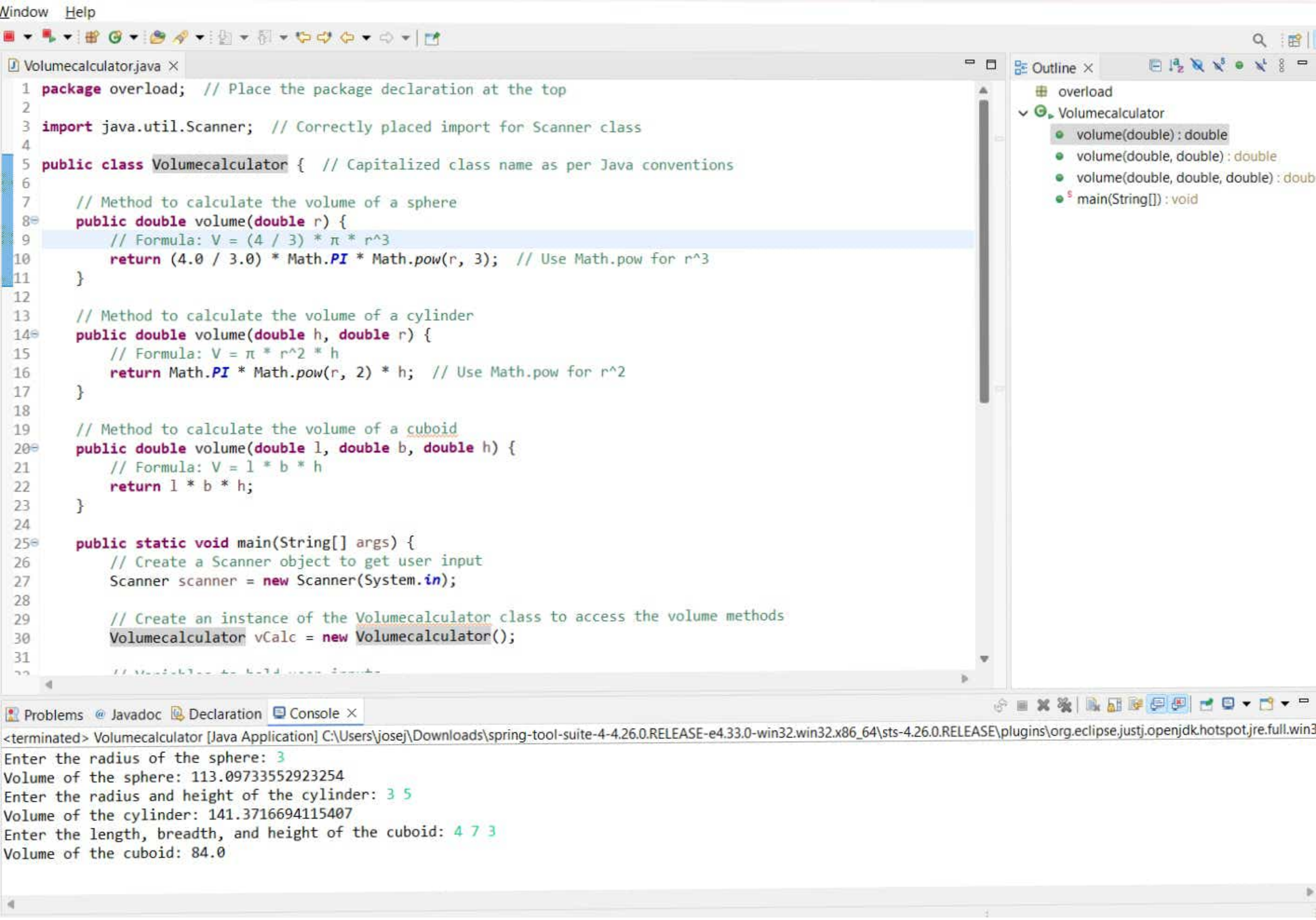
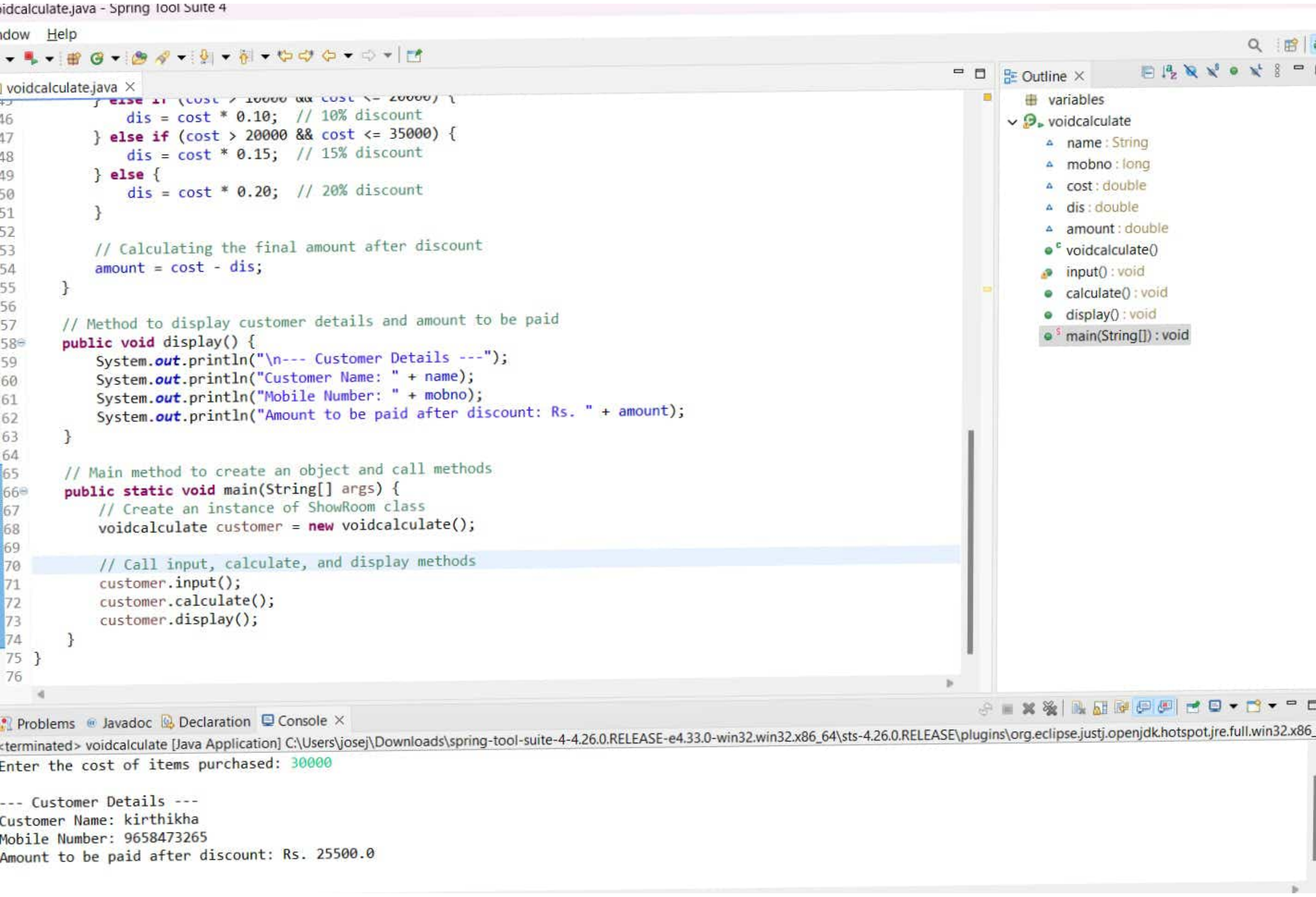


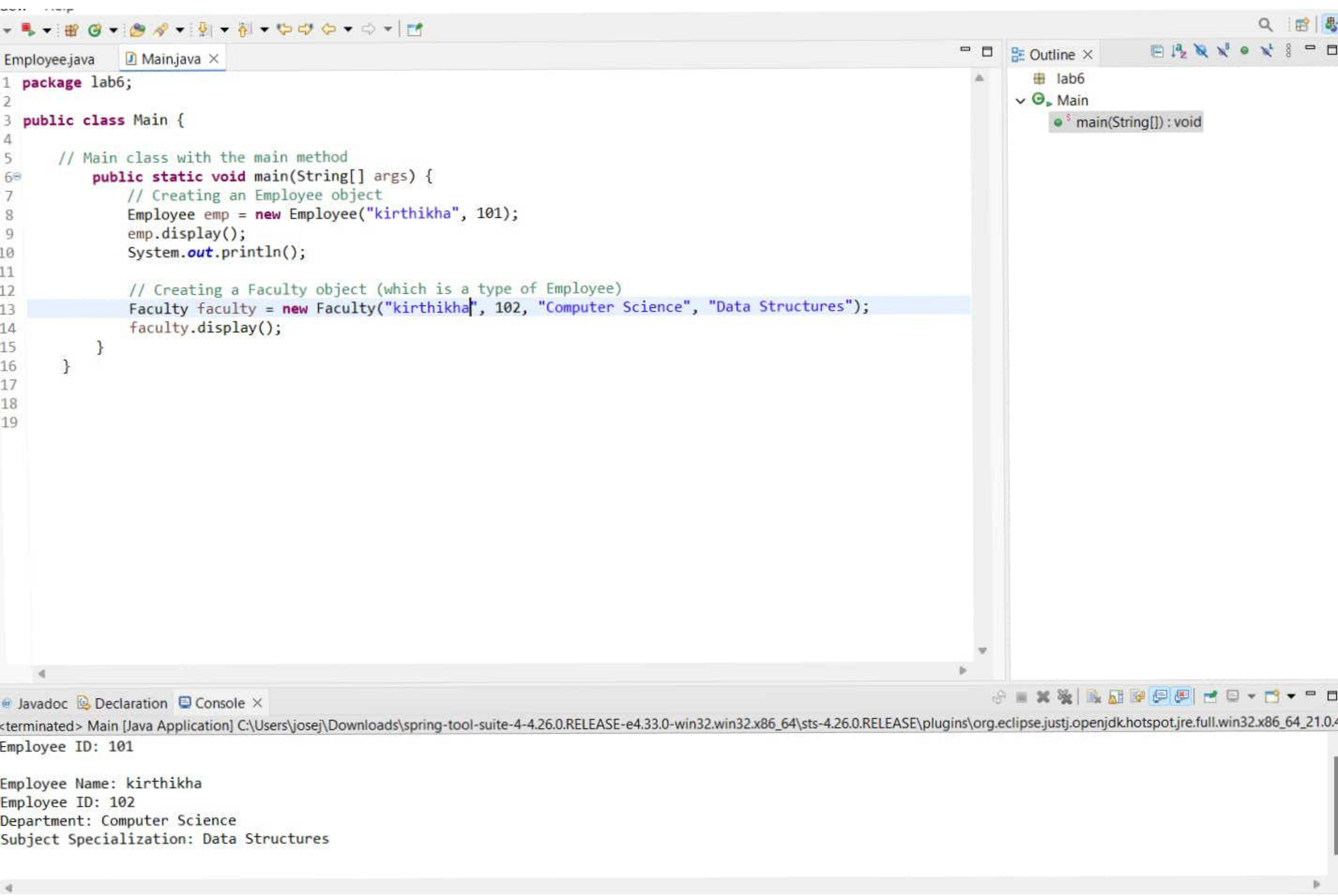
```java
package overload;  // Place the package declaration at the top

import java.util.Scanner;  // Correctly placed import for Scanner class

public class Volumecalculator {  // Capitalized class name as per Java conventions

    // Method to calculate the volume of a sphere
    public double volume(double r) {
        // Formula: V = (4 / 3) * π * r^3
        return (4.0 / 3.0) * Math.PI * Math.pow(r, 3);  // Use Math.pow for r^3
    }

    // Method to calculate the volume of a cylinder
    public double volume(double h, double r) {
        // Formula: V = π * r^2 * h
        return Math.PI * Math.pow(r, 2) * h;  // Use Math.pow for r^2
    }

    // Method to calculate the volume of a cuboid
    public double volume(double l, double b, double h) {
        // Formula: V = l * b * h
        return l * b * h;
    }

    public static void main(String[] args) {
        // Create a Scanner object to get user input
        Scanner scanner = new Scanner(System.in);

