

PYTHON FOR ANALYTICS ASSIGNMENT

[DS7A-707]

WEEK-2

MASTER OF TECHNOLOGY

In

DATA SCIENCE

Submitted by

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Submitted To

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DEVI AHILYA VISHWAVIDYALAYA

Indore (M.P.)

Objective (a): Creating a Python class named Circle constructed by a radius and two method which will compute the area and the perimeter of a circle.

Code#

```
"""
Created on Sat Sep 10 14:59:14 2022

@author: Rahul Sharma M.Tech(Data Science)
"""
'''Objective:
Create a Python class named Circle constructed by a radius and two
methods
which will compute the area and the perimeter of a circle'''

from math import pi
# Creating Class named Circle()
class Circle():
    def __init__(self):
        self.r = float(input("Enter radius of circle :"))
# defining first method area of a circle
    def area(self):
        print("The Area of Circle is:", pi*self.r*self.r)
# defining second method perimeter of a circle
    def perimeter(self):
        print("The Perimeter of circle is:", 2*pi*self.r)

C = Circle()
C.area()
C.perimeter()
```

Output:

```
C:\Users\rjrah\AppData\Local\Programs\Python\Python310\python.exe
C:\Users\rjrah\PycharmProjects\PFA-Week-2\Circle.py
Enter radius of circle :8
The Area of Circle is: 201.06192982974676
The Perimeter of circle is: 50.26548245743669

Process finished with exit code 0
```

Objective(b): Creating a Python class named Rectangle constructed by a length and width and a method which will compute the area of a rectangle.

Code#

```
"""
Created on Sat Sep 10 15:43:43 2022

@author: Rahul Sharma M.Tech(Data Science)
"""
"""Objective:
Create a Python class named Rectangle constructed by a length and width
and a method which will compute the area of a rectangle. """

"""Creating a Python class named Rectangle"""

class Rectangle():
    def __init__(self):
        self.l= float(input("Enter the length of rectangle:"))
        self.b=float(input("Enter the width of rectangle:"))
    def area(self):
        print("The Area of Circle is:", self.l*self.b)
R=Rectangle()
R.area()
```

Output:

```
C:\Users\rjrah\AppData\Local\Programs\Python\Python310\python.exe
C:\Users\rjrah\PycharmProjects\PFA-Week-2\Rectangle.py
Enter the length of rectangle:8
Enter the width of rectangle:6
The Area of Circle is: 48.0

Process finished with exit code 0
```

GitHub-Repository:

This link redirect to my Assignment's source code repository on GitHub

<https://github.com/cse-rahulsharma/PFA-Week-2.git>