TWO BIT HALF SUBTRACTOR

EXP.NO: 22

AIM:

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

PROCEDURE:

1)   Pick and place the necessary gates.

2)   Insert 2 inputs into the canvas.

3)   Connect the inputs to the OR gate, AND gate and NOT gate.

4)   Insert 2 outputs into the canvas.

5)   Make the connections using the connecting wires.

6)   Verify the truth table.
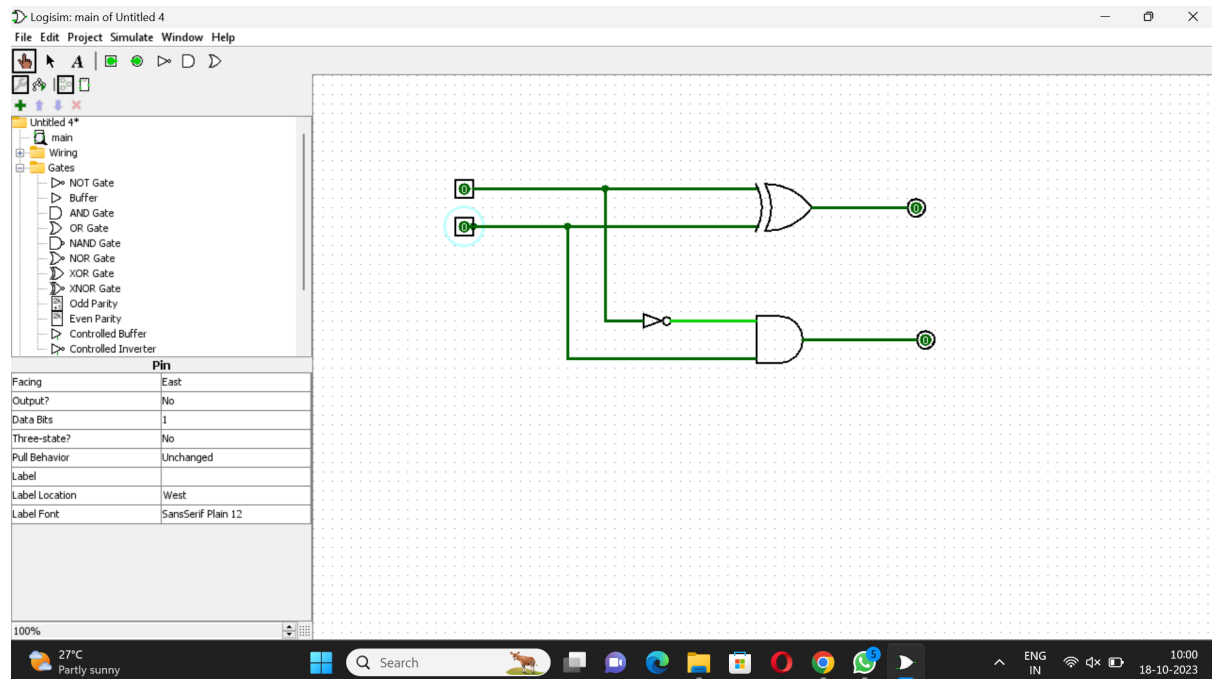
TRUTH TABLE:

Inputs		Outputs	
A	B	Diff	Borrow
0	0	0	0
0	1	1	1
1	0	1	0
1	1	0	0

Diff=A'B+AB'
Borrow = A'B

OUTPUT:

RESULT: Thus 2-bit half subtractor has been designed and implemented successfully using logisim simulator