EXP.NO: 21

AIM:

To design and implement the two bit half adder using Logisim simulator.

PROCEDURE:

1) Pick and place the necessary gates.

2) Insert 2 inputs into the canvas.

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

4) Insert 2 outputs into the canvas.

5) Make the connections using the connecting wires.

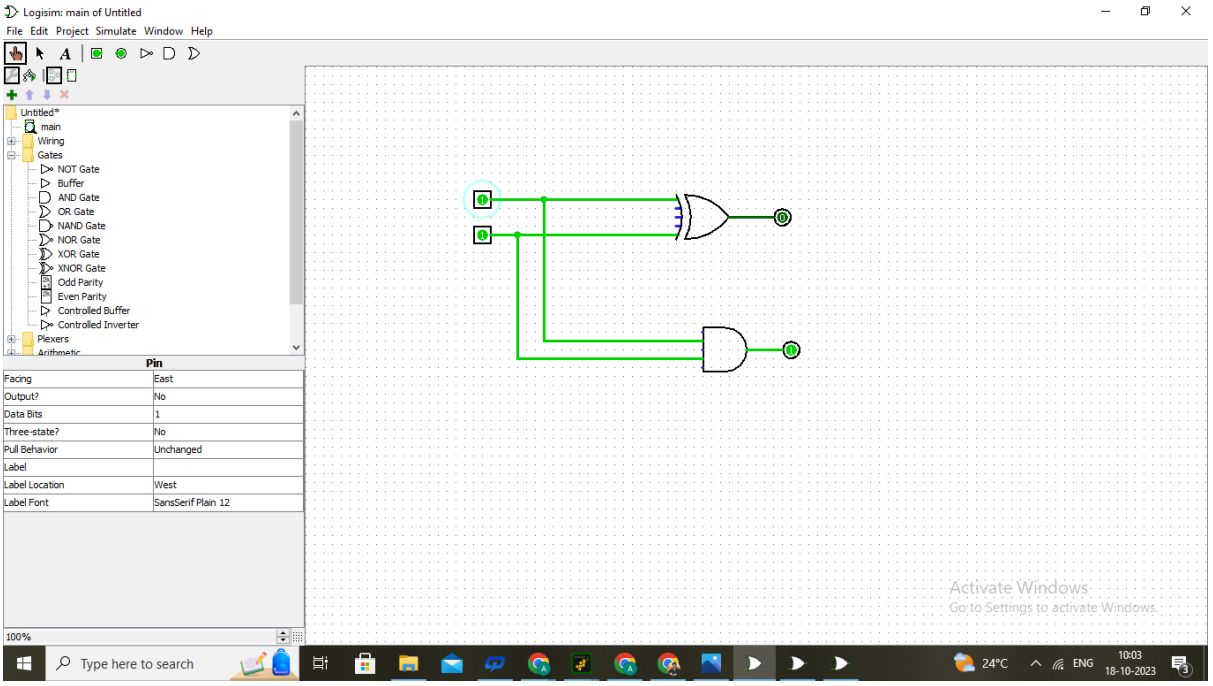
6) Verify the truth table.

TRUTH TABLE:

A	B	S	C
0	0	0	0
0	1	1	0
1	0	1	0
1	1	0	1

S = A XOR B C = A AND B

OUTPUT



RESULT:

Thus

2-bit half adder has been designed and implemented successfully using logisim simulator.