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:
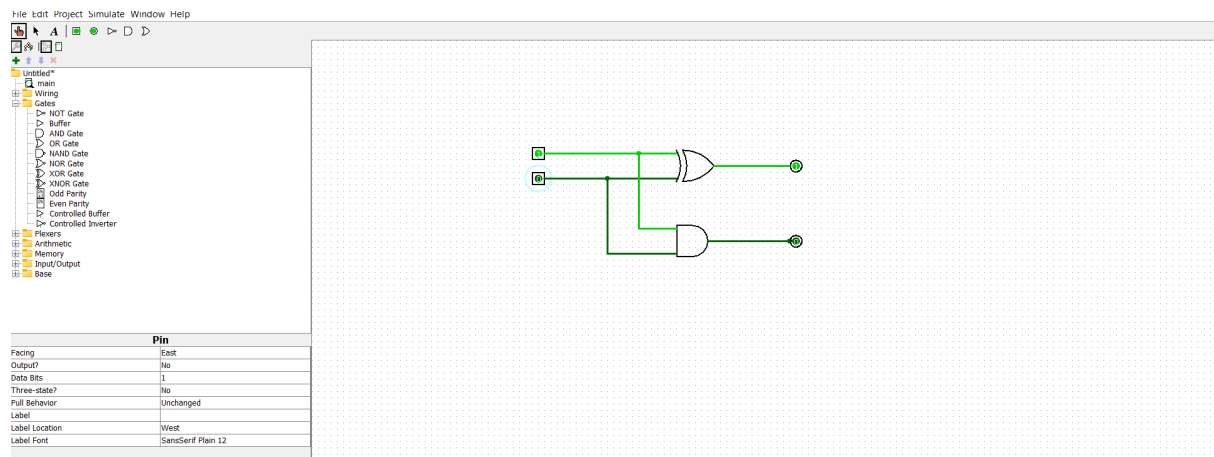

A

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.