Object Oriented Programming

Lab on- Exercise

Exercise(1): Write a Circle class that has the following fields:

- radius: a double
- PI: a final double initialized with the value 3.14159

The class should have the following methods:

- Constructor. accepts the radius of the circle as an argument.
- Constructor. A no-arg constructor that sets the radius field to 0.0.
- setRadius. A mutator method for the radius field.
- getRadius. An accessor method for the radius field.
- getArea. Returns the area of the circle which is calculated as * area=PIradiusradius
- getDiameter. Returns the diameter of the circle which is calculated as diameter=radius*2
- getCircumference. Returns the circumference of the circle, which is calculated as circumference= 2PIradius
- Write a program that demonstrates the Circle class by asking the user for the circle's radius, creating a Circle object, and then reporting the circle's area, diameter, and circumference.

Exercise(2): **Write a class Person that contains the following fields :**

Name (string), Age (Int) ,Gender (string)

Add the following methods to the class :

- Constructor default and parametrized.
- Set and get for each data field .