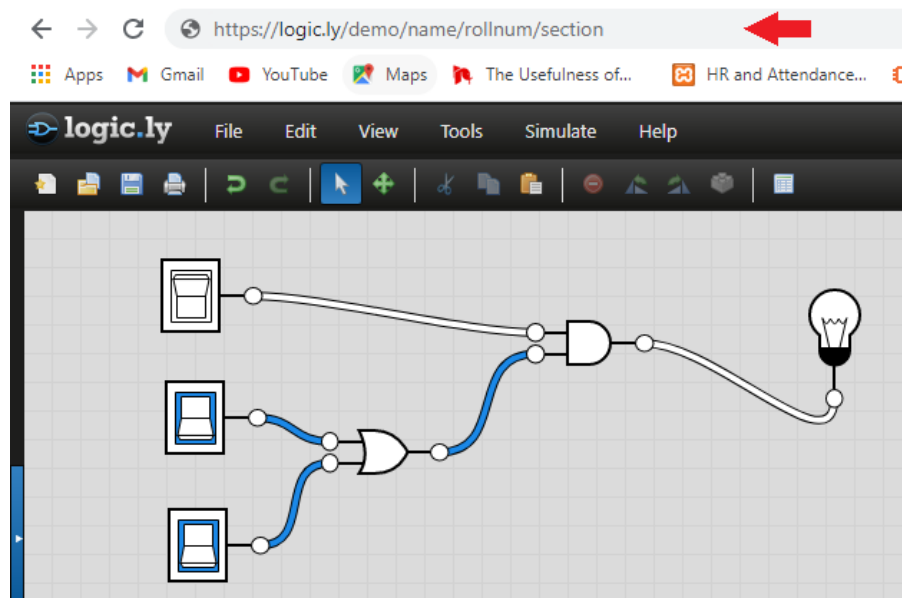


ABC=101, the output is 1



***Do this to complete the whole truth table***

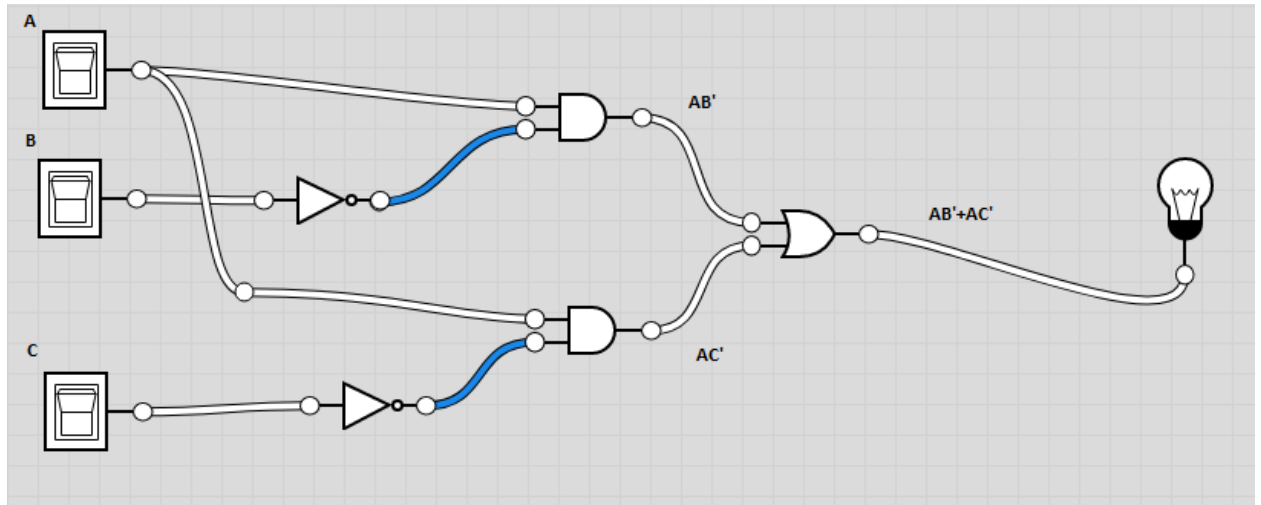
***Make sure that you take the complete screenshot that shows your name roll num, section, like the one below:***



### Expression to Logic Circuit

$$F = AB' + AC'$$

### Circuit Diagram (from logicly)



*(These labels are written with the help of Paint, you may also edit your images like this for better understanding of inputs & outputs)*

*Test the circuit for all the possibilities of inputs and fill in the table as shown below.*

Truth Table

A	B	C	Output
0	0	0	0
0	0	1	0
0	1	0	0
0	1	1	0
1	0	0	1
1	0	1	1
1	1	0	1
1	1	1	0