

Assignment #7

Due Oct. 27th.

20 points - turn in the CPP file.

When writing C++ programs include comments in your code, make the program readable by indenting, use meaningful variable and function names, and produce meaningful output.

This assignment will be to write a temperature conversion program that interacts with the end user – using the guidelines and sample output below.

Program: 20 points - temp.cpp

Write a program that will do the following:

- Use a function that will prompt the user for their name, returning the name back to the calling function.
- Use a function that will prompt the user for the current temperature outside in Celsius, when you prompt the user make sure to reference the user by their name, returning the temperature in Celsius back to the calling function. (you will need to pass the name to this function)
- Use a function that will convert the temperature in Celsius to Fahrenheit, returning the new Fahrenheit temperature back to the calling function.
- Use a function that will print out the results of the Celsius to Fahrenheit conversion, referencing the user by their name - returns nothing.

Example program run:

(1st function)

Please enter your full name: Michael Bradley

(2nd function)

Hello Michael Bradley, please enter the current temperature outside in Celsius: 31.6

(3rd function calculates the C → F temp - no output produced)

(4th function displays the results)

Michael Bradley, your temperature outside in Fahrenheit is: 88.88

Another run without references to what function is what - this is what your run should resemble:

Please enter your full name: Karissa Smith

Hello Karissa Smith, please enter the current temperature outside in Celsius: 2

Karissa Smith, your temperature outside in Fahrenheit is: 35.6

Grading criteria: 20 pts.

no global variables

program must use at least four functions,

program must use at least one function that returns a value with a return statement

program must be indented correctly,
use meaningful variable and function names,
produce correct output,
use comments at beginning,
use comments for each program component,
use comments for each function - signature/purpose
use comments throughout to document what is happening.