

## **CMSC 240: Principles of Computer Organization**

### **Assignment#3**

**Due in class on Thursday, March 21, 2024.**

**Description:** Write an LC-3 machine language program to compute the minimum value stored in 10 consecutive memory locations.

#### **Notes:**

1. You will need to store 10 random values in consecutive memory locations. You may use any values. Store them starting from location x3030. A data file will be provided for the sake of submission.
2. Leave the minimum value found in register R1.
3. Store your program starting from memory location x3000
4. Start by writing the program in pseudocode (and/or a flowchart), choose registers for variables used in pseudocode. Encode the pseudocode in LC-3 instructions. Make generous use of comments.

#### **What to Hand in**

Submit a stapled printout containing the following: A printout of your program (.bin file), a snapshot of the Simulator screen showing contents of all registers after running the program on the data file provided. A short personal reflection on the exercise.