Assignment 1

Deadline 8th Nov, 2023

Instructions

Before begginning the assignment, please make sure you have following tasks completed:

1. Installation of VS Code.
2. Installation of Python
3. Making of Github Profile
4. Watched the video of using Github by clicking this link.

Question 1

Task 1

Write a Python program that prompts the user to input values for both the length and breadth of a shape, and then determines whether the shape formed is a square or a rectangle based on the provided dimensions.

The following is expected in the code:

"This shape is *[shape name]*"

Task 2

Also calculate the Perimeter and Area of the Shape.

The following is expected in the code:

"The *[shape name]* has Perimeter: *[value]* and Area: *[value]*"

Additional Help

The formulas are as follows:

Rectangle:

Area = Length × Breadth   Perimeter = 2 × (Length + Breadth)

Square:

Area = Side × Side (where Side refers to both Length and Breadth, since they are equal in a square)   Perimeter = 4 × Side (or 4 × Length, as both sides are equal in a square)

Question 2

Scenario

The faculty list for Upcode Lab is as follows:

faculty = ["Uzair", "Ali", "Samad", "Usman", "Saifullah"]

Task 1: Cofounders List

The goal is to create a new list named "Cofounders" and move the names "Usman" and "Saifullah" into it from the "faculty" list. Simultaneously, remove these names from the "faculty" list.

Instructions:

1. Create an empty list named "Cofounders".
2. Identify and move "Usman" and "Saifullah" into the "Cofounders" list.
3. Ensure removal of "Usman" and "Saifullah" from the "faculty" list.

The following is expected in the code:

Display the "Cofounders" list containing "Usman" and "Saifullah" and the updated "faculty" list without these names.

Task 2: Name Correction

An error has been spotted in the faculty list. "Ali" should be corrected to "Umair."

Instructions:

1. Locate the index of "Ali" in the "faculty" list.
2. Replace "Ali" with "Umair" at that specific index.

The following is expected in the code:

Display the corrected "faculty" list after changing "Ali" to "Umair."

Submission

After completing the assignment on Github, please make fill the response form on this link