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 to Celsius
$F = C * 1.8 + 32.0$ to convert a Celsius 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.
- Follow formatting as demonstrated in the "Sample Output" below. Your temperature values should be formatted to 2 leading digits and 2 decimal places (Hint: use printf for correct formatting).
- 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.

> *HW2: 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*
>
> *Enter option number:* **8**
> *Incorrect option, please enter 1 to convert from Fahrenheit to Celsius, or 2 to Convert from Celsius to Fahrenheit!*

Due: October 18, 2017 by 6.00 PM. submit your Temperature.java file to Blackboard.

Total Points = 100

- Code complies to requirements: 70 points
- Good coding style: 20 points
- Correctness/Robustness: 10 points