        // Create an instance of the Volumecalculator class to access the volume methods
        Volumecalculator vCalc = new Volumecalculator();

        // Variables to hold user inputs
```

```
<terminated> Volumecalculator [Java Application] C:\Users\josej\Downloads\spring-tool-suite-4-4.26.0.RELEASE-e4.33.0-win32.win32.x86_64\sts-4.26.0.RELEASE\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win3
Enter the radius of the sphere: 3
Volume of the sphere: 113.09733552923254
Enter the radius and height of the cylinder: 3 5
Volume of the cylinder: 141.3716694115407
Enter the length, breadth, and height of the cuboid: 4 7 3
Volume of the cuboid: 84.0
```



```
        } else if (cost > 10000 && cost <= 20000) {
            dis = cost * 0.10;  // 10% discount
        } else if (cost > 20000 && cost <= 35000) {
            dis = cost * 0.15;  // 15% discount
        } else {
            dis = cost * 0.20;  // 20% discount
        }

        // Calculating the final amount after discount
        amount = cost - dis;
    }

    // Method to display customer details and amount to be paid
    public void display() {
        System.out.println("\n--- Customer Details ---");
        System.out.println("Customer Name: " + name);
        System.out.println("Mobile Number: " + mobno);
        System.out.println("Amount to be paid after discount: Rs. " + amount);
    }

    // Main method to create an object and call methods
    public static void main(String[] args) {
        // Create an instance of ShowRoom class
        voidcalculate customer = new voidcalculate();

        // Call input, calculate, and display methods
        customer.input();
        customer.calculate();
        customer.display();
    }
}
```

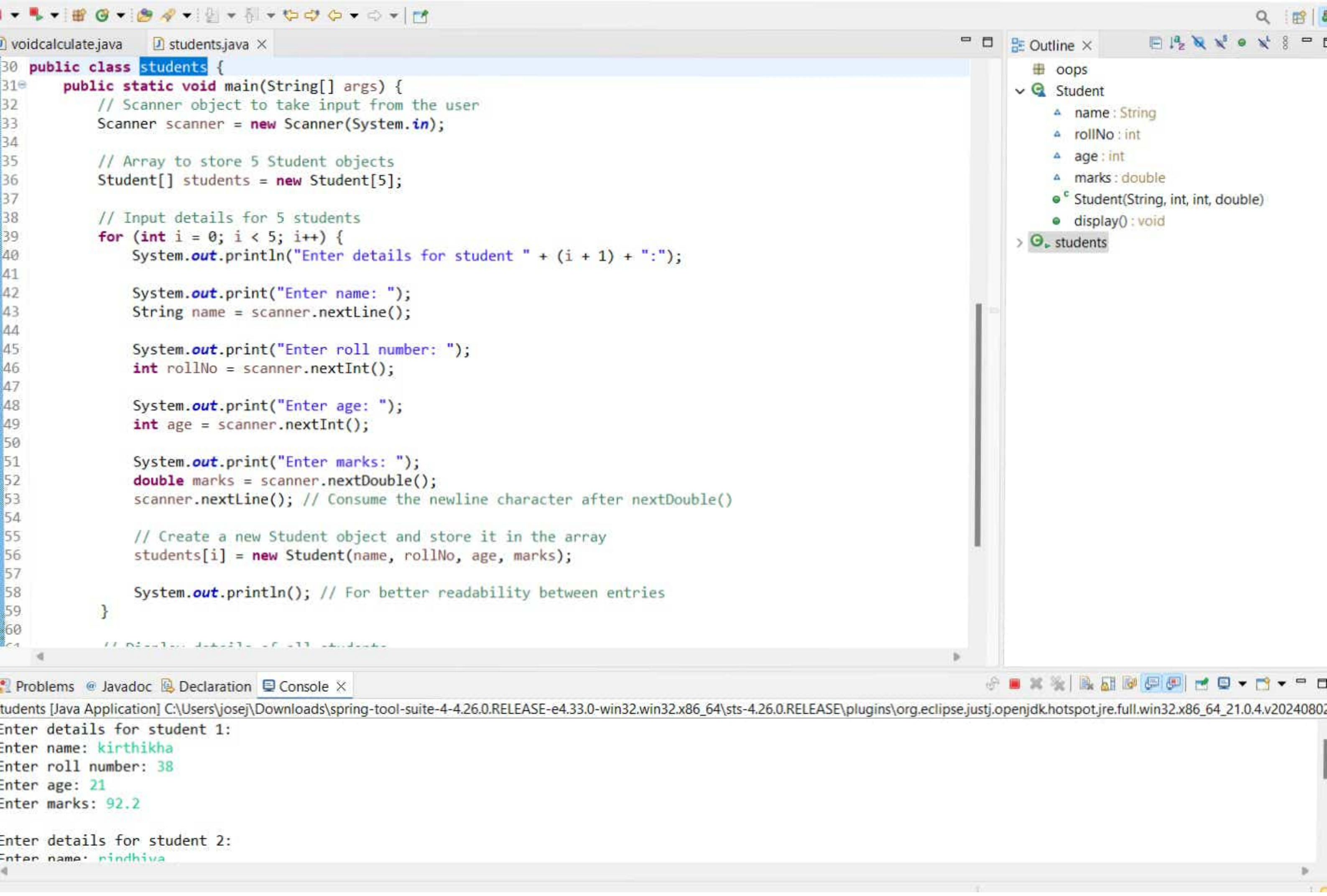
```
<terminated> voidcalculate [Java Application] C:\Users\josej\Downloads\spring-tool-suite-4-4.26.0.RELEASE-e4.33.0-win32.win32.x86_64\sts-4.26.0.RELEASE\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_
Enter the cost of items purchased: 30000

--- Customer Details ---
Customer Name: kirthikha
Mobile Number: 9658473265
Amount to be paid after discount: Rs. 25500.0
```



```java
package lab6;

public class Main {

    // Main class with the main method
        public static void main(String[] args) {
