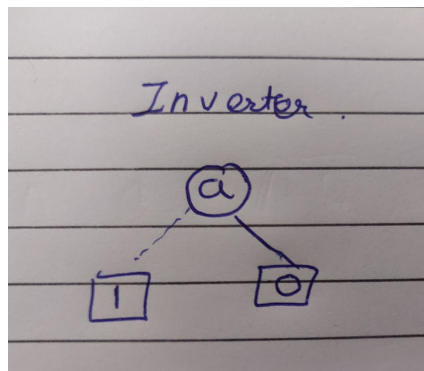# Lab1 Report

Niraj Mahajan
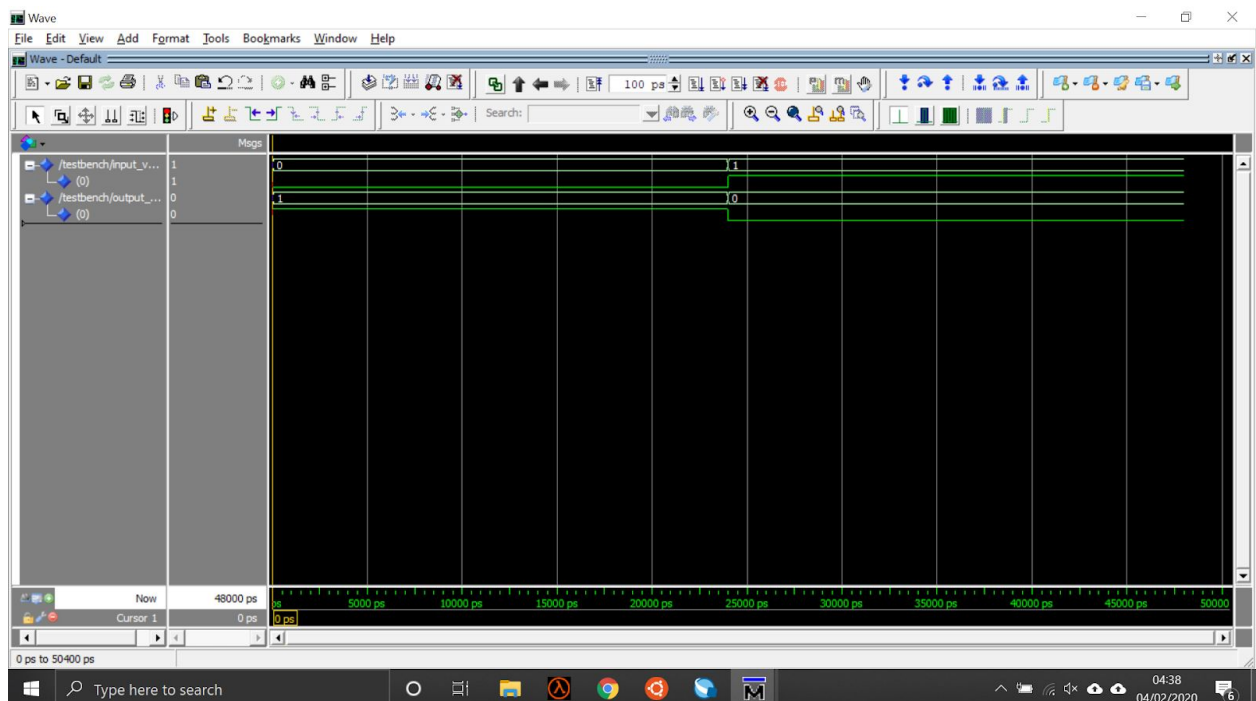180050069

Basic Gates

Basic gates like NOT, AND, OR, NOR, NAND and XOR were