S.No: 9	Exp. Name: ***Volume of the Ball***	Date:2024-11-27

Aim:

Laasya recently bought a new volleyball from the sports shop. The ball appears to be medium-sized, and she is curious about its volume. Fortunately, she managed to measure the radius r of the ball accurately. Now, she wants to calculate the volume V of the spherical ball based on the radius. As a friend, you decide to help her find the volume using the mathematical formula for the volume of a sphere. Your task is to compute the volume of the volleyball and display the result.

The volume of a sphere can be calculated using the formula:
$V = \left(\frac{4.0}{3.0}\right) \times \pi \times (r \times r \times r)$
Take $\pi = 3.14$

Constraint:

- $1.00 \leq r \leq 5.00$

Input Format:

- The input consists of a single float value representing the radius of the ball.

Output Format:

- The program should output the volume rounded to six decimal places.

Source Code:

volumeOfBall.c

```
#include <stdio.h>

int main() {
    float radius, volume;
    const float pi = 3.14;
    scanf("%f" ,&radius );
   volume = (4.0/3.0)*pi *( radius * radius * radius );
    // Print the volume with 6 decimal places
    printf("%.6f\n", volume);

    return 0;
}
```

Execution Results - All test cases have succeeded!

Test Case - 1
User Output
1.72
21.303637

Test Case - 2
User Output
4.5
381.510010

Test Case - 3
User Output
1.5
14.130000

Test Case - 4
User Output
3.3
150.456238