

## **HALF ADDER**

**EXP.NO: 21**

### **AIM:**

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

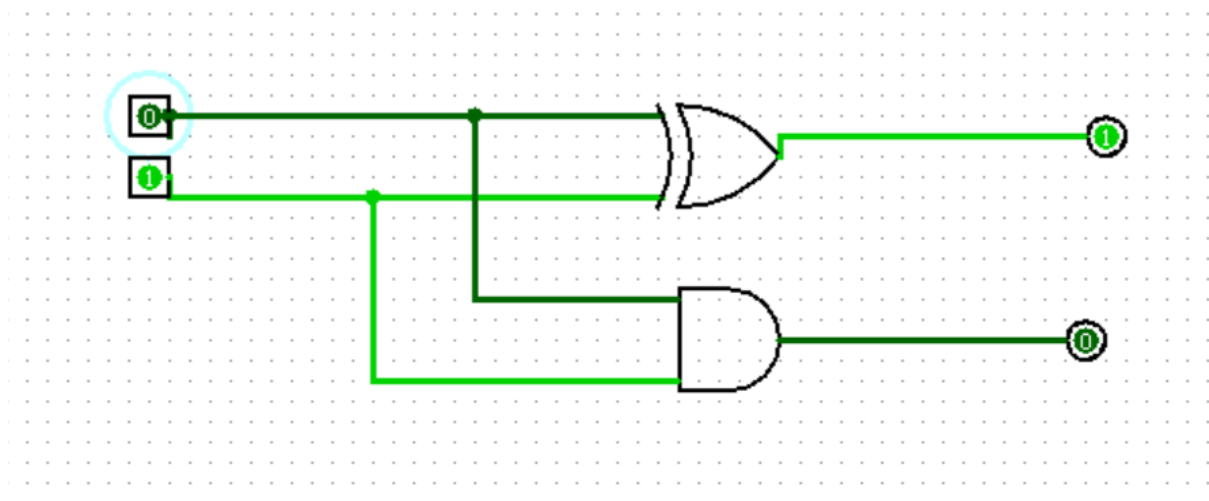
### **PROCEDURE:**

- 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:**

Input		Output	
A	B	Sum	Carry
0	0	0	0
0	1	1	0
1	0	1	0
1	1	0	1

**OUTPUT**



**RESULT:**

Thus

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