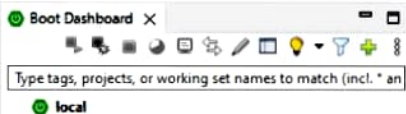
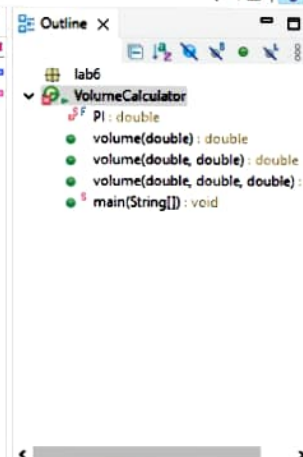


```
29
30
31 // Calculate sphere volume
32 double radius = 5.0;
33 double sphereVolume = calculator.volume(radius);
34 System.out.println("Sphere Volume: " + sphereVolume);
35
36 // Calculate cylinder volume
37 double height = 10.0;
38 double cylinderVolume = calculator.volume(height, radius);
39 System.out.println("Cylinder Volume: " + cylinderVolume);
40
41 // Calculate cuboid volume
42 double length = 8.0;
43 double breadth = 6.0;
44 double cuboidVolume = calculator.volume(length, breadth, height);
45 System.out.println("Cuboid Volume: " + cuboidVolume);
46
47
48 }
49
50
51
```



Problems Javadoc Declaration Console

```
<terminated> VolumeCalculator [Java Application] C:\Users\DELL\AppData\Local\Temp\Rar$EXa3952.48535\sts-4.26.0.RELEASE\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64_21.
Sphere Volume: 523.8095238095237
Cylinder Volume: 785.7142857142857
Cuboid Volume: 480.0
```



Package Explorer

- lab
- project
 - JRE System Library [JavaSE-21]
 - src
 - lab6
 - ShowRoom.java
- module-info.java
- lab

Boot Dashboard

Type tags, projects, or working set names to match (incl. * and ? wildcards)

- local

```
module-info.java  prime.java  ShowRoom.java
1 package lab6;
2
3 import java.util.Scanner;
4
5
6
7 // 1000 Auto-generated method stub
8 import java.util.Scanner;
9
10 class ShowRoom {
11     // Instance variables
12     String name;
13     long mobno;
14     double cost;
15     double dis;
16     double amount;
17
18     // Default constructor to initialize data members
19     ShowRoom() {
20         name = "";
21         mobno = 0;
22         cost = 0.0;
23         dis = 0.0;
24         amount = 0.0;
25     }
26
27     // Method to input customer name, mobile number, and cost
28     void input() {
29         Scanner sc = new Scanner(System.in);
30
31         System.out.print("Enter customer name: ");
32         name = sc.nextLine();
33
34         System.out.print("Enter mobile number: ");
35         mobno = sc.nextLong();
36
37         System.out.print("Enter the cost of purchased items: ");
38         cost = sc.nextDouble();
39     }
40
41     // Method to calculate discount and final amount
```

Outline

- lab6
 - ShowRoom
 - name: String
 - mobno: long
 - cost: double
 - dis: double
 - amount: double
 - ShowRoom()
 - input(): void
 - calculate(): void
 - display(): void
 - main(String[]) : void

Terminated: ShowRoom (Java Application) C:\Users\HP\Documents\New folder\sts-4.26.0.RELEASE\workspace\src\prime\src\openjdk.hotspot.jvmti.win32.x86_64_21.0.4.v20240802-1551\src\bin\java.exe (21-Nov-2024 9:41:50 am - 9:42:51 am) [pid:16376]

```
Enter customer name: nithya priye
Enter mobile number: 6384629924
Enter the cost of purchased items: 7500

Customer Name: nithya priye
Mobile Number: 6384629924
Cost of Items Purchased: Rs. 7500.0
Discount: 5.0%
Amount to be paid after discount: Rs. 7125.0
```

The screenshot shows the Spring Tool Suite 4 IDE with the following components:

- Package Explorer:** Displays the project structure with folders 'lab' and 'project'. Inside 'project', there is a 'src' folder containing 'lab6', which includes 'Employee.java', 'Main.java', 'ShowRoom.java', 'Student.java', 'project', and 'module-info.java'.
- Editor:** Shows the code for 'Employee.java' and 'Faculty.java'.

```
1 package lab6;
2
3
4 //Employee class (parent)
5 class Employee {
6     String name;
7     int id;
8     String department;
9
10    Employee(String name, int id, String department) {
11        this.name = name;
12        this.id = id;
13        this.department = department;
14    }
15
16    void display() {
17        System.out.println("Employee Information:");
18        System.out.println("Name: " + name);
19        System.out.println("ID: " + id);
20        System.out.println("Department: " + department);
21    }
22 }
23
24 //Faculty class (child) extending Employee
25 class Faculty extends Employee {
26     String subject;
27     int experience;
28
29    Faculty(String name, int id, String department, String subject, int experience) {
30        super(name, id, department); // Calling Employee constructor
31        this.subject = subject;
32        this.experience = experience;
33    }
34
35    // Overriding display() method
36    @Override
37    void display() {
38        super.display(); // Calling Employee's display()
39        System.out.println("Faculty Information:");
40        System.out.println("Subject: " + subject);
41        System.out.println("Experience (years): " + experience);
42    }
43 }
44
45
```
- Console:** Shows the output of the application.

```
<terminated> Main [Java Application] C:\Users\HP\Documents\New folder\sts-4.26.0.RELEASE\plugins\org.eclipse.jdt.ui\org.eclipse.jdt.ui\win32.x86_64\21.0.0\20240002-1551\jre\bin\java.exe (21-Nov-2024, 10:44:11 am - 10:44:14 am) [pid: 16400]
Employee Information:
Name: NithyaPriya
ID: 543
Department: ECE
Faculty Information:
Subject: DSD
Experience (years): 5
```

