

Fall Semester 2019-20

Digital Assignment – II



Course	Digital Logic and Design
Code	CSC1002
Faculty	Prof.P.Ushapreethi
Date	25 th September 2019

1. Design a combinational circuit which gives Low for the numbers in **your register number**.

REG NO:19BCS0012

A	B	C	D	F
0	0	0	0	0
0	0	0	1	0
0	0	1	0	0
0	0	1	1	1
0	1	0	0	1
0	1	0	1	1
0	1	1	0	1
0	1	1	1	1
1	0	0	0	1
1	0	0	1	0
1	0	1	0	1
1	0	1	1	1
1	1	0	0	1
1	1	0	1	1
1	1	1	0	1
1	1	1	1	1

$F = \sum m(3, 4, 5, 6, 7, 8, 10, 11, 12, 13, 14, 15)$ - MINTERMS

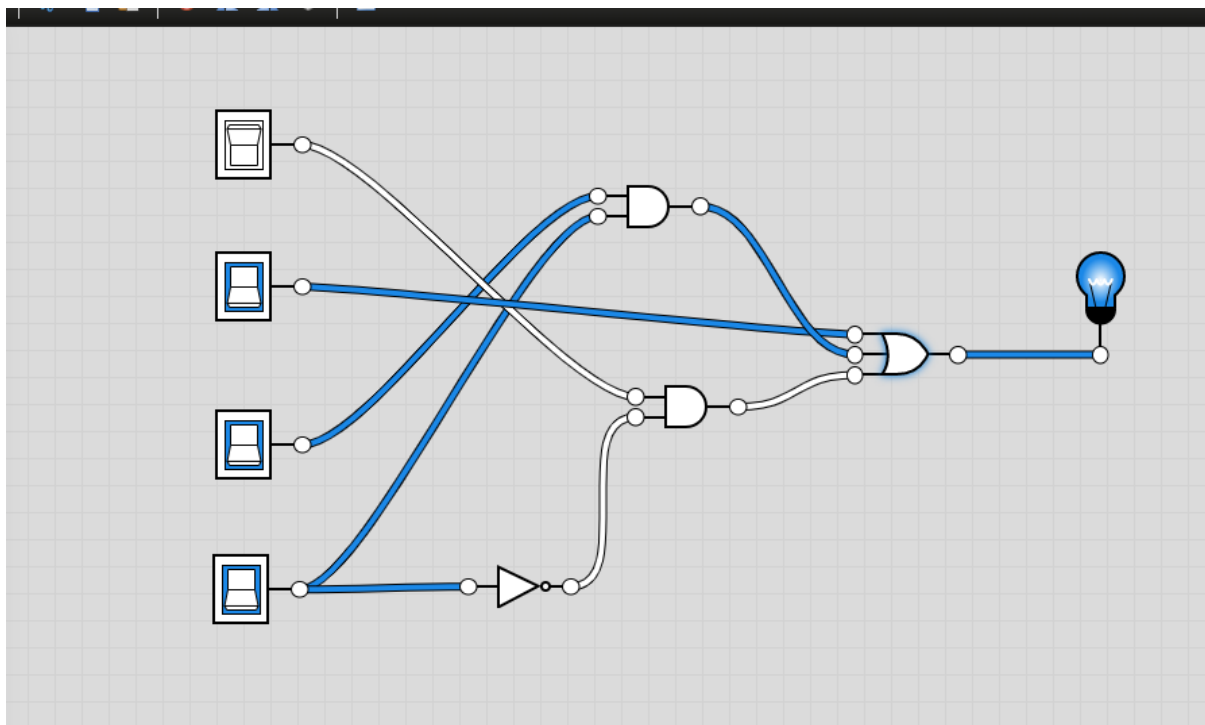
$F = \pi m(0, 1, 2, 9)$ - MAXTERMS

K-MAP SIMPLIFICATION

