InLab02

20 Points

Objectives

- Learn variables and data types
- Learn how to take input from the user and return
- Learn how to return type of variable(s)

Instructions & Requirements

1) Now let's write a Python program for this week. This program gets input from the user and returns something. Create a new `.py` file (If you need a refresher, refer to InLab01 instruction again).

2) ***Introductory Comments***: At the beginning of the program, include "Introductory Comments" as below. **All** your submissions should include a segment of introductory comments.

```
#================================================================
# Your Name & Lab Section: (ex: Purdue Pete, Friday 1:30pm)
# Your Purdue Email:
# Program Description: In your own words, provide a brief description
of the program in 1-2 sentences (just "InLab02" is not meaningful).
# Academic Honesty:
# I attest that this is my original work.
# I have not used unauthorized source code, either modified or
unmodified.
# I have not given other fellow student(s) access to my program.
#================================================================
```

3) ***InLine Comments***: Add **at least 3** InLine comments to provide explanatory information about your code.

```
EX.  #Calculate the area of the rectangle
     #Print a message to get input from the user
```

4) Define the `main()` function and write code as follows inside the `main()`:

5) Print the first line (See **Desired Outputs**), "This is InLab02 for CNIT155 by *your name*"

6) Prompt the user to enter the number of students in CNIT 155.
   a) Read the user's input into a variable (`int`).
   b) Then display the entered number (user's input) to the screen with a descriptive message.
   c) With a message (i.e. "The data type of the number of students is"), return the type of the variable.

7) Prompt the user to enter the price of the textbook for this class.
   a) Read the user's input into a variable (`float`).
   b) Display the entered price with a $ sign and 2 digits after the decimal point.
   c) With a proper message, return the type of the variable.

8) Prompt the user to enter today's temperature in Fahrenheit (F).
   a) Read the entered input into a variable (`float`).
   b) Using the variable, convert the temperature into Celsius. Another variable will be needed for Celsius.
      Fahrenheit to Celsius conversion formula: $T_C = (T_F - 32) * 5 / 9$
   c) Display the temperature in Celsius (C) and print it up to 2 decimal places.
   d) With a proper message, return the type of the variable.

9) Have your TA check off your python program. Once it is approved, submit your program (the source code **`.py`** file) on Brightspace.

Submission

- **Submit the `.py` file on Brightspace.**
- BEFORE submission, test your program by comparing your program's output with **Desired Outputs**.
- AFTER submission, download your submission and test whether your program runs without any issue (For Windows users, don't double-click the source code. Run it using an IDE).
- NO late submission will be accepted.
- There will be penalties for wrong file submission and any errors in the program.
- Only the last submission will be graded, although you can turn in as many as you want.

Desired Outputs

- Again, BEFORE submission, test your program by comparing the outputs in the example figures below. Your program MUST produce the same outputs as below when given the same inputs.