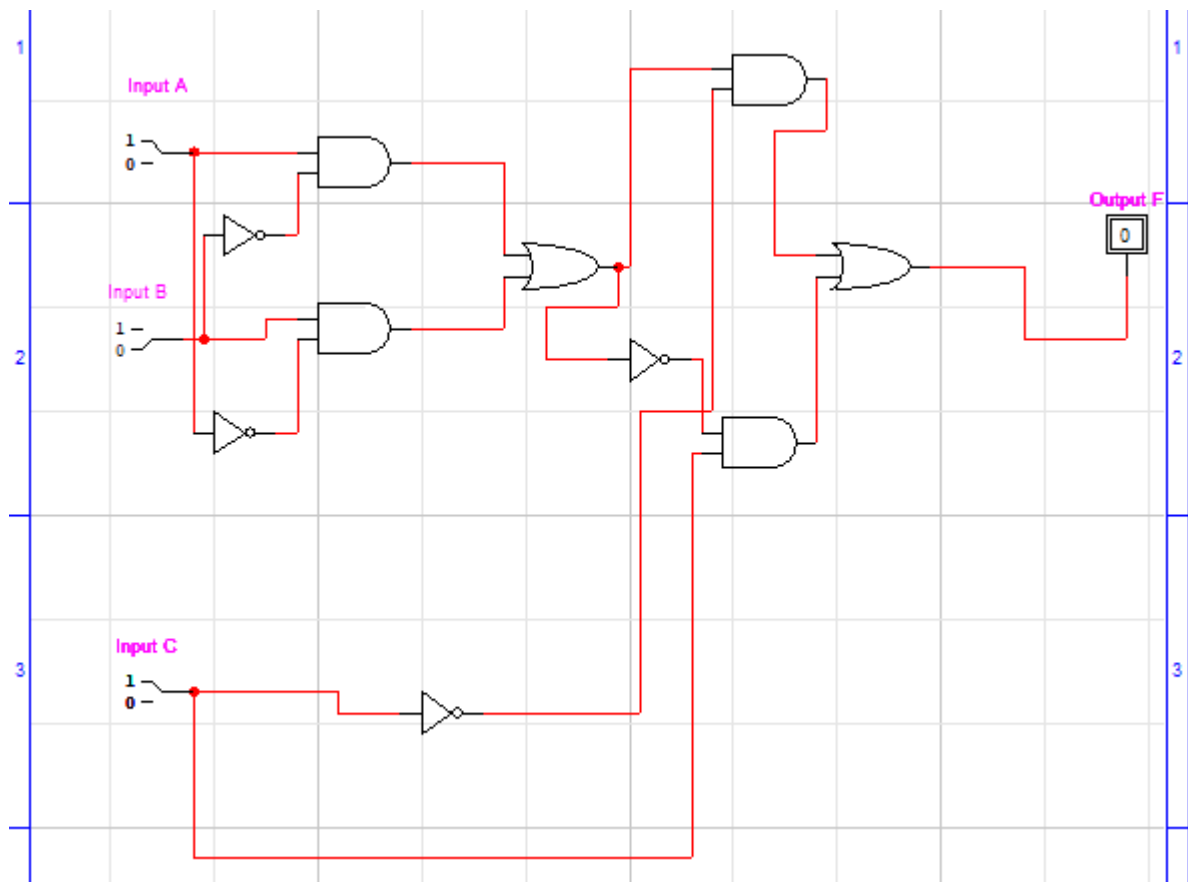


Q1)

Screen shot with inputs 101



CS 3853

Lab 1

Question 1.2

Input A	Input B	Input C	Output F
0	0	0	0
0	0	1	1 $A'B'C$
0	1	0	1 $A'B'C'$
0	1	1	0
1	0	0	1 $AB'C'$
1	0	1	0
1	1	0	0
1	1	1	1 ABC

Question 1.3

Using the min terms

$$F = A'B'C + A'B'C' + AB'C' + ABC$$

Q2)

Question 2

Input A	^{Load} Input B	Input C	Output L
0	0	0	0
0	0	1	1
0	1	0	0
0	1	1	0
1	0	0	0
1	0	1	0
1	1	0	0
1	1	1	0

$A'B'C$

~~Input A~~ ^{Store}

Sum of minterms = $A'B'C$

^{Store}

Input A	Input B	Input C	Output S
0	0	0	0
0	0	1	0
0	1	0	1
0	1	1	0
1	0	0	0
1	0	1	0
1	1	0	0
1	1	1	0

$A'BC'$

Sum of minterms = $A'BC'$

Add

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

$AB'C$

Sum of min terms = $AB'C$

Invalid

Input A	Input B	Input C	Output I
0	0	0	1
0	0	1	0
0	1	0	0
0	1	1	1
1	0	0	1
1	0	1	0
1	1	0	1
1	1	1	1

$A'B'C'$

$A'BC$

$AB'C'$

ABC'

ABC

Sum of min terms = $A'B'C' + A'BC + AB'C' + ABC'$
 ABC

