Chapter 3: Temperature Converter

Time required: 90 minutes

- Comment each line of code as shown in the tutorials and other code examples.
- Follow all directions carefully and accurately.
- Think of the directions as minimum requirements.

Pseudocode

1. Write pseudocode or TODO for the exercise
2. Submit with the assignment

Requirements

Create a program named **temperature_converter.py**.

1. Create a menu that allows the user to decide whether to convert from Fahrenheit to Celsius, or from Celsius to Fahrenheit.
2. Assuming that C is a Celsius temperature, the following formula converts the temperature to Fahrenheit:
   F = (9.0 / 5.0 * C) + 32.0
3. The displayed result should concatenate an **°F** as shown in the example.
4. Assuming that F is a Fahrenheit temperature, the following formula converts the temperature to Celsius:
   C = (F - 32.0) * 5.0 / 9.0
5. The displayed result should concatenate a **°C** as shown in the example.
6. Add f-Strings formatting code to display the temperature to 2 decimal places.
7. Get the Degree Symbol: www.degreesymbol.net
   At the top of this web page, you can Copy the degree symbol and paste it into your code.

TODO

```
# ---------------------- INPUT -------------------------#
# TODO: Print program title

# TODO: print menu
print("Type 1 to convert Fahrenheit to Celsius")
print("Type 2 to convert Celsius to Fahrenheit")

# TODO: Get menu choice from user

# ------------ CALCULATE AND DISPLAY RESULTS -------------#
# TODO: Convert Fahrenheit to Celsius
# if menu choice == 1:
# celsius = (fahrenheit - 32.0) * 5.0 / 9.0
# Display results

# TODO: Convert Celsius to Fahrenheit
# elif menu choice == 2:
# fahrenheit = (9.0 / 5.0 * celsius) + 32.0
# Display results
```

Example runs:

```
-------------------------------------------
Temperature Converter
-------------------------------------------
Type 1 to convert Fahrenheit to Celsius:
Type 2 to convert Celsius to Fahrenheit
Enter your choice [1-2]: 1
Enter a Fahrenheit temperature: -40
-40.00 °F is equal to -40.00 °C
```

```
-------------------------------------------
Temperature Converter
-------------------------------------------
Type 1 to convert Fahrenheit to Celsius:
Type 2 to convert Celsius to Fahrenheit
Enter your choice [1-2]: 2
Enter a temperature in Celsius: 0
0.00 °C is equal to 32.00 °F
```

Assignment Submission

1. Attach the pseudocode.

2. Attach the program files.
3. Attach screenshots showing the successful operation of the program.
4. Submit in Blackboard.