constructed using just a multiplexer, by drawing their ROBDD.
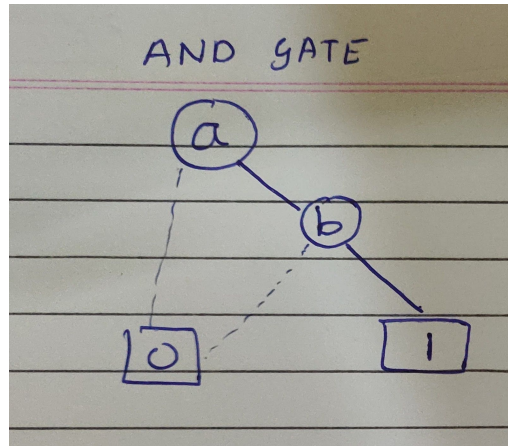
1. INVERTER
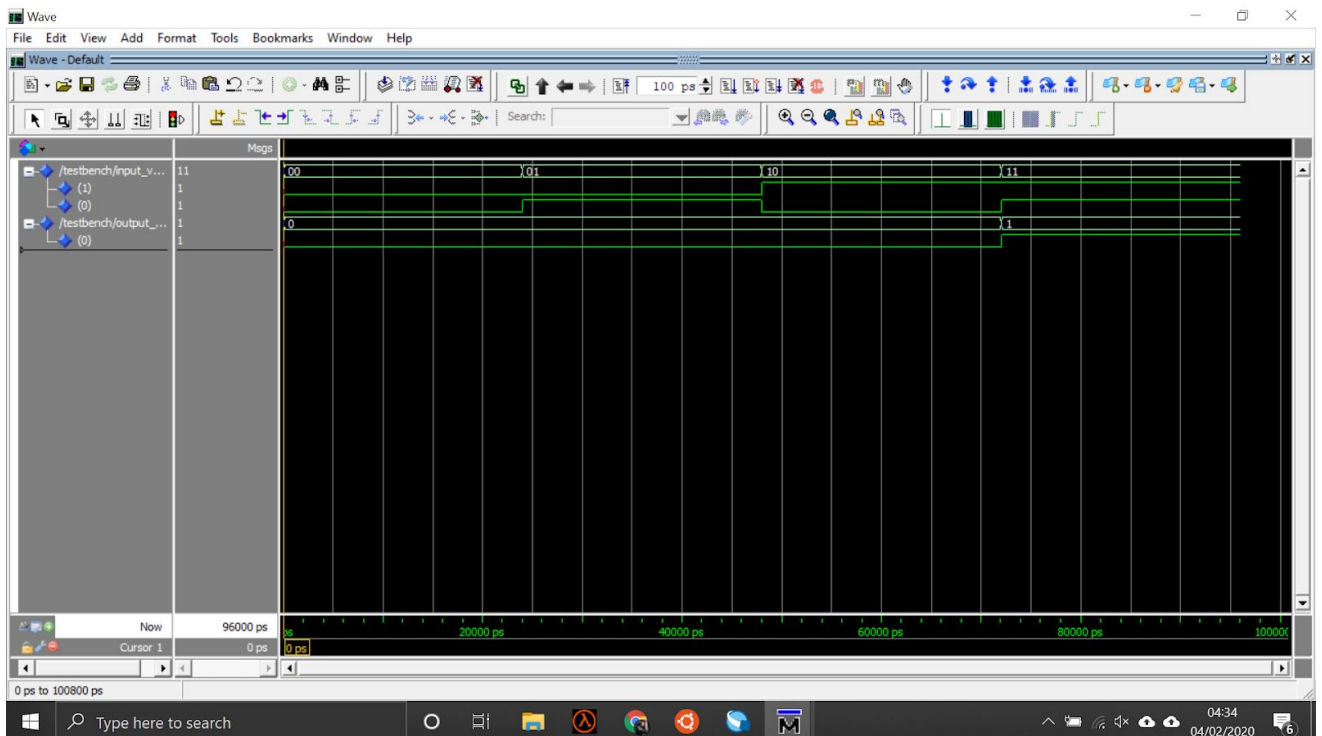   a. ROBDD :

   b. Simulation :

