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QUES.

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.

abstract class Shape {

def area: Double

}

class Rectangle(width: Double, height: Double) extends Shape {

override def area: Double = width \* height

}

class Circle(radius: Double) extends Shape {

override def area: Double = math.Pi \* radius \* radius

}

object ShapeApp {

def main(args: Array[String]): Unit = {

val rectangle = new Rectangle(7, 5)

println(s"Rectangle Area: ${rectangle.area}")

val circle = new Circle(4.5)

println(s"Circle Area: ${circle.area}") } }

