CSCI 1320 Computer Science I: Engineering Applications – Fall 2018
Instructor: Zagrodzki
Lab 10
Due Friday, Nov. 30, by 6pm

File I/O

Data contained in files can easily be processed by computer programs. In this lab, you will use C++ *ifstream* object to read a text file (with whitespace as delimiter). Using the stream object you use to read the file, you should extract the words in the file.

A string is an object that represents sequence of characters. You need to find the sum of all the ASCII values of characters in a word and display them to console. Also, you need to keep track of the number of words you process in the file.

Hint: You may want to use the size() member function to obtain the length of a string.

What is given:

A text file named "lab10test.txt" in txt format

What you need to do:

Write a C++ program that
- Reads the given text file.
- Counts the total number of words in the file.
- Finds the sum of the ASCII values of each character in every word.
- Sorts the words based on their ASCII sums in increasing order. (You can use the bubble sort algorithm here.)

What your program should display:

- Each word along with its ASCII sum, in increasing order.
- Print the total number of words in the file to the console.

Submitting the Lab:
Make sure your .cpp file is well commented and it includes in a block comment your name, student ID, course number, lab number and recitation section.

Submit the .cpp file *(lab10_fileio.cpp)* through Moodle as Lab 10 by due date.