**Experiment No : 7**

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**Code: Write a Python class named Circle constructed by a radius and two methods, which will compute the area and the perimeter of a circle.**

import math  # Import math module for π (pi)

class Circle:

    def \_\_init\_\_(self, radius):

        """

        Initializes the Circle with a given radius.

        :param radius: Radius of the circle

        """

        self.radius = radius  # Store the radius

    def compute\_area(self):

        """

        Computes the area of the circle.

        :return: Area (π \* r²)

        """

        return math.pi \* self.radius \*\* 2  # Formula: πr²

    def compute\_perimeter(self):

        """

        Computes the perimeter (circumference) of the circle.

        :return: Perimeter (2 \* π \* r)

        """

        return 2 \* math.pi \* self.radius  # Formula: 2πr

# Get user input for radius

radius = float(input("Enter the radius of the circle: "))

# Create a Circle object

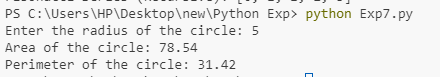
circle = Circle(radius)

# Print the computed area and perimeter

print(f"Area of the circle: {circle.compute\_area():.2f}")

print(f"Perimeter of the circle: {circle.compute\_perimeter():.2f}")

**Output:**

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