FULL ADDER

EXP.NO: 23

AIM:

To design and implement the full adder using Logisim simulator.

PROCEDURE:

1) Pick and place the necessary gates.

2) Insert 3 inputs into the canvas.

3) Connect the inputs to the XOR gate, AND gate and OR gate.

4) Insert 2 outputs into the canvas.

5) Make the connections using the connecting wires.

6) Verify the truth table

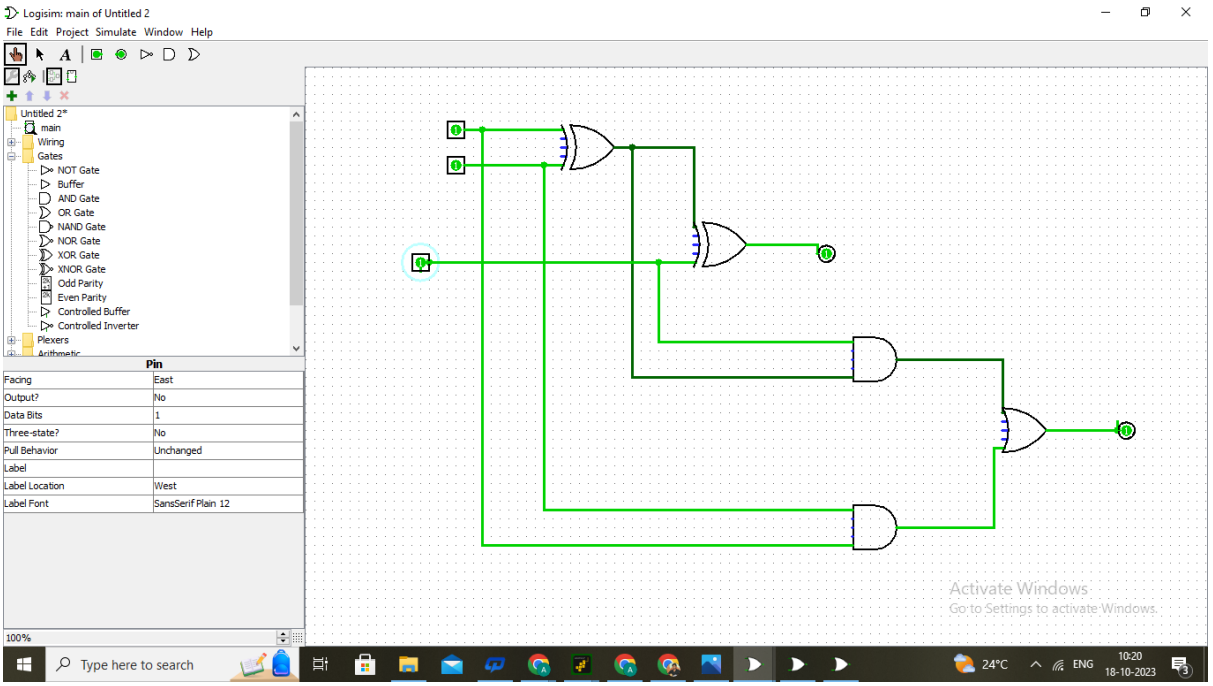
TRUTH TABLE;

Inputs			Outputs	
A	B	C_{in}	Sum	Carry
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

Sum=(A⊕B) ⊕Cin

Carry=A.B+ (A ⊕B)

OUTPUT



RESULT: Thus full adder has been designed and implemented successfully using logisim simulator.
CI