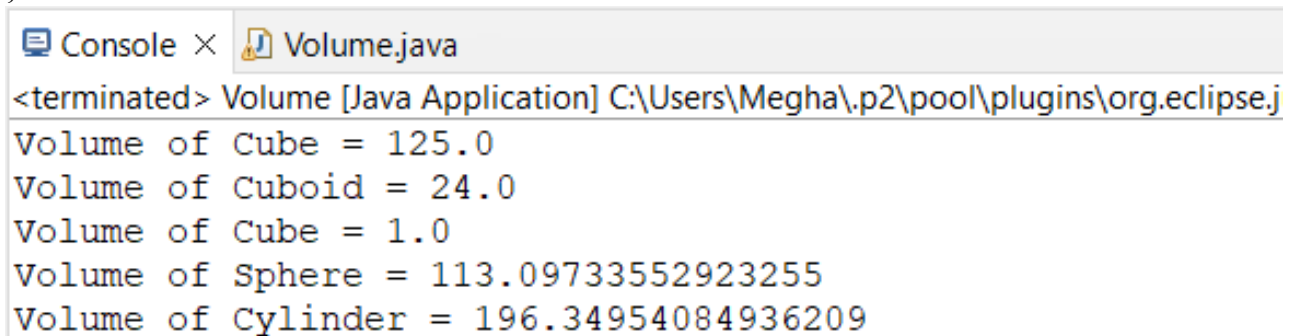


1] Write a program in JAVA to demonstrate the method and constructor overloading.

**package** Practical4;

```
public class Volume {  
    Volume(double side) {  
        double volume = side * side * side;  
        System.out.println("Volume of Cube = " + volume);  
    }  
    // Volume of Cuboid  
    Volume(double length, double width, double height) {  
        double volume = length * width * height;  
        System.out.println("Volume of Cuboid = " + volume);  
    }  
    // Volume of Cylinder  
    void findVolume(double radius, double height) {  
        double volume = Math.PI * radius * radius * height;  
        System.out.println("Volume of Cylinder = " + volume);  
    }  
    // Volume of Sphere  
    void findVolume(double radius) {  
        double volume = (4.0 / 3.0) * Math.PI * radius * radius * radius;  
        System.out.println("Volume of Sphere = " + volume);  
    }  
    public static void main(String[] args) {  
        Volume cube = new Volume(5);  
        Volume cuboid = new Volume(4, 3, 2);  
        // Method overloading  
        Volume shape = new Volume(1);  
        shape.findVolume(3.0);  
        shape.findVolume(2.5, 10);  
    }  
}
```



The screenshot shows the Eclipse IDE interface with a console window titled "Console x Volume.java". The console output displays the results of the program's execution, showing the volume calculations for a cube, cuboid, sphere, and cylinder using the overloaded methods.

```
<terminated> Volume [Java Application] C:\Users\Megha\.p2\pool\plugins\org.eclipse.j  
Volume of Cube = 125.0  
Volume of Cuboid = 24.0  
Volume of Cube = 1.0  
Volume of Sphere = 113.09733552923255  
Volume of Cylinder = 196.34954084936209
```