

VLSI DESIGN
CSE460
SECTION : 08L
Assignment 1 [Lab]
Deadline: 07/03/2022 11:59 pm

Rules:

1. You need to submit the code, the compilation report and the simulation report with a brief description for each of the problems.
 2. Prepare your assignment in a doc file. For each of the problems, paste the code in the doc file (Not screenshot, copy-paste the code), add screenshots (full screen) of the compilation and simulation report and give a brief description of how your timing diagrams manifest expected outputs. The explanation can either be typed or scanned. Next, export the doc as pdf and rename it as **Section_StudentID_Assignment3.pdf**.
 3. Finally, submit the pdf within the deadline.
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Problem 1 :

Design a 4 bit adder/subtractor circuit in Verilog. The circuit should have a control pin e.g. **add_sub**. If **add_sub** is high, the circuit will behave as an adder and if **add_sub** is low, the circuit will behave as a subtractor.

Problem 2:

Design a 4 to 2 priority encoder (0>1>3>2) using Verilog HDL and verify using timing diagram.

Note:

1. Show and discuss the case when multiple input bits are high.

Submission Link

<https://forms.gle/81JiUPV2bZKxve227>