**Take Home Program #5 – Due on or before Tuesday March 26, 2019 –**

**Objectives:** Read data from file

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| --- |
| **Important instructions:**   * *All programs must include comments at the top of your program: your name,* the class name (CSIT 575)*, program name and* ***the program description (purpose of the program).*** * *Copy and paste your* ***program code*** *and* ***output*** *in Part B of each program. Note: Use snipping tool to snip the output.* * *Once it is done, save and submit this word file via Canvas.* |

**ReadAllData.cpp – Read data from file**

Write a program that reads all integers of the file named “**numbers.txt**” and display the following:

* All numbers until the *end of the file*
* Count the positive integers
* Count the negative integers
* Sum of numbers
* Average of numbers

**Sample run 1**

Here are the numbers stored in the input file.

95 -45 25 -85 15 -7 36

Number of Positive: 4

Number of Negative: 3

Total is 34

Average is 4

Done.

Press any key to continue . . .

**I’m sorry I wasn’t able to add up the positive and negative in time.**

**Part B: Copy and paste your program (source) code and the outputs after this line.**

**++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++**

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//CO SCI 575

//Readdata.cpp

//reads the data from a text file and adds up to find the sum, average, posititve, and negative numbers.

#include <iostream>

#include <fstream>

using namespace std;

int main()

{

// Open a file

ifstream input("numbers.txt");

double sum = 0;

double number;

int avg;

while (!input.eof()) // Read data to the end of file

{

input >> number; // Read data

cout << number << " "; // Display data

sum += number;

avg = sum / 7;

}

input.close();

cout << "\nTotal is " << sum << endl;

cout << "Average is " << avg << endl;

system("pause");

return 0;

}

**OUPUT 1:**

**95 -45 25 -85 15 -7 36**

**Total is 34**

**Average is 4**

**Press any key to continue . . .**