Updated: September 1, 2022

CS 3035, Fall 2022
In-Lab Exercise 4

Due: September 1, 2022 (11:59 PM)

The following programming exercise has two parts. Part 1 is compulsory for everyone and part 2 is optional for those who might want to attempt it.

Part 1: Find the largest number

The process of finding the largest number (i.e., the maximum of a group of numbers) is used frequently in computer applications. For example, a program that determines the winner of a sales contest would input the number of units sold my each salesperson. The salesperson who sold the most units would win the contest.

Write a **pseudocode program** and then a **C program** that inputs a series of 10 numbers and determines and prints the largest of the numbers.

Your C program must use the following elements:
1. A 'while' loop
2. An 'if' or 'if…else' statement
3. An increment assignment operator (e.g. x++)

Hint: Your program will need three variables similar to the following:
- *counter : to count to 10 so you can accept 10 user input numbers*
- *number : the current number input by the user*
- *largest : the variable that keeps track of the largest number found so far.*

Part 2: Find the two largest numbers

Extend the program you wrote for Part 1 to find the *two* largest values of the 10 numbers. You may assume that each number is unique, i.e., a number is not repeated.