EEL3834 - Programming for Electrical Engineers Fall 2016

Programming Assignment 1 Assigned: 9/2/2016 Due: 9/9/2016 @ 4:00PM To be done individually

Your mission, should you choose to accept it...

Programming Project 12 from Chapter 1 of Absolute C++ 5th ed. (Savitch), pg. 44: "A simple rule to estimate your ideal body weight is to allow 110 pounds for the first 5 feet of height and 5 pounds for each additional inch. Write a program with a variable for the height of a person in feet and another variable for the additional inches and input values for these variables from the keyboard. Assume the person is at least 5 feet tall. For example, a person that is 6 feet and 3 inches tall would be represented with a variable that stores the number 6 and another variable that stores the number 3. Based on these values calculate and output the ideal body weight."

Your program should ask the user for their height in two steps: First ask for the number of feet, then ask for the number of inches. Your program should then display the ideal weight for that height

Your grade will be subject to the following condition(s):

• Submission:

The submission deadline is **4:00PM** on **9/9/16**. You will be penalized in increments of 25% per day late (regardless of the time). A submission at 4:01PM on 9/9/16 will result in a 25% penalty, as will a submission at 4:00PM on 9/10/16. A submission at 4:01PM on 9/10/16 will result in a 50% penalty, and so on. We will go by the timestamp on Canvas, so be sure to submit early.

Submit your code on Canvas. You just need to **upload** your .cpp file, not copy and paste your code. Please name your .cpp file **assignment1.cpp**

In addition, you will need to write in the text entry box which version of g^{++} you used. This can be found from the terminal by typing: g^{++} - \mathbf{v} .

The grading criteria are on the following page:

Your grade will be calculated based on the following (total 10 points)

• Compilation: 4 pts

Your code MUST compile in a Linux environment (namely using g++ 4.8.2 or g++ 4.4.7), since that is the environment in which it will be graded. There is no partial credit available here, either your code compiles or it doesn't.

• Execution: 4 pts

Your program will be tested against 8 cases, each worth 0.5 points. You can earn partial credit here if your code doesn't work for every single case. If it does work for every case, you will get the full 4 points.

• Style: 2 pts

Your code will also be graded on its style. This includes things like using meaningful variable names (0.75 pts), useful comments (0.75 pts), and proper indentation and spacing (0.5 pts). All of these things make your code easy to read and maintain. Partial credit will be available here.