LAB 07

OOP

1. Design a **PayRoll** class that has data members for an employee's hourly pay rate, and number of hours worked. Write a main code with an array of n (take n from user input) **PayRoll** objects. The program should ask the user for the number of hours each employee has worked and hourly pay rate and will then display the amount of total pay each has earned. Do not accept values greater than 60 for the number of hours worked. The data members must be private.

2. Write a **Circle** class that has radius, and pi (const value) = 3.14159 as data members The class should have the following member functions:

   - **Default Constructor**. A default constructor that sets radius to 0.0.
   - **Constructor**. Accepts the radius of the circle as an argument.
   - **setRadius**. A mutator function for the radius variable.
   - **getRadius**. An accessor function for the radius variable.
   - **getArea**. Returns the area of the circle, which is calculated as area = pi * radius * radius
   - **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 = 2 * pi * radius

   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.