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22BTRAD008

The image displays two screenshots of the OneCompiler Scala IDE, showing a Scala program for calculating the area of shapes. The code defines an abstract class `Shape` with an `area` attribute, and two concrete classes, `Rectangle` and `Circle`, extending `Shape`. The `Rectangle` class has `width` and `height` attributes, and the `Circle` class has a `radius` attribute. The `main` method in the `ShapeApp` object creates instances of `Rectangle` and `Circle` and prints their areas.

Top Screenshot: The code defines a `Rectangle` with width 7.7 and height 'A'. The output shows the `Rectangle Area: 500.5` and the `Circle Area: 13273.228961416875`.

```
1 abstract class Shape {
2   def area: Double
3 }
4 class Rectangle(width: Double, height: Double) extends Shape {
5   override def area: Double = width * height
6 }
7 class Circle(radius: Double) extends Shape {
8   override def area: Double = math.Pi * radius * radius
9 }
10 object ShapeApp {
11   def main(args: Array[String]): Unit = {
12     val rectangle = new Rectangle(7.7, 'A')
13     println(s"Rectangle Area: ${rectangle.area}")
14     val circle = new Circle('A')
15     println(s"Circle Area: ${circle.area}")
16   }
17 }
18
```

Bottom Screenshot: The code is modified to use a height of 5 for the `Rectangle`. The output shows the `Rectangle Area: 38.5` and the `Circle Area: 13273.228961416875`.

3zm89mqbz - Scala - OneCompiler

onecompiler.com/scala/3zm89mqbz

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NEW

SCALA

RUN

HelloWorld.scala

```
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2   def area: Double
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5   override def area: Double = width * height
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12     val rectangle = new Rectangle(7.7, "A")
13     println(s"Rectangle Area: ${rectangle.area}")
14     val circle = new Circle('A')
15     println(s"Circle Area: ${circle.area}")
16   }
17 }
18
```

STDIN

Input for the program (Optional)

Output:

HelloWorld.scala:12: error: type mismatch;
found : String("A")
required: Double
val rectangle = new Rectangle(7.7, "A")
 ^

31°C
Mostly cloudy

Search

15:38
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