CSCE 350 – Data Structures and Algorithms

Project 1

Getting Started

10 Points

Assigned on: August 28th, 2019
Due: September 11th, 2019 @ 11:59 pm

Topics Covered:

- Reading/Writing to terminal
- Running C++ code
- C++ syntax refresher

For this assignment, you will implement an extremely simple algorithm. The purpose is to give you a chance to practice writing code in the form that's expected in this course.

Background:

In order to write and test algorithms in this course, we will often need to read in some form of data. We will accomplish this by reading the input from standard in either through file redirection or manual value input. The task for this assignment is to read in numerical data from standard in and calculate and print the sum back to standard out.

Description:

You should write a very small C++ program that performs the following tasks:

1. First, your program should read in a set of 5 integers from "standard in" (remember `cin`). The numbers that you read in will be either zero or positive.
2. If *at least one* of the five numbers entered is non-zero then your program should calculate the sum of the numbers and report that back to the user using "standard output" (remember `cout`). Then your program should be ready to accept 5 new numbers from the user.
3. Your program should allow the input of 5 numbers until the user enters 5 zero values. At this point, your program should then terminate.

Example input/output:

```
1 1 1 1 1
5
10 5 5 10 5
35
0 1 0 0 0
1
0 0 0 0 0
```

Additional Specifications:

- I have provided a main.cpp that you may use as a starting point for your code.
- Your program should consist of a long comment that contains the following information:
    - First name and last name of the programmer.
    - Email
    - Date and time of the program completion.
    - A brief description of the program function.
    - Input requirements and format.
    - The output of the program.
    - Any additional needed comments (e.g. related to compilation, execution or other requirements).
- Make sure your program compiles and runs on one of the Linux machines in the Linux lab before you submit.
- **Submit the source code (.cpp) not the executable.**

NAME YOUR FILE: Project1_<last_name>.cpp (replace <last_name> with your own last name.)