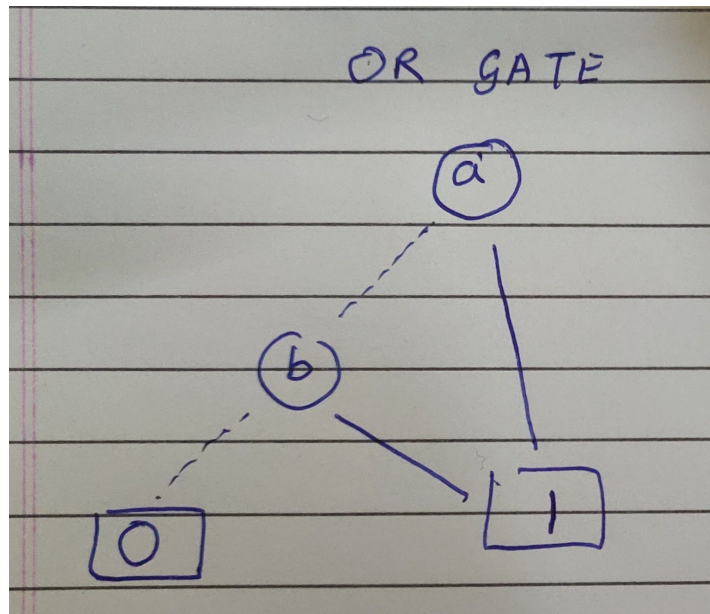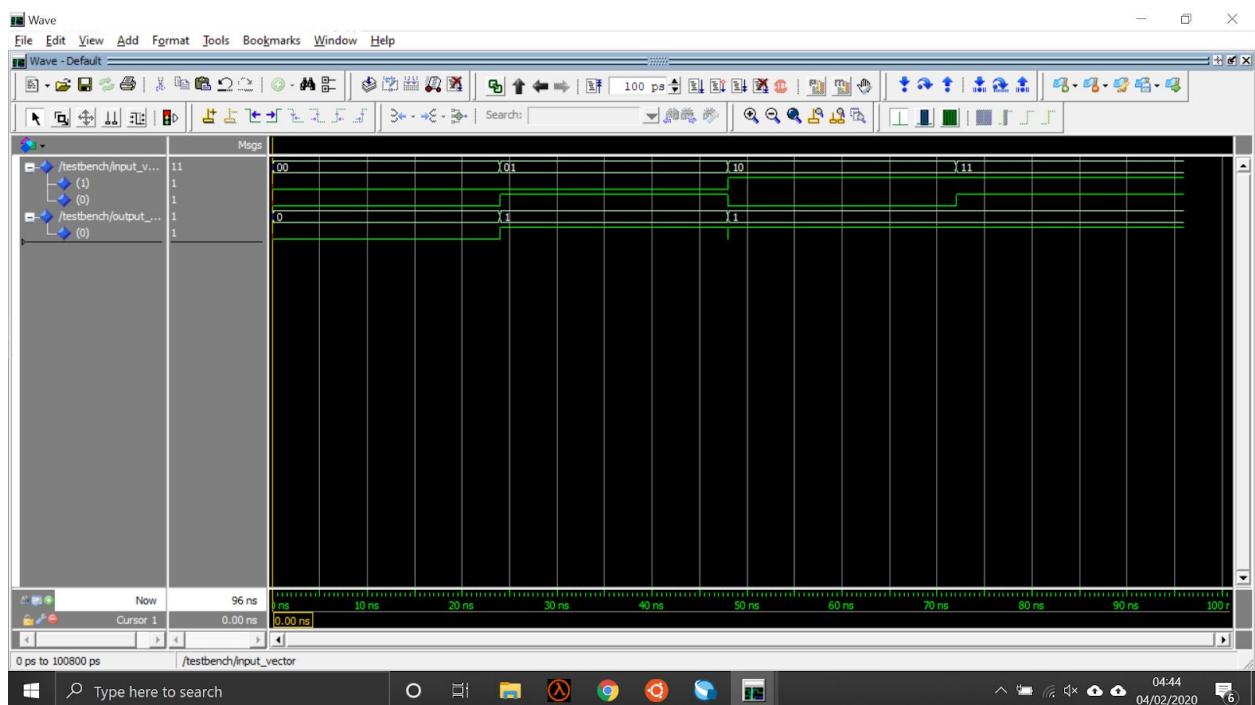## 2. And Gate
a. ROBDD:

