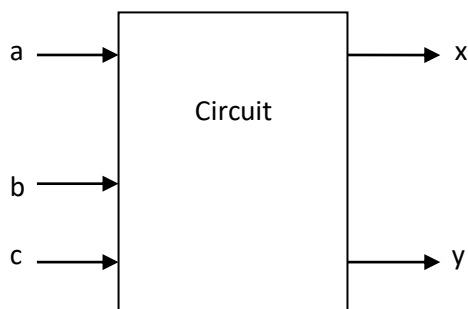


EE 213 LAB2 ASSIGNMENTS

1. Implement a circuit on Vivado, of which truth table is given below. Use WHEN/ELSE statements. Test it on simulation. What is the function of the circuit? (50 points)



a	b	c	x	y
0	0	0	0	0
0	0	1	1	0
0	1	0	1	0
0	1	1	0	1
1	0	0	1	0
1	0	1	0	1
1	1	0	0	1
1	1	1	1	1

2. By using WHEN/SELECT, create a design whose truth table is given below. Your design must cover ALL possible input combinations. Test it on simulation. What is the function of the circuit? (50 points)

Input			Output			
EN	I ₀	I ₁	A ₃	A ₂	A ₁	A ₀
0	X	X	0	0	0	0
1	0	0	1	0	0	0
1	0	1	0	1	0	0
1	1	0	0	0	1	0
1	1	1	0	0	0	1

Note: X means either 0 or 1.