

Lab2 Report

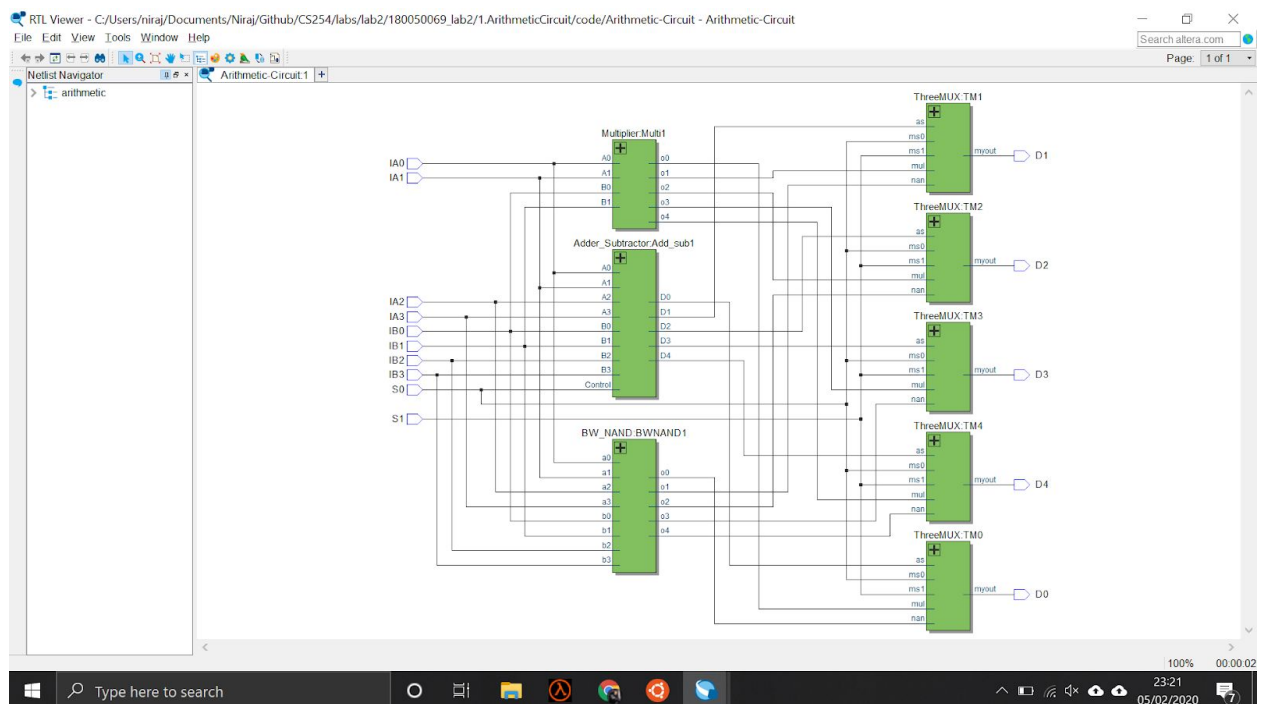
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Arithmetic Circuit

1. Implementation details

- In this question I have calculated the 2 bit multiplier using Half adders as in the homework problem
- Bitwise Nand using 4 Nand gates
- Extended the two bit adder subtractor used in the homework problem to a four-bit adder subtractor.
- Used a Multiplexer with three inputs and two controls to choose the appropriate output according to the S0 and S1 values.

2. Diagram



3. Simulation:

