

Don Bosco Institute Of Technology

Department Of Information Technology

Date – 19/01/2023

Microprocessor Lab

Experiment No 2

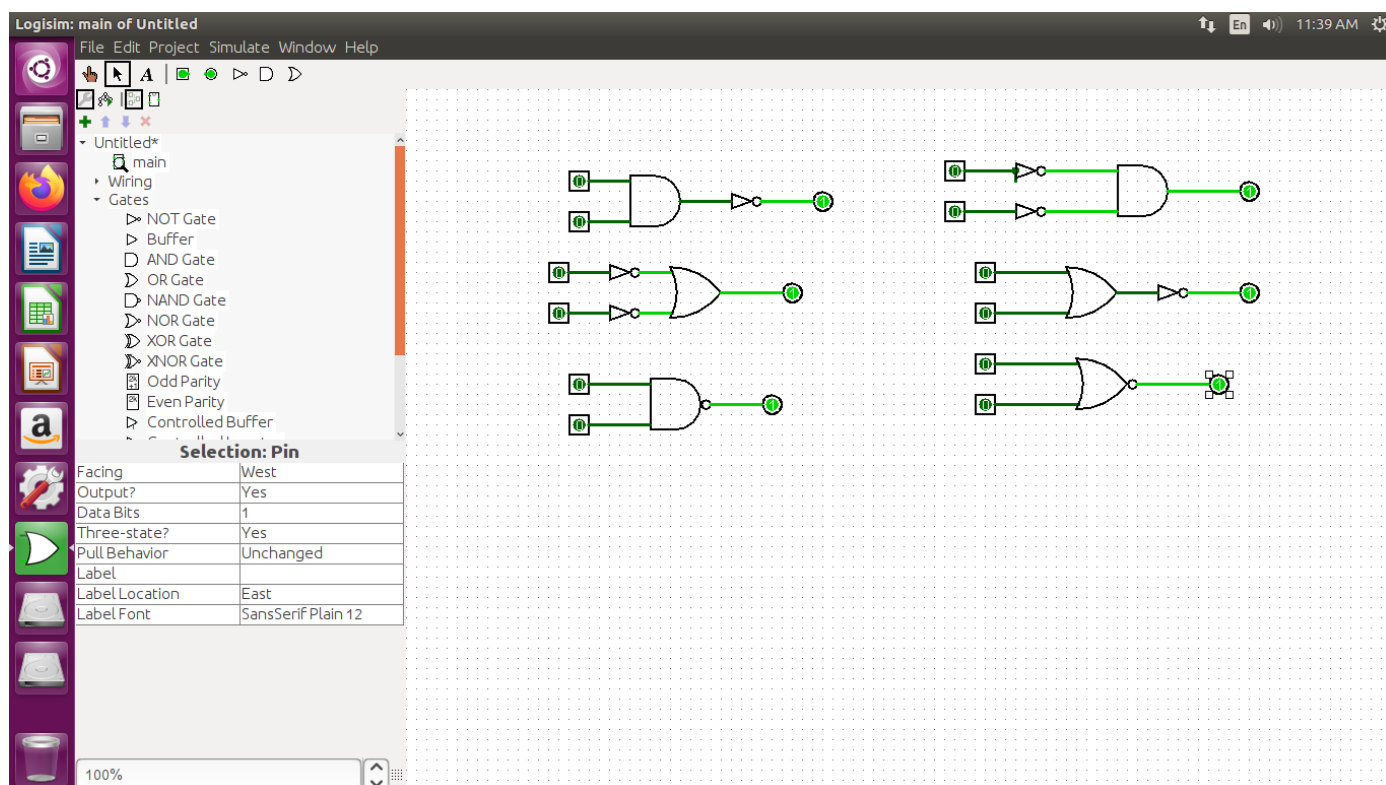
Name – Afzal Siddiquie

Class – SE-IT

Roll No :- 62

AIM :- Implement DeMorgans Theorem Using Logisim

Screenshot:-



Truth Table :-

1) $A.B = A + B$

| A | B | A.B | A.B | A | B | A+B |
|---|---|-----|------------|---|---|------------|
| 0 | 0 | 0 | 1 | 1 | 1 | 1 |
| 0 | 1 | 0 | 1 | 1 | 0 | 1 |
| 1 | 0 | 0 | 1 | 0 | 1 | 1 |
| 1 | 1 | 1 | 0 | 0 | 0 | 0 |

2) $X.Y = X+Y$

| X | Y | X | Y | X+Y | X.Y | X+Y |
|---|---|---|---|-----|-----|-----|
| 0 | 0 | 1 | 1 | 0 | 1 | 1 |
| 0 | 1 | 1 | 0 | 1 | 0 | 0 |
| 1 | 0 | 0 | 1 | 1 | 0 | 0 |
| 1 | 1 | 0 | 0 | 1 | 0 | 0 |