SCALA PROGRAMMING

LAB WORK 3

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Write a Scala program that creates an abstract class Shape with an abstract method area. Implement subclasses Rectangle and Circle that override the area method.

Code

```scala
HelloWorld.scala                                    3zmhar8yy ✏

1  abstract class Shape { def area: Double
2  }
3  class Rectangle(width: Double, height: Double) extends Shape
4  { override def area: Double = width * height
5  }
6  class Circle(radius: Double) extends Shape
7  { override def area: Double = math.Pi * radius * radius
8  }
9  object ShapeApp
10 { def main(args: Array[String]): Unit = {
11   val rectangle = new Rectangle(7, 5)
12   println(s"Rectangle Area: ${rectangle.area}")
13   val circle = new Circle(4.5)
14   println(s"Circle Area: ${circle.area}") }
15 }
```

Output

```
Output:

Rectangle Area: 35.0
Circle Area: 63.61725123519331
```

GitHub Link: https://github.com/arj1-1n/Scala