

ECN-252 Lab 5

You need to save the circuit for each part. These circuit files need to be submitted in a compressed folder (.zip) with your roll no. as the name. For example, if your roll no. is 191112002, you need to submit 191112002.zip. The .zip should also contain a report.

Part -1:

Design a *half adder* and a *full adder* (similar to Lab-2). Use minimum number of gates.

Part -2:

Design a *4-bit multiplier* using the *half-* and *full- adders* from Part-1. Simulate and show the results of

(a) 1111×1111

(b) 1011×1110

The report should contain the circuit diagrams as well as all the input and output combinations for your half- and full- adders. It should also contain the circuit diagram for your multiplier along with the required simulations results.

Deadline: 21 March 11:59 pm.