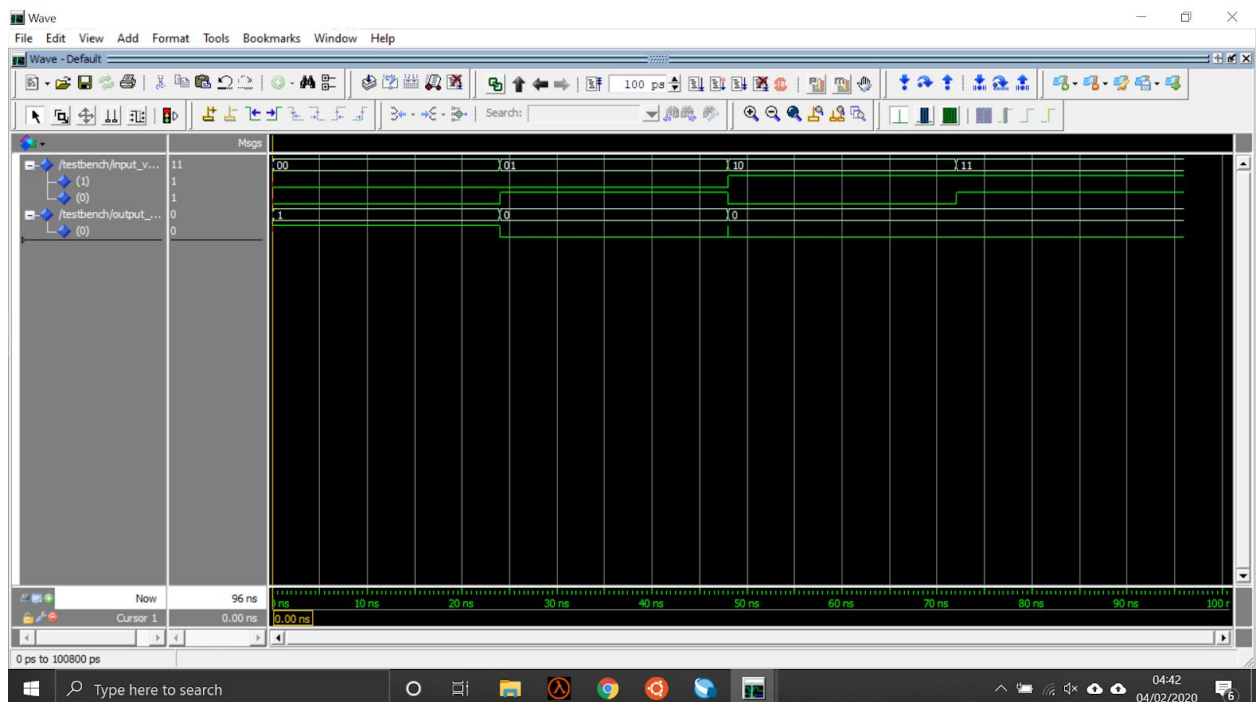
b. Simulation:

3. Or Gate
    a. ROBDD:

    b. Simulation:

4. NOR gate
a. ROBDD:
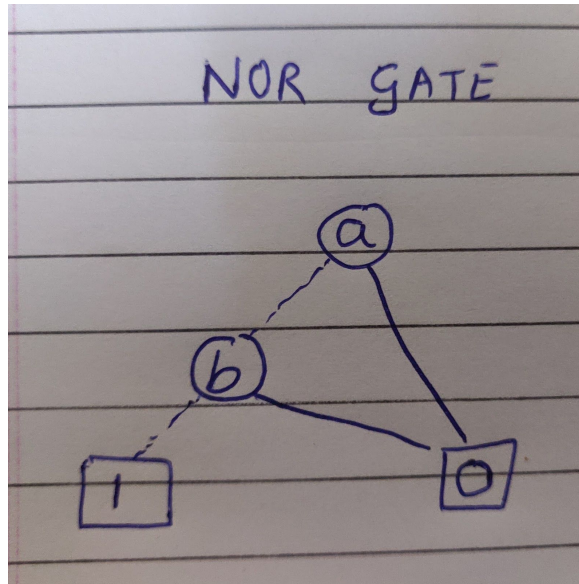
b. Simulation:

5. NAND Gate

a. ROBDD:

