COSC 1436, Professor Clark

Assignment 6a: 6 points

Write a Program: Temperature Table

The formula for converting a temperature from Fahrenheit to Celsius is:

$$C = \frac{5}{9}(F - 32)$$

Where *F* is the Fahrenheit temperature and *C* is the Celsius temperature.

Write a function named *celsiusConverter* that accepts a Fahrenheit temperature as a parameter. The function should return the converted temperature in Celsius. Demonstrate the calling of this function by calling it in a loop that passes the values 0-100 in increments of 10 as arguments and displays the return values in a table (see example output).

Your program should have the following:

- 3 comment lines (description of the program, author, and date).
- A function named *celsiusConverter* that calculates and returns a single converted temperature (3 points)
- A prototype for the function (1 point)
- Demonstrate the calling of the function in a loop, passing the values 0-100 in increments of 10 (1 point)
- Display the output in a formatted table of values (1 point)

Turn in a .txt file to Canvas with your name, section number, all output, and source code.

Example Output:

```
This program converts Fahrenheit temperatures to Celsius.

  Fahrenheit   Celsius
-----------------------
           0     -17.8
          10     -12.2
          20      -6.7
          30      -1.1
          40       4.4
          50      10.0
          60      15.6
          70      21.1
          80      26.7
          90      32.2
         100      37.8
```