COSC 251 – Lab #1
C is for Catastrophe

Purpose: Work with C (not C++!) to do some simple exercises with pointers and recursion.

Task: Utilizing CLion (or your environment of choice), create a simple program that will contain two unrelated functions and a main function that should drive the program. This can be done in a single .c file.

The first function is to create a simple add3Integers function, but the function cannot have any parameters and you cannot declare anything but pointers. You should ask the user for the three numbers (inputted one at a time is fine) and then calculate and print out the result.

The second function is your old friend factorial (again). Code a recursive factorial function using C. Here's the trick: you cannot return anything from the function (no using global variables either!). Hint: pass-by-reference.

Your main function should simply have a menu that asks the user to process one or the other function. For the add3Integers function, simply call the function. For factorial, the main should be where you ask the user for what value they want then print out the result.

You may work in pairs for this lab.

Deliverable: the c file that contains your source. It should be well commented.

Deductions (beyond incorrect calculations):
-2 non-recursive factorial function
-2 return in factorial function
-1 print in the factorial function
-1 lack of comments
-2 missing input from user

Due: By 11:59 pm Tuesday. To be turned in via Blackboard.