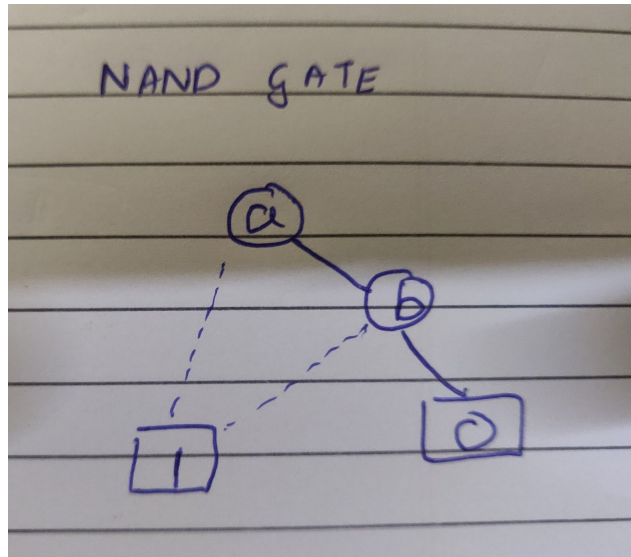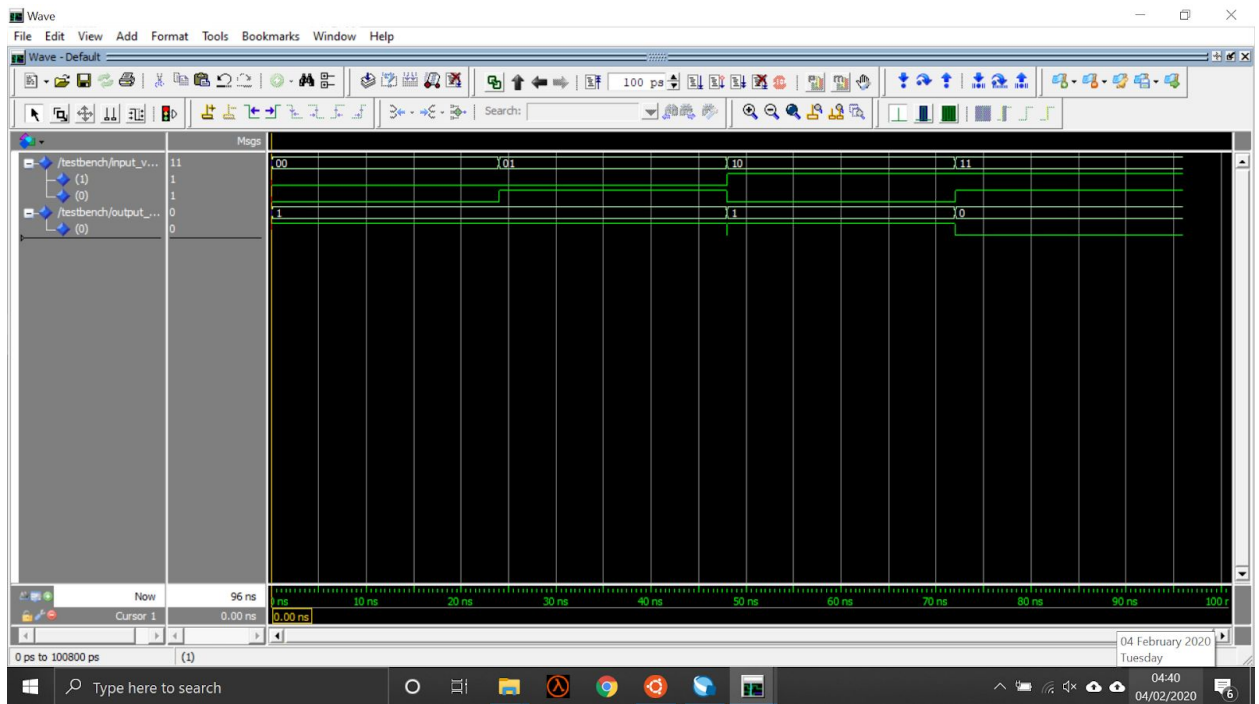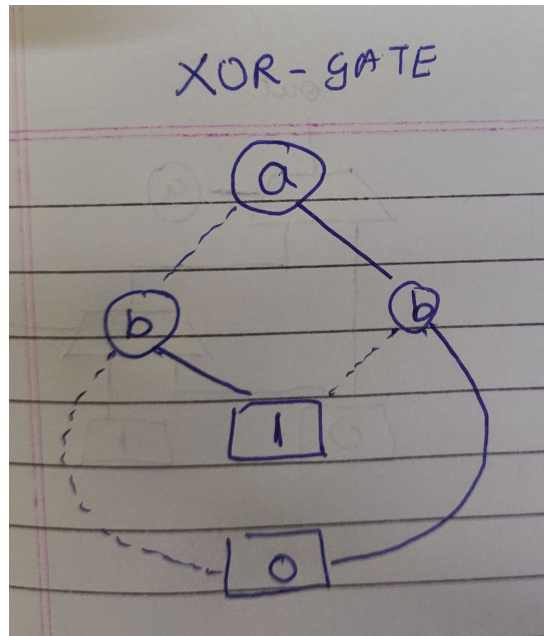## b. Simulation:

6. XOR Gate
a. ROBDD:

b. Simulation: