Python Randy's Rectangle Calculator

Time required: 60 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 for the exercise
2. Submit with the assignment

Minimum Requirements

Ask the user to enter the length and width of a rectangle. Calculate and display the rectangle's area and perimeter.

1. Create a Python program named **rectangle_calculator.py**
2. Create a program title.
3. Area of a rectangle: **Area = length * width**
4. Perimeter of a rectangle: **Perimeter = 2 (length + width)**
5. Ask the user for the length and the width of a rectangle, cast to float.
6. Calculate the area.
7. Calculate the perimeter.
8. Display the area.
9. Display the perimeter.

TODO Outline of Program

You can use the following TODO outline to get started with your program.

```
"""
    Name: rectangle_calculator.py
    Author:
    Created:
    Purpose: Python program to calculate
    the area and perimeter of a rectangle
"""

# TODO: Print program title

# TODO: Get user input for length and width as float

# TODO: Calculate area of rectangle Math formula: a = lw

# TODO: Calculate perimeter of rectangle Math formula: p = 2(l+w)

# TODO: Echo user input

# TODO: Display results
# Use f-strings to format float to 2 decimal places
# use comma , as a 1,000's separator
```

F-strings formatting example:

```
print(f" Perimeter: {perimeter:,.2f}")
```

```
: indicates formatting codes are coming up
, comma formats 1,000 separators
.2f formats a float to 2 decimal places
```

Example run:

```
-------------------------------------------------
|     Randy's Rectangle Calculator in Python     |
| Calculate the area and perimeter of a Rectangle |
-------------------------------------------------
Enter length: 201.56
Enter width: 250.123
You entered: length 201.56 - width 250.123
Area:      50,414.79
Perimeter: 903.37
```

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.