3460:209 Assignment 2-A

# **Assignment 2-A: Grade Calculator**

**Overview**

The purpose of this assignment is to make sure that you know how to write a program that does basic input, output, flow of control and/or calculations.

**PROGRAM SPECIFICATION**

For the assignment, we will write a program that calculates the total grade for N classroom exercises as a percentage. The user should input the value for N followed by each of the N scores and totals.

Calculate the overall percentage (sum of the total points earned divided by the total points possible) and output it as a percentage. Then determine the letter grade using the following scale:

A: 93%-100% ; A-: 90%-92.99% ; B+: 87%-89.99% ; B: 83%-86.99%; B-: 80%-82.99%; C+: 77%-79.99%; C: 73%-76.99%; C-: 70%-72.99%; D+: 67%-69.99%; D: 63%-66.99%; D-: 60%-62.99%; F: Less than 60%.

Match your program with the sample input and output as shown below.

**How many exercises to input? 3**

**Score received for exercise 1: 10**

**Total points possible for exercise 1: 10**

**Score received for exercise 2: 7**

**Total points possible for exercise 2: 12**

**Score received for exercise 3: 5**

**Total points possible for exercise 3: 8**

**Your total is 22 out of 30, or 73.33%.**

**Your letter grade is C.**

Make sure that your programs follow good documentation standards and follow the requirements for assignments. Reference the rubric standards on Brightspace.

Submission Instructions – for programming solutions

On Brightspace, go to the matching Assignments for the ASSGN@-#, where @ is the chapter and # is the number or character of the problem assigned (eg., 5-11 for chapter 5, problem 11), and submit the program (cpp) and any (hpp) files.

*Last updated 5.22.2016 by Will Crissey.*

*Be aware that programming falls under all of the rules of plagiarism. Be careful when using any coding found in the outside world that is not your own. Any evidence of plagiarism is subject to sanctions like forfeits, suspension, and even ejection, as determined by the Department of Student Conduct and Community Standards.*

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