

King Saud University

College of Computer and Information Sciences
Department of Computer Science

CSC 220: Computer Organization

Labwork - # 2

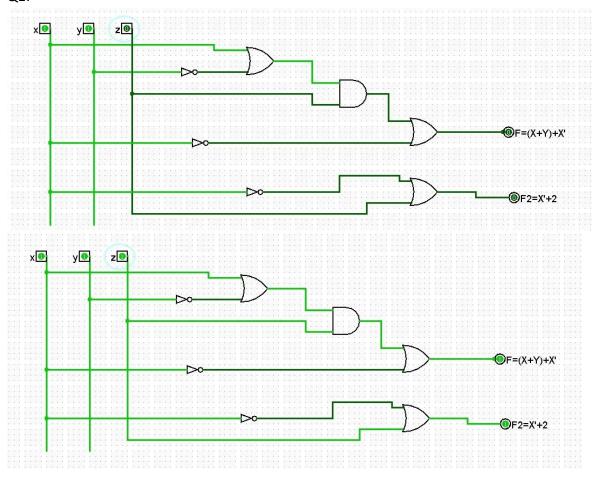
Student Name: ID:

1. Introduction

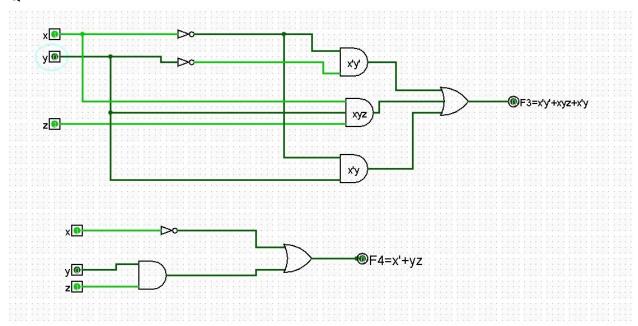
Today we have drawn 2 different circuits with different number of gates. We also did the truth table.

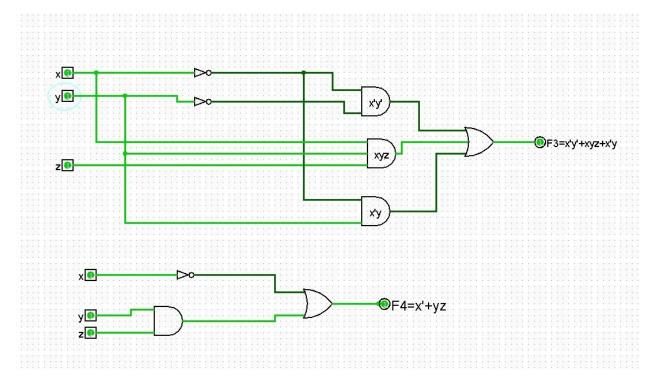
2. Experiments

Q1:



Q2:





3. Results

truth table:

X	Y	Z	X'	Y	X+Y'	(X+Y')Z		F2 = X'+Z	F3= X'Y'+XYZ+X'Y	F4 = X'+YZ
0	0	0	1	1	1	0	1	1	1	1
0	0	1	1	1	1	1	1	1	1	1
0	1	0	1	0	0	0	1	1	1	1
0	1	1	1	0	0	0	1	1	1	1
1	0	0	0	1	1	0	0	0	0	0
1	0	1	0	1	1	1	1	1	0	0
1	1	0	0	0	1	0	0	0	0	0
1	1	1	0	0	1	1	1	1	1	1

4. Discussion

5. Both circuits are producing same result. But the circuit has less number of gates is cheaper and faster than the circuit has more gate.