Challenge 2: Implement and Override the Method

Can you override the getArea() method in a derived class of the base class? A solution is placed in the "solution" section to help you, but we would suggest you try to solve it on your own first.

WE'LL COVER THE FOLLOWING

- Problem Statement
  - Input:
  - Output:
  - Sample Input
  - Sample Output
- Coding Exercise

Problem Statement

Write a method in a `Circle` class which overrides a method in a `Shape` class i.e. `getArea() and returns the area of a circle`.

> The value of Pi is 3.14.

You are given a partially completed code in the editor. Modify the code so that the code prints the following:

Input:

radius

Output:

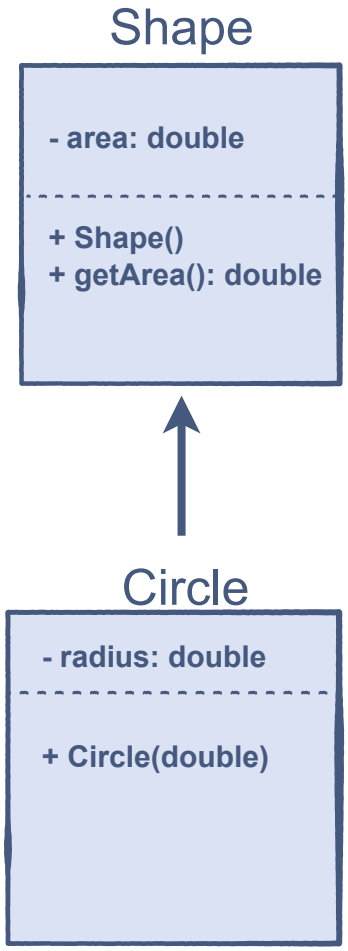
area of a circle

Sample Input

```
Shape circle = new Circle(2);
System.out.println(circle.getArea());
```

Sample Output

```
12.56
```



Based and Derived Classes Structure

Coding Exercise

First, take a close look and design a step-by-step algorithm before jumping to the implementation. This problem is designed for your practice, so initially try to solve it on your own. If you get stuck, you can always refer to the solution provided in the solution review. Good Luck!

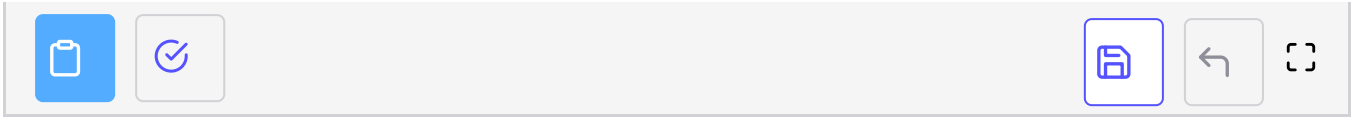
```
// Derived Class
class Circle extends Shape {

  private double radius;

  public Circle(double radius) { // Constructor
    this.radius = radius;
  }

  // Overridden the Method getArea() which returns the area of Rectangle
```

```
  // Write your code here
}
```



The solution will be explained in the next lesson.