

ECE 71 – Introduction to Computational Engineering

Dr. Gregory R. Kriehn, Fresno State
C++ Homework Assignment: Chapter 2.1

Code Due By: Midnight on Monday, September 4, 2017
Write-up Due By: Class Time on September 11 or 12, 2017

HOMEWORK #2 – Length Conversion

Write a program that reads in a given length in feet and inches, and converts the output in centimeters. Assume that the two inputs into the program (feet and inches) are both integer values. Recall that there are 2.54 centimeters per inch. Always print 2 values after the decimal point for the number of centimeters.

Specifications:

Login into your account using PuTTY or a terminal window, and create a new source file called **hw02.cpp**. The first line of your program should be a comment stating the homework number:

```
// Homework 2
```

After you have created your code (including the rest of your comment header), test, and debug it. When you execute your code, the following information should be displayed if 15 and 7 are used for the number of feet and inches as inputs:

```
~> hw02.o  
Enter the number of feet: 15  
Enter the number of inches: 7  
  
Feet = 15'  
Inches = 7"  
  
Total Inches = 187"  
Total Centimeters = 474.98 cm  
~>
```

In this case, the bold underline data “15” and “7” represent user input into the program via the keyboard. Test your program using several different inputs to verify its operation.

Once you have verified that your program is working correctly, submit your source code to the Grader Program.

On September 11 or 12, submit the paperwork for your program, which includes an I/O diagram, pseudocode, and a printout of your working code.