You will learn the following in this lab:

- How to program your computer in assembly.
- How to access I/O devices using memory-mapped load and store instructions.

Develop a demo app

Develop a MIPS application (in assembly, using the MARS simulator) to demonstrate

- Functional MIPS processor
- Functional I/O devices

The complexity of your application must be similar to sample projects shown in class (see video posted on website).

**Due Date and Demos:** Final due dates for an in-class project demonstration (open to other faculty and students) will be the last couple of class sessions, Apr 23rd and 25th, 2018. We will seek volunteers who would like to demonstrate their apps first, and then call on students in alphabetical order of last name.

**What and how to submit:**

- **Demo App:** Please submit your assembly code at the conclusion of your in-class demonstration. Attach all the MARS source files used in developing your app.
- **Verilog:** Source files may be requested by instructor, if necessary. Submit only if asked.
- **Send email to:** comp541-submit-s18@cs.unc.edu
- **Use subject line:** Project PART B