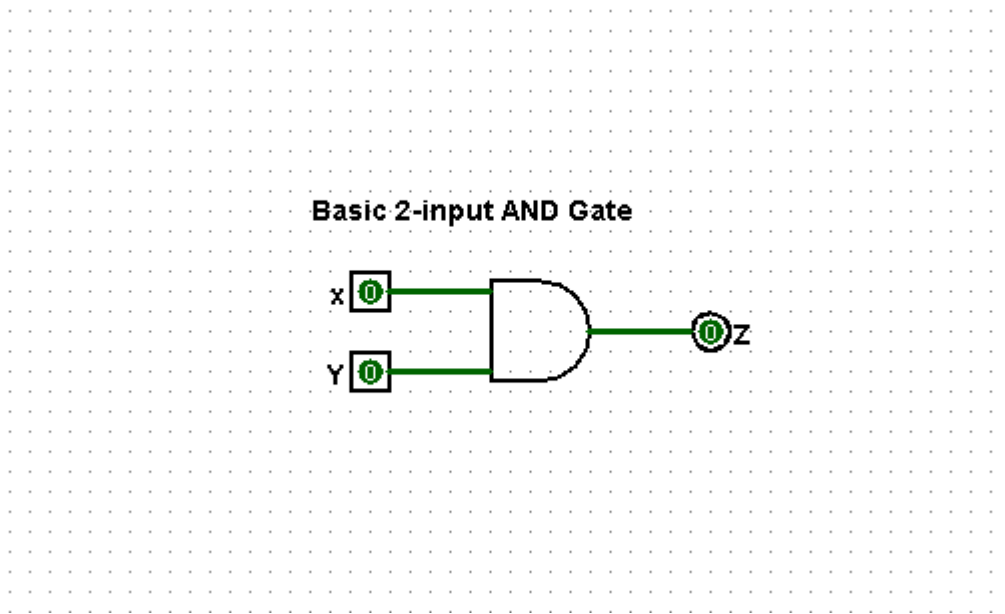SYSC 2310 L2E

Riya Arora (101190033)
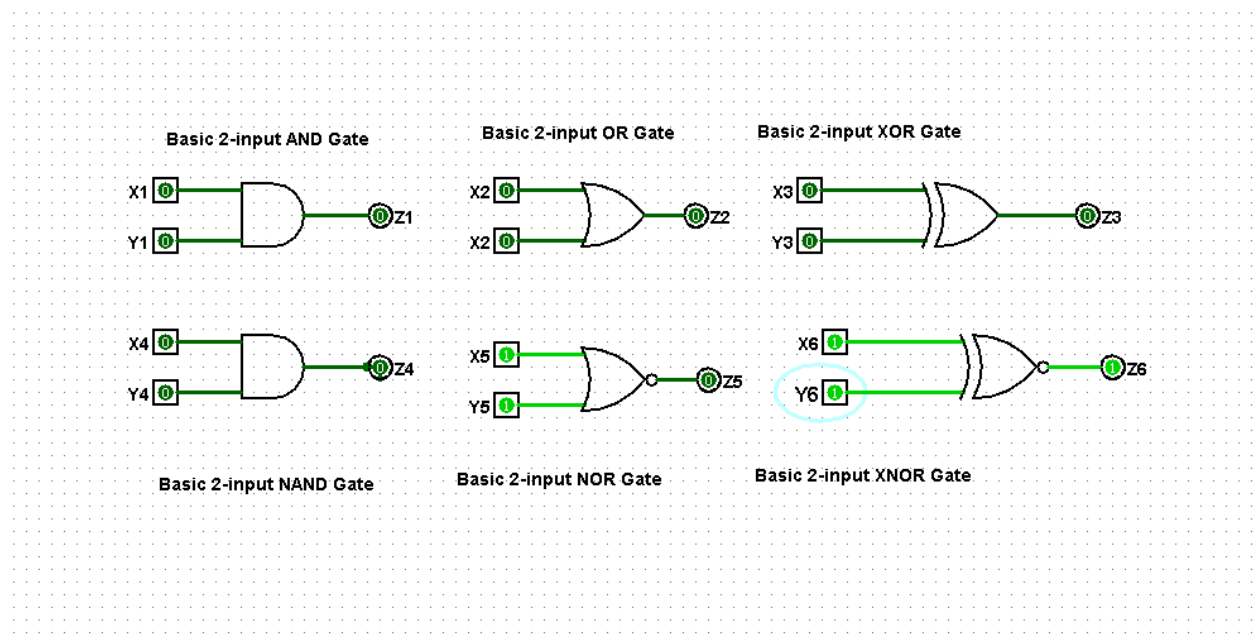
September 21st, 2021

