CMSC 240: Principles of Computer Organization
Assignment#4
Due in class on Thursday, March 28, 2024.

Description: Write an LC-3 assembly 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 the values shown below. Store them starting from location x3030.

   [256, 91, 345, 967, 42, 89, 12301, 32767, 695, 43]

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 psuedocode. 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 (.asm file) containing the data above, 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.