Mathematics 3670: Laboratory 7

Lab Exercises

Complete the following exercises from Chapter 6 of our text. In each case make a clearly named asm file for your solution. You may only use `FILL` instructions to load your machine code, `.ORIG x3000` to give the start point, and `.END` to give the end point. Include comments to describe what your program is doing at a high level. Your program should end with a halt.

1. Complete Exercise 6.9.
2. Complete Exercise 6.12a. Your program should keep echoing characters until a space is entered.
3. Complete Exercise 6.12b. Your program should keep echoing lines until a blank line is entered. What is the largest line your program can handle?
4. Complete Exercise 6.13. Your program does not need to output anything. Its behavior will be demonstrated by setting breakpoints. In your comments clearly indicate where I can set breakpoints to load my test value into 0x3100 and when I can see that the result has been placed into 0x3100.
5. Complete Exercise 6.18. Your program does not need to output anything. Its behavior will be demonstrated by setting breakpoints. In your comments clearly indicate where I can set breakpoints to load my test values into 0x4000 and 0x4001 and when I can see that the results have been placed into 0x4002 (quotient) and 0x4003 (remainder). Note these are not the same addresses as given in the text.

Submissions

Before submitting your work, make sure your name appears in each of the programs you wrote. Also, ensure that each of your programs is generously commented.

Create a **lab7** folder and place copies of all `.asm` programs you wrote in this folder. Submit the folder by dragging it onto the EIU submission icon.