

CS 128 – Introduction to C++, Assignment 3

You will write a program to convert degrees Fahrenheit (F) to degrees Celsius (C) and vice versa. All variables of temperature should be of type double.

Use the formulas below to perform the conversions:

$C = (F - 32.0) / 1.8$ to convert a Fahrenheit temperature to Celsius

$F = C * 1.8 + 32.0$ to convert a Celsius temperature to Fahrenheit

Requirements

- Use a Switch-Case to provide a menu option to select which conversion formula to use. Your program will take this option (Hint: integer type) and then move on to relevant case statement for the conversion formula.
- Next, your program will take a double input from the user, to be evaluated with the program.
- 5 Bonus points: Allow the program to be played repeatedly without ending the program after a conversion. Typing 'y' or 'Y' or “Yes” causes program to run again. Anything else exits the program with output “Thanks for playing!”
- Follow formatting as demonstrated in the "Sample Output" below.
- Make sure you have your name and Bronco ID in the header comment

```
/* Name: Jane-Joe
* Bronco ID: 12345678
* Sources of Help: Jon Doe helped me with.....
*/
```

Your output should look exactly like this. Highlighted values are the user input.

HW3: Temperature Conversions

Enter option 1. Converting Fahrenheit to Celsius

Enter option 2. Converting Celsius to Fahrenheit

Enter option number: **1**

Converting Fahrenheit to Celsius

Enter temperature to convert from Fahrenheit: **98.60**

98.60 degrees F = 37.00 degrees C

Enter option number: **2**

Converting Celsius to Fahrenheit

Enter temperature to convert from Celsius: **100.00**

100.00 degrees C = 212.00 degrees F

Due: October 26, 2016 by 4.00 PM. submit your .cpp file to Blackboard.

Total Points = 100 + 5 Bonus Points

- Correctness/Robustness: 60 points
- Code complies to requirements: 20 points
- Good coding style: 20 points