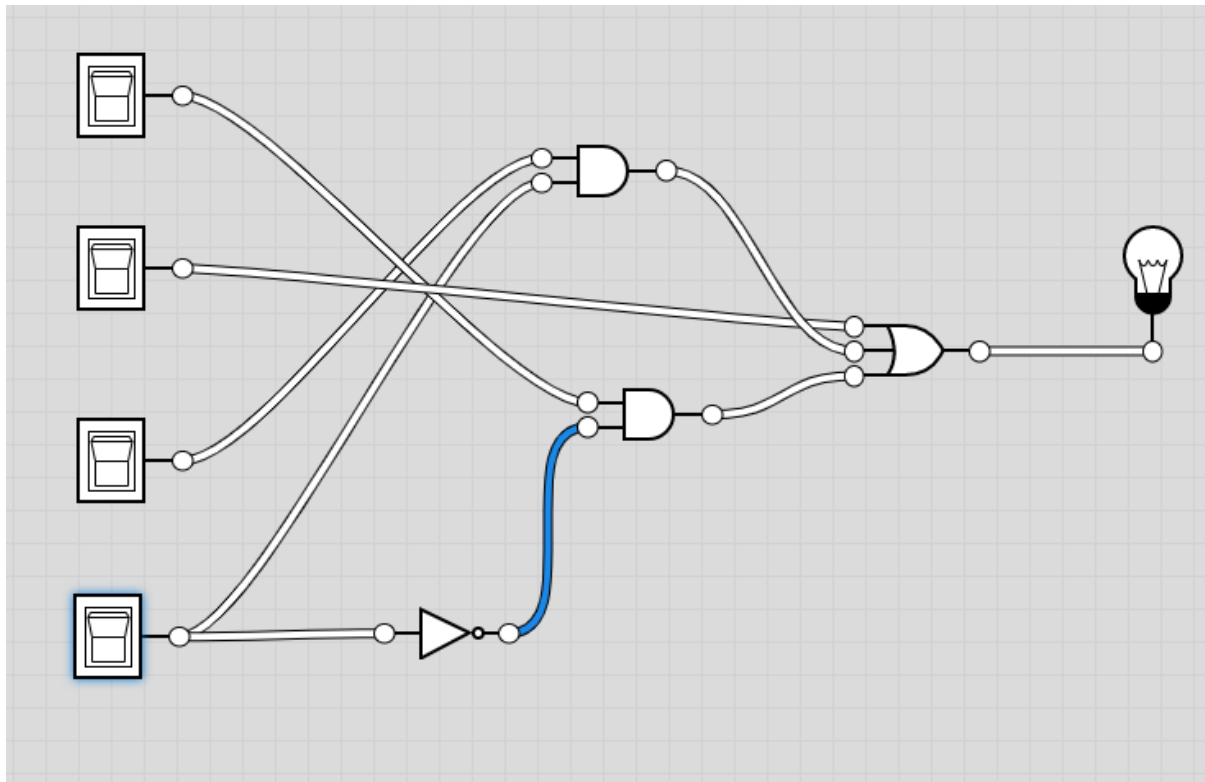
		1	
1	1	1	1
1	1	1	1
1		1	1

$$F = B + CD + AD'$$

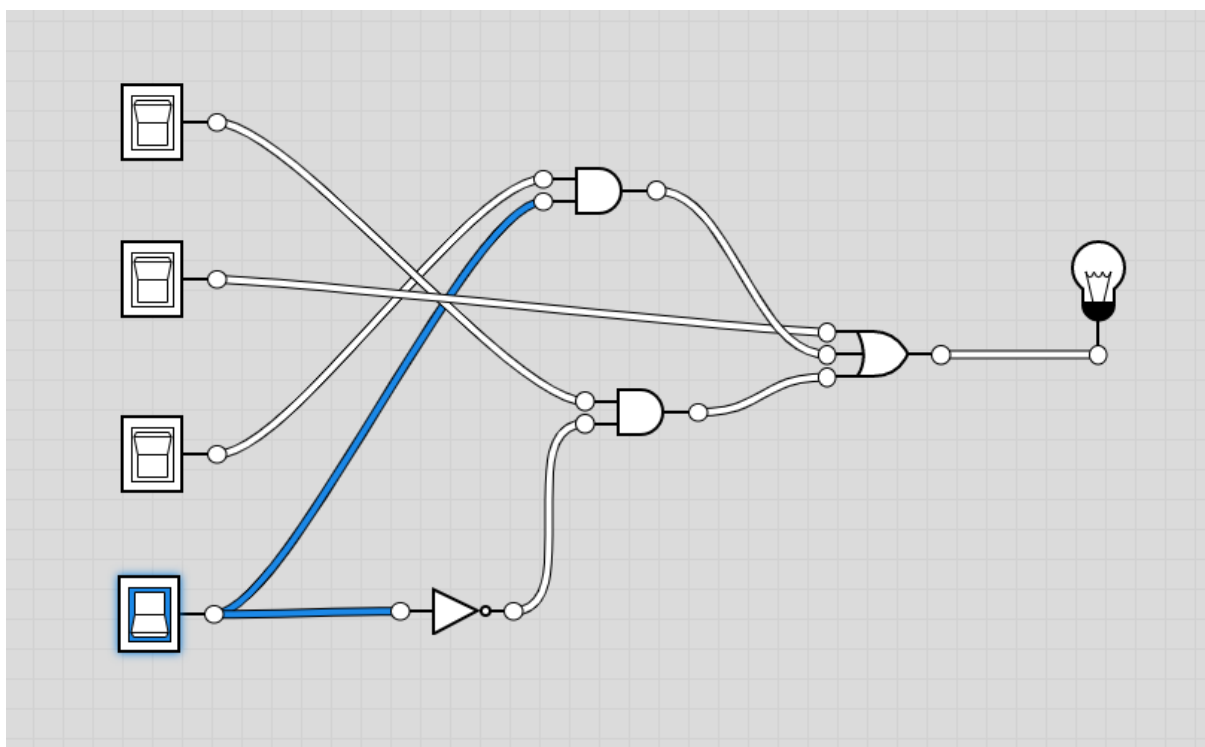
POSTIVE CASE:



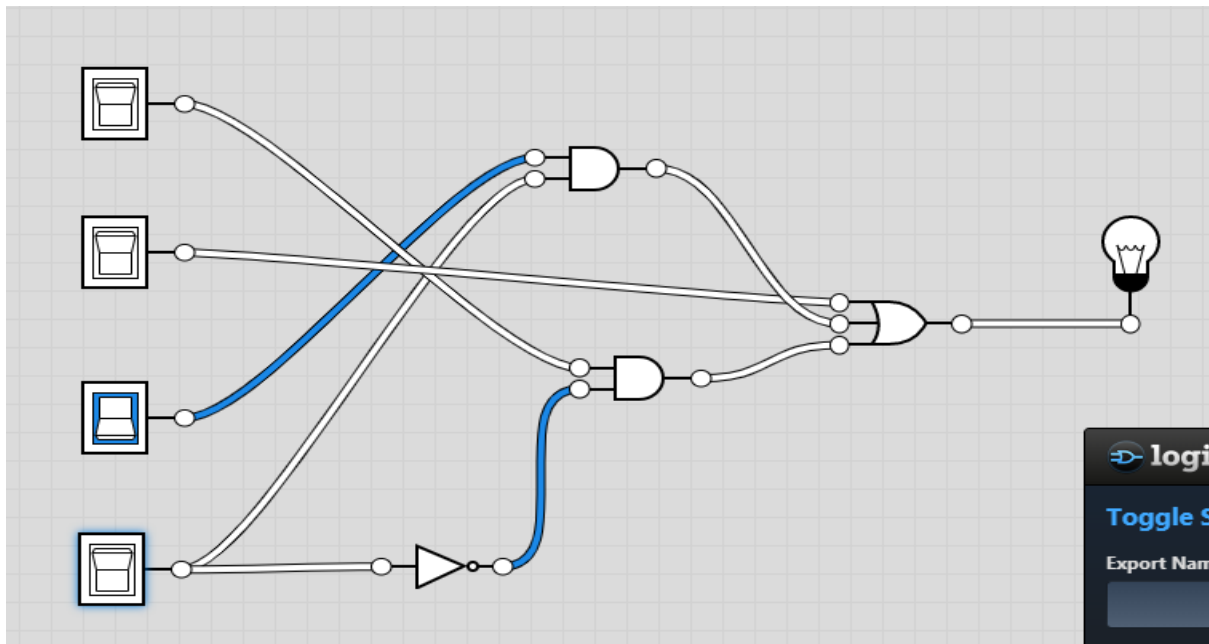
NEGATIVE CASE FOR 0:



NEGATIVE CASE FOR 1:



NEGATIVE CASE FOR 2:



NEGATIVE CASE FOR 9:

