CprE 381: Computer Organization and Assembly Level Programming

Lab 1: Orientation

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Start NOW!

- Download Lab1 materials
- Print, read, sign, and submit safety contract
- Open the lab manual
- Log in to VDI

Lab Overview

- Labs 1 & 2 (individual)
  - Get to know Modelsim and VHDL
  - Review 281 concepts
    - Binary, 2's complement
    - Binary addition/subtraction
    - Muxes
    - Registers, register files
  - Learn to model memory
  - ***Expect you to be into Lab 1 Part 3 before week 2 section***
- Beyond (teams of teams of 3)
  - Proj 1: single-cycle processor
  - Proj 2: software and hardware scheduled pipelines
  - Proj 3: performance analysis of 3 processors and how to improve them

Lab Rhythym

- **Before** lab section, complete team contract + prelab questions
  - Preparation and planning
  - Read lab manual
- Execute lab starting **minute 0** of the first lab section
- Turn in lab report (due 11:59pm two days before the next lab assignment begins)
- Repeat