



# Final Project: Demo Expectations

COEN 122



# Demo

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- Demo and report are due on Friday Week 10
- 1 submission per team



## Demo: Viewing Registers in Waveform

- Under “Scope” Section, click on your register file module
- Under “Object” Section, click on the drop down icon for your registers
- Drag and drop the registers used into the waveform
- Then right-click “Run Simulation” and “Relaunch Simulation” to see the waveform updated with the values in the registers



## Demo: Your Own Assembly Code

- You will be given N random numbers to test your datapath with
  - Load base and end indexes in registers
  - Show in waveform that you are getting the correct value in your register



## Important Constructs

- Needing NOPs between instructions with data dependencies or branching
  - Data dependency: requires at least 2 NOPs
  - Branching/Jumping: requires at least 3 NOPs
- Sign Extension
  - {10'b0000000000, sign\_ext\_in}
- Buffers should be on 1 edge and the data memory, instruction memory and reg file should be on the other edge