**TestSimpleCircle:** [**https://liveexample.pearsoncmg.com/html/TestSimpleCircle.html**](https://liveexample.pearsoncmg.com/html/TestSimpleCircle.html)

**public** **class** TestSimpleCircle {

/\*\* Main method \*/

**public** **static** **void** main(String[] args) {

// Create a circle with radius 1

SimpleCircle circle1 = **new** SimpleCircle();

System.out.println("The area of the circle of radius "

+ circle1.radius + " is " + circle1.getArea());

// Create a circle with radius 25

SimpleCircle circle2 = **new** SimpleCircle(25);

System.out.println("The area of the circle of radius "

+ circle2.radius + " is " + circle2.getArea());

// Create a circle with radius 125

SimpleCircle circle3 = **new** SimpleCircle(125);

System.out.println("The area of the circle of radius "

+ circle3.radius + " is " + circle3.getArea());

// Modify circle radius

circle2.radius = 100; // or circle2.setRadius(100)

System.out.println("The area of the circle of radius "

+ circle2.radius + " is " + circle2.getArea());

}

}

// Define the circle class with two constructors

**class** SimpleCircle {

**double** radius;

/\*\* Construct a circle with radius 1 \*/

SimpleCircle() {

radius = 1;

}

/\*\* Construct a circle with a specified radius \*/

SimpleCircle(**double** newRadius) {

radius = newRadius;

}

/\*\* Return the area of this circle \*/

**double** getArea() {

**return** radius \* radius \* Math.PI;

}

/\*\* Return the perimeter of this circle \*/

**double** getPerimeter() {

**return** 2 \* radius \* Math.PI;

}

/\*\* Set a new radius for this circle \*/

**void** setRadius(**double** newRadius) {

radius = newRadius;

}

}