

Sphere.java

```
1 public class Sphere extends Shape implements Volume {
2     private double radius;
3
4     public Sphere(double radius) {
5         super("Sphere");
6         this.radius = radius;
7     }
8
9     @Override
10    public double calculateArea() {
11        return 4 * Math.PI * radius * radius;
12    }
13
14    @Override
15    public double calculatePerimeter() {
16        return 0; // Perimeter is not applicable for Sphere
17    }
18
19    @Override
20    public double calculateVolume() {
21        return (4.0 / 3.0) * Math.PI * Math.pow(radius, 3);
22    }
23 }
24
```