

lab4/src/constructor/lab4.java - Spring Tool Suite 4

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lab4.java

```
11     emp.displayInfo();
12 }
13 }
14
15 // Define Employee class
16 class Employee {
17     // Attributes
18     private int id;
19     private String name;
20     private double salary;
21
22     // Constructor
23     public Employee(int id, String name, double salary) {
24         this.id = id;
25         this.name = name;
26         this.salary = salary;
27     }
28
29     // Method to display employee information
30     public void displayInfo() {
31         System.out.println("Employee ID: " + id);
32         System.out.println("Employee Name: " + name);
33         System.out.println("Employee Salary: " + salary);
34     }
35 }
36 }
```

Outline

- constructor
- lab4
 - main(String[]) : void
- Employee
 - id : int
 - name : String
 - salary : double
 - Employee(int, String, double)
 - displayInfo() : void

Problems Javadoc Declaration Console

terminated> lab4 [Java Application] C:\Users\ELCOT\Desktop\sts-4.26.0.RELEASE\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_21.0.4.v2

```
Employee ID: 150
Employee Name: Rindhiya
Employee Salary: 20000.0
```

E - shapes/src/method/shapes.java - Spring Tool Suite 4

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```
lab4.java  shapes.java x
13 }
14
15 public static double areaOfCircle(double radius) {
16     return Math.PI * radius * radius;
17 }
18
19 public static void main(String[] args) {
20     Scanner scanner = new Scanner(System.in);
21
22     System.out.print("Enter the base of the triangle: ");
23     double base = scanner.nextDouble();
24     System.out.print("Enter the height of the triangle: ");
25     double height = scanner.nextDouble();
26     System.out.println("Area of Triangle: " + areaOfTriangle(base, height));
27     System.out.print("Enter the length of the rectangle: ");
28     double length = scanner.nextDouble();
29     System.out.print("Enter the width of the rectangle: ");
30     double width = scanner.nextDouble();
31     System.out.println("Area of Rectangle: " + areaOfRectangle(length, width));
32     System.out.print("Enter the radius of the circle: ");
33     double radius = scanner.nextDouble();
34     System.out.println("Area of Circle: " + areaOfCircle(radius));
35
36     scanner.close();
37 }
38 }
```

Outline x

method
shapes
areaOfTriangle(double, double)
areaOfRectangle(double, double)
areaOfCircle(double) : double
main(String[]) : void

Problems Javadoc Declaration Console x

<terminated> shapes [Java Application] C:\Users\ELCOT\Desktop\sts-4.26.0.RELEASE\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_21.0.4.v

```
Enter the base of the triangle: 4
Enter the height of the triangle: 5
Area of Triangle: 10.0
Enter the length of the rectangle: 6
Enter the width of the rectangle: 8
Area of Rectangle: 48.0
Enter the radius of the circle: 1
Area of Circle: 3.141592653589793
```

lab04.java ×

```
21     sortDescending(array);
22     System.out.println("Sorted Array (Descending): " + Arrays.toString(array));
23 }
24
25 // Method to reverse an array
26 public static void reverseArray(Integer[] array) {
27     Collections.reverse(Arrays.asList(array));
28 }
29
30 // Method to find the largest number in an array
31 public static int findLargest(Integer[] array) {
32     int max = array[0];
33     for (int num : array) {
34         if (num > max) {
35             max = num;
36         }
37     }
38     return max;
39 }
40
41 // Method to sort an array in descending order
42 public static void sortDescending(Integer[] array) {
43     Arrays.sort(array, Collections.reverseOrder());
44 }
45 }
46
```

Outline ×

- array
- lab04
 - main(String[]) : void
 - reverseArray(Integer[]) : void
 - findLargest(Integer[]) : int
 - sortDescending(Integer[]) :

Problems Javadoc Declaration Console ×

<terminated> lab04 [Java Application] C:\Users\ELCOT\Desktop\sts-4.26.0.RELEASE\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_21.0.4.v2

Reversed Array: [25, 32, 88, 99, 13, 50, 42]

Largest Number: 99

Sorted Array (Descending): [99, 88, 50, 42, 32, 25, 13]

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46 : 1 : 1373

- student/src/subject/student.java - Spring Tool Suite 4

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student.java × subjectmarks.java

```
36     grade = 'A';
37 } else if (average >= 80) {
38     grade = 'B';
39 } else if (average >= 70) {
40     grade = 'C';
41 } else if (average >= 60) {
42     grade = 'D';
43 } else {
44     grade = 'F';
45 }
46 }
47
48 // Method to display the results
49 public void displayResults() {
50     System.out.println("\nTotal Marks: " + total);
51     System.out.println("Average Marks: " + average);
52     System.out.println("Grade: " + grade);
53 }
54
55 public static void main(String[] args) {
56     student s = new student(); // Corrected to use the correct class name
57     s.inputMarks();
58     s.calculateTotalAndAverage();
59     s.calculateGrade();
60     s.displayResults();
61 }
```

Outline ×

subject
student

Problems Javadoc Declaration Console ×

<terminated> student [Java Application] C:\Users\ELCOT\Desktop\sts-4.26.0.RELEASE\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_21.0.4\

Subject 1: 90
Subject 2: 80
Subject 3: 80
Subject 4: 75
Subject 5: 90

Total Marks: 415
Average Marks: 83.0
Grade: B