            // Creating an Employee object
            Employee emp = new Employee("kirthikha", 101);
            emp.display();
            System.out.println();

            // Creating a Faculty object (which is a type of Employee)
            Faculty faculty = new Faculty("kirthikha", 102, "Computer Science", "Data Structures");
            faculty.display();
        }
    }
```

<terminated> Main [Java Application] C:\Users\josej\Downloads\spring-tool-suite-4-4.26.0.RELEASE-e4.33.0-win32.win32.x86_64\sts-4.26.0.RELEASE\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_21.0.4

```
Employee ID: 101

Employee Name: kirthikha
Employee ID: 102
Department: Computer Science
Subject Specialization: Data Structures
```



```java
public class students {
    public static void main(String[] args) {
        // Scanner object to take input from the user
        Scanner scanner = new Scanner(System.in);

        // Array to store 5 Student objects
        Student[] students = new Student[5];

        // Input details for 5 students
        for (int i = 0; i < 5; i++) {
            System.out.println("Enter details for student " + (i + 1) + ":");

            System.out.print("Enter name: ");
            String name = scanner.nextLine();

            System.out.print("Enter roll number: ");
            int rollNo = scanner.nextInt();

            System.out.print("Enter age: ");
            int age = scanner.nextInt();

            System.out.print("Enter marks: ");
            double marks = scanner.nextDouble();
            scanner.nextLine(); // Consume the newline character after nextDouble()

            // Create a new Student object and store it in the array
            students[i] = new Student(name, rollNo, age, marks);

            System.out.println(); // For better readability between entries
        }

        // Display details of all students
```

```
tudents [Java Application] C:\Users\josej\Downloads\spring-tool-suite-4-4.26.0.RELEASE-e4.33.0-win32.win32.x86_64\sts-4.26.0.RELEASE\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_21.0.4.v20240802
Enter details for student 1:
Enter name: kirthikha
Enter roll number: 38
Enter age: 21
Enter marks: 92.2

Enter details for student 2:
Enter name: rindhiya
```