Screenshot 1: Circuit #1 with corresponding logging file screenshot
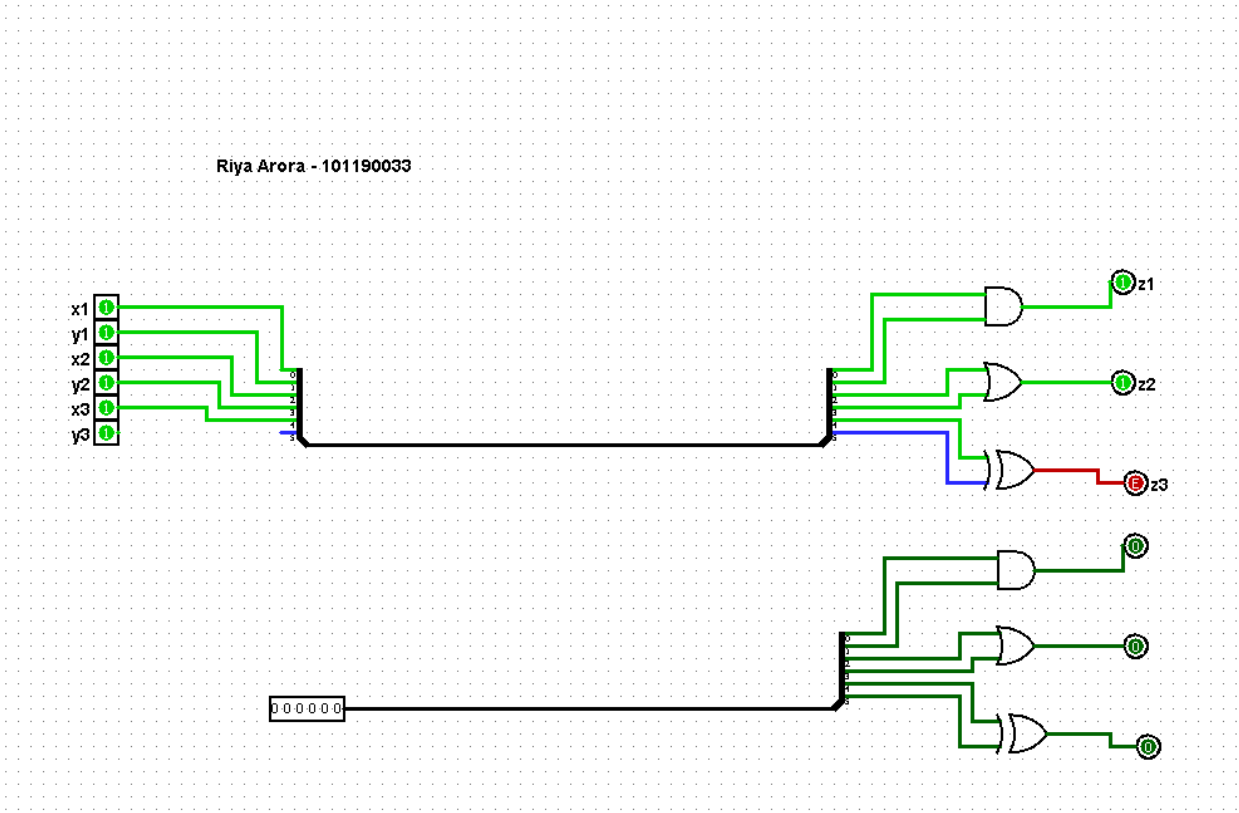
Basic 2-input AND Gate

x [0]

Y [0]

