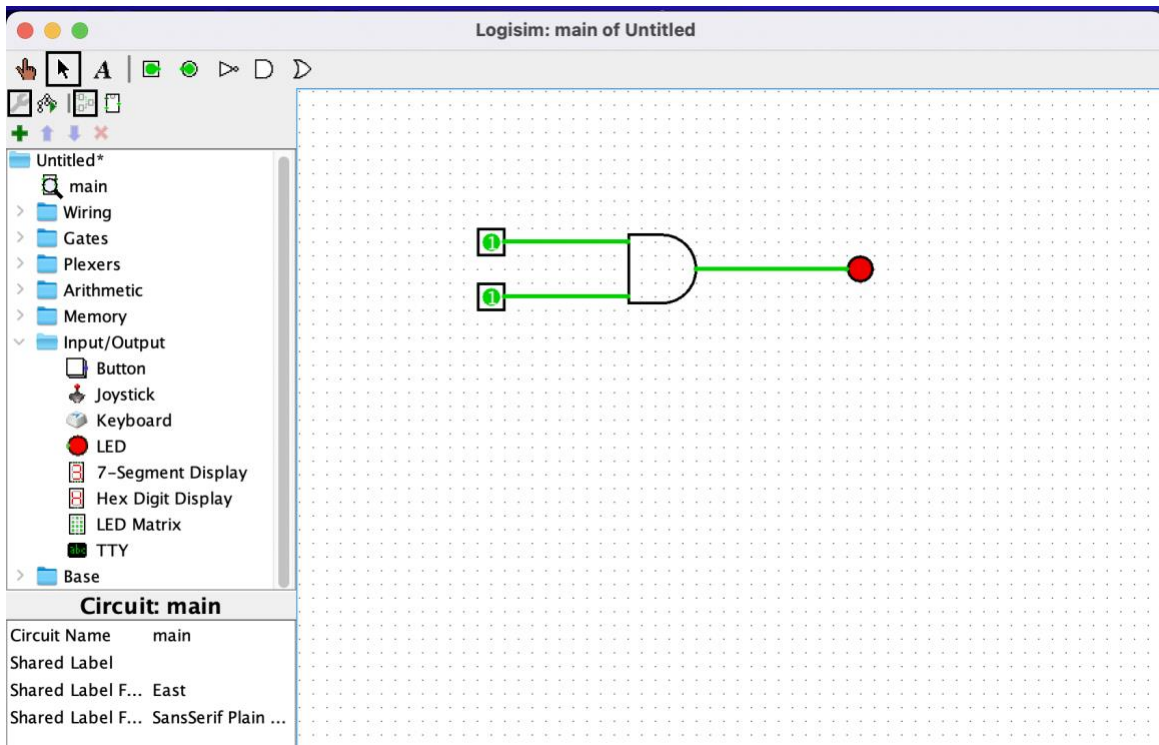**Name:** Thanh Tam Vo
StudentID: 103487596

