

## GitHub/CSCI155W1H1/HW1P2\_Code.java

```
1  /*
2  Name: Hunter Poole
3  Date: 1/29/25
4  Homework #: 1
5  Problem #: 2
6  Source File: HW1P2_Code
7  Action: Given the radius of a circle, calculates and then prints the volume and
8  surface area of the sphere for that circle.
9  */
10 import java.util.Scanner;
11
12 public class HW1P2_Code {
13     public static void main(String[] args) throws Exception {
14
15         Scanner Radius_Input = new Scanner(System.in);
16         System.out.print("Enter the radius of the circle: ");
17         float Radius = Radius_Input.nextFloat();
18
19         while (Radius <=0) {
20             System.out.print("Please enter a positive number: ");
21             Radius = Radius_Input.nextFloat();
22         }
23
24         Radius_Input.close();
25
26         // Volume = 4/3pir^3
27         // Surface Area = 4pir^2
28         double Volume = Radius * Radius * Radius * 3.1415926 * 4 / 3;
29         double Surface_Area = Radius * Radius * 3.1415926 * 4;
30
31         System.out.println("The volume of the sphere is: " + Volume + "^3");
32         System.out.println("The surface area of the sphere is: " + Surface_Area +
33         "^2");
34     }
35 }
36
37 /* I am using VSCode, output below is the full terminal output */
38
39 /*
40 hunterpoole@Megs-MacBook-Pro Documents % /usr/bin/env /Library/Java/
41 JavaVirtualMachines/temurin-21.jdk/Contents/Home/bin/java -XX:+ShowCodeDetailsInExc-
42 eption
43 nMessages -cp /Users/hunterpoole/Library/Application\ Support/Code/User/
44 workspaceStorage/aa4af2d5ea8777f0c20fee4aa25f3c30/redhat.java/jdt_ws/Documents_5c3529
45 dc/bin HW1P2_Code
```

```
43 |
44 | Enter the radius of the circle: 6
45 | The volume of the sphere is: 904.7786688^3
46 | The surface area of the sphere is: 452.3893344^2
47 |
48 | hunterpoole@Megs-MacBook-Pro Documents %
49 | */
```