[0] Z

X	Y	Z
0	0	0
0	1	0
0	0	0
0	1	0
0	0	0
0	1	0
0	0	0
1	0	0
1	1	1
0	1	0
1	1	1
0	1	0
1	1	1

Screenshot 2: Circuit #2 with corresponding logging file screenshot

Basic 2-input AND Gate

X1 — Y1 — Z1

Basic 2-input OR Gate

X2 — X2 — Z2

Basic 2-input XOR Gate

X3 — Y3 — Z3

Basic 2-input NAND Gate

X4 — Y4 — Z4

Basic 2-input NOR Gate

X5 — Y5 — Z5

Basic 2-input XNOR Gate

X6 — Y6 — Z6

X2	X1	X2	X3	X4	X5	X6	Y1	Y3	Y4	Y5	Y6	Z1	Z2	Z3	Z4	Z5	Z6
1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1
1	0	1	1	1	1	1	1	1	1	1	1	0	1	0	1	0	1
1	0	1	1	1	1	1	1	1	1	1	1	0	1	0	1	0	1
1	0	1	1	1	1	1	0	1	1	1	1	0	1	0	1	0	1
1	1	1	1	1	1	1	0	1	1	1	1	0	1	0	1	0	1
1	0	1	1	1	1	1	0	1	1	1	1	0	1	0	1	0	1
1	0	1	1	1	1	1	1	1	1	1	1	0	1	0	1	0	1
1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1
1	1	1	1	1	1	1	0	1	1	1	1	0	1	0	1	0	1
0	1	1	1	1	1	1	0	1	1	1	1	0	1	0	1	0	1
0	1	0	1	1	1	1	0	1	1	1	1	0	0	0	1	0	1
0	1	1	1	1	1	1	0	1	1	1	1	0	1	0	1	0	1
1	1	1	1	1	1	1	0	1	1	1	1	0	1	0	1	0	1
1	1	0	1	1	1	1	0	1	1	1	1	0	1	0	1	0	1
1	0	0	1	1	1	1	0	1	1	1	1	0	1	0	1	0	1
1	0	0	1	1	1	1	0	1	1	1	1	0	1	1	1	0	1
1	1	0	0	1	1	1	0	0	1	1	1	0	1	0	1	0	1
1	0	0	0	1	1	1	0	1	1	1	1	0	1	1	1	0	1
1	0	0	1	1	1	1	0	0	1	1	1	0	1	0	1	0	1
1	0	0	1	1	1	1	0	0	1	1	1	0	1	1	1	0	1
1	0	0	1	1	1	1	0	0	0	1	1	0	1	1	0	0	1
1	0	0	1	0	1	1	0	0	0	1	1	0	1	1	0	0	1
1	0	0	1	0	1	1	0	0	1	1	1	0	1	1	0	0	1
1	0	0	1	1	1	1	0	0	0	1	1	0	1	1	0	0	1
1	0	0	1	1	0	1	0	0	0	1	1	0	1	1	0	0	1
1	0	0	1	1	0	1	0	0	0	0	1	0	1	1	0	1	1
1	0	0	1	1	1	1	0	0	0	0	1	0	1	1	0	0	1
1	0	0	1	1	1	1	0	0	0	0	0	1	0	1	1	0	0
1	0	0	1	1	1	0	0	0	0	0	0	1	0	1	1	0	1
1	0	0	1	1	1	0	0	0	0	0	0	1	0	1	1	0	0
1	0	0	1	1	1	1	0	0	0	0	1	0	1	1	0	0	1
1	0	0	1	1	1	1	0	0	0	0	0	0	1	1	0	0	0

Screenshot 3: Circuit #3 with corresponding logging file screenshot

Riya Arora - 101190033

x1	x2	x3	y1	y2	y3	z1	z2	z3	x1	x2	x3	y1	y2	y3	z1	z2
1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
1	1	0	0	0	0	0	1	0	1	1	0	0	0	0	0	1
1	1	0	0	1	0	0	1	0	1	1	0	0	1	0	0	1
1	1	1	0	1	0	0	1	1	1	1	1	0	1	0	0	1
1	1	1	0	1	1	0	1	0	1	1	1	0	1	1	0	1
1	1	0	0	1	1	0	1	1	1	1	0	0	1	1	0	1
1	1	0	0	1	1	0	1	1	1	1	0	0	1	1	0	1
1	0	0	0	0	1	0	0	1	1	0	0	0	0	1	0	0
1	0	0	1	0	1	1	0	1	1	0	0	1	0	1	1	0
1	1	0	1	0	1	1	1	1	1	1	0	1	0	1	1	1
1	1	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1
1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1
0	1	1	1	1	1	0	1	0	0	1	1	1	1	1	0	1
0	1	1	0	1	1	0	1	0	0	1	1	0	1	1	0	1
0	0	1	0	1	1	0	1	0	0	0	1	0	1	1	0	1
0	1	1	0	1	1	0	1	0	0	1	1	0	1	1	0	1
0	1	0	0	1	1	0	1	1	0	1	0	0	1	1	0	1
0	1	0	0	0	1	0	1	1	0	1	0	0	0	1	0	1
0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	0