COS10004 - Computer Systems – Lab 1 Submission

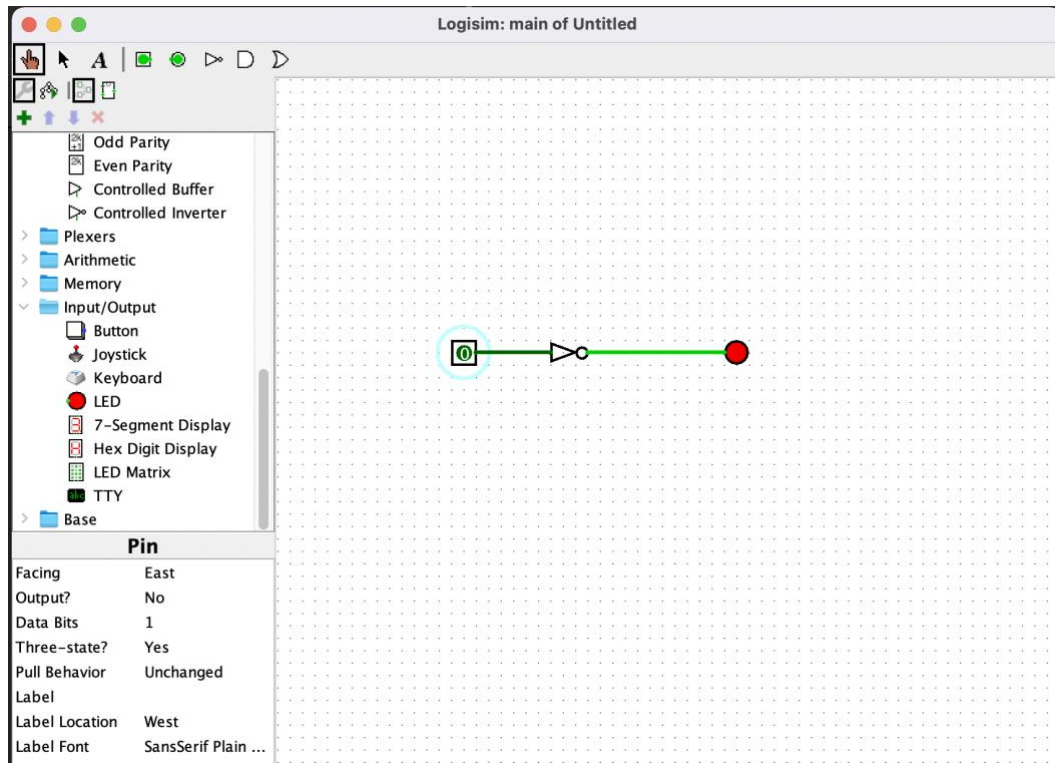**Screenshot of circuit 1**

Screen captured from my Mac on September 15th, 2022

Testing circuit

Pin 1	Pin 2	Output
1	1	1
1	0	0
0	1	0
0	0	0

Table 1. Truth table for the circuit 1

Screenshot of circuit 2

Screen captured from my Mac on September 15th, 2022

Testing circuit

Pin	Output
1	0
0	1

Table 2. Truth table for the circuit 2

Screenshot of circuit 3
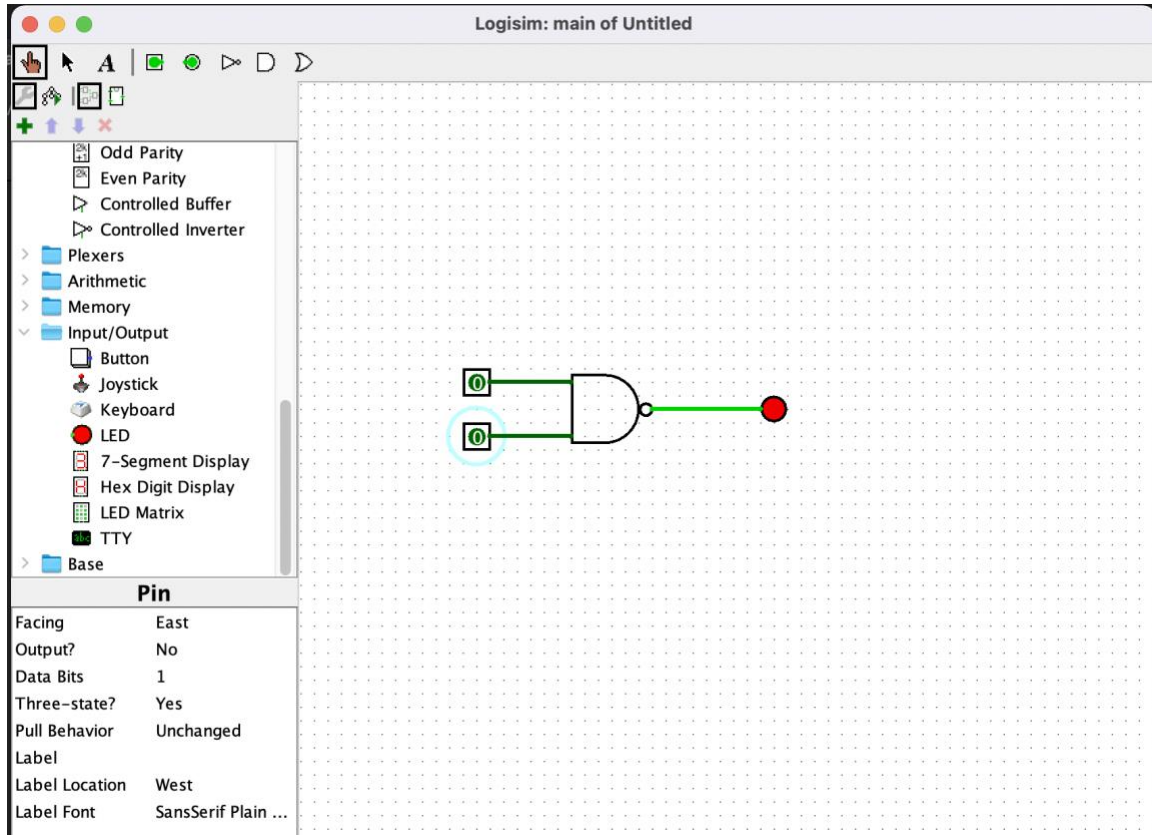
Screen captured from my Mac on September 15th, 2022

Testing circuit

Pin 1	Pin 2	Output
1	1	0
1	0	1
0	1	1
0	0	1

Table 3. Truth table for the circuit 3

Screenshot of half-adder circuit
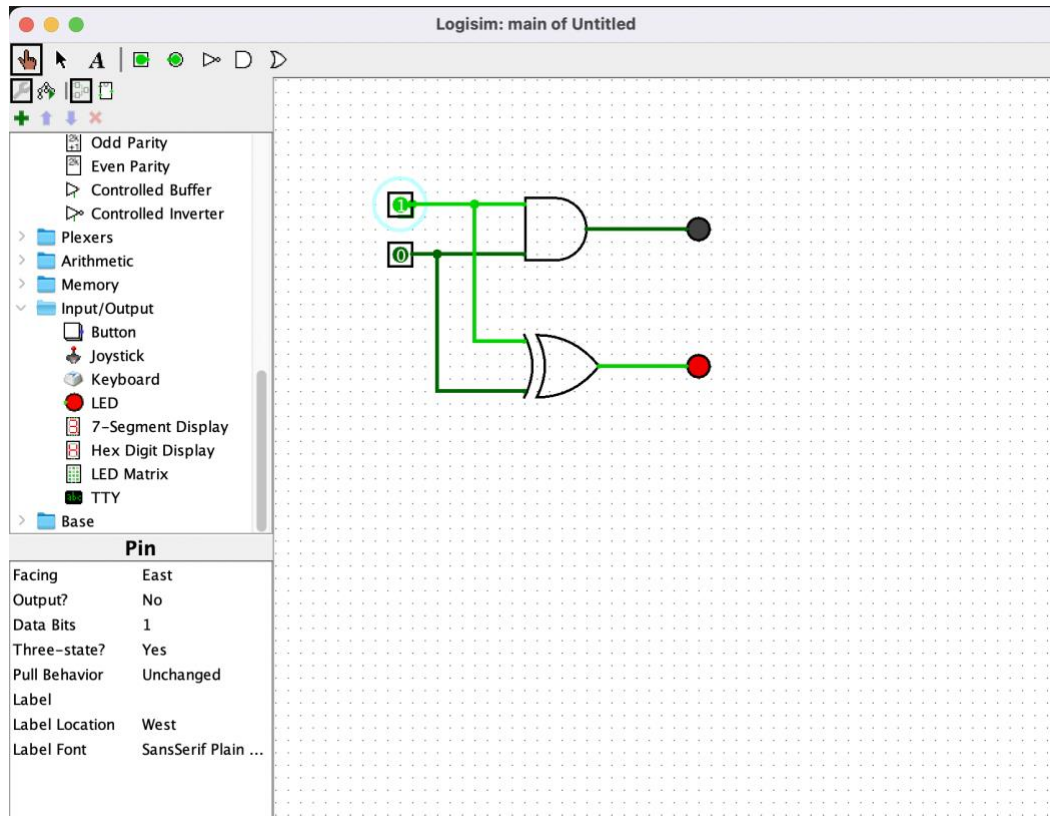
Screen captured from my Mac on September 15th, 2022

Testing circuit

Input 1	Input 2	Sum Output	Carry Output
1	1	0	1
1	0	1	0
0	1	1	0
0	0	0	0

Table 4. Truth table for the half-adder circuit

Screenshot of full-adder circuit
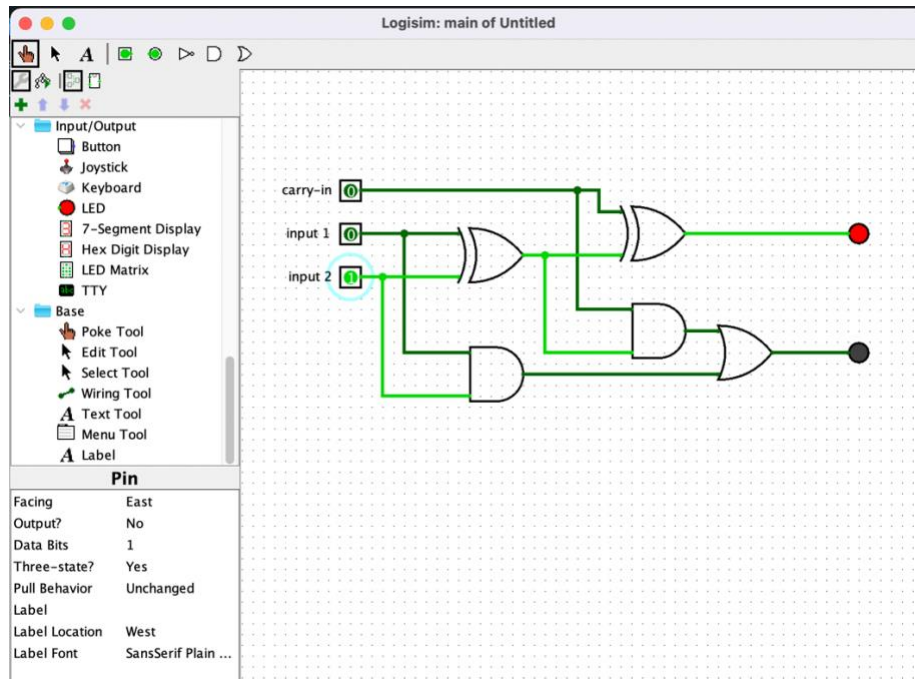
Screen captured from my Mac on September 15th, 2022

Testing circuit

Input 1	Input 2	Carry in	Sum output	Carry Output
0	0	0	0	0
0	1	0	1	0
1	0	0	1	0
1	1	0	0	1
0	0	1	1	0
0	1	1	0	1
1	0	1	0	1
1	1	1	1	1