

workspace-gang-tool-suite-4-4.76.0.RT.FASP - com.gangw/employee/EmployeeMain.java - Spring Tool Suite 4

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Package Explorer X

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 - RE System Library [Java SE-7.0]
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 - array
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 - calculator
 - ShapeAreaCalculator.java
 - employee
 - Employee.java
 - EmployeeMain.java
 - packageoperator
 - LogicalOperator.java
 - RelationalOperator.java
 - ShiftOperator.java
 - UnaryOperator.java
 - student
 - Student.java
 - module-info.java

module-info... Employee.java EmployeeMain... Student.java BankCustom...

```
1 package employee;
2
3 public class EmployeeMain {
4
5     // 100% Auto-generated method stub
6     public static void main(String[] args) {
7         Employee emp=new Employee (123,"Rama",30000);
8         System.out.println(emp);
9         emp.setSalary(30000);
10        System.out.println(emp);
11    }
12 }
13
14
15
16
```

Outline X

 - employee
 - EmployeeMain
 - main(String[] args)

Problems Declaration Console X

terminated: EmployeeMain [Java Application] C:\Users\DELL\AppData\Local\Temp\flutter_tools\4.76.0.RT.FASP\plugins\org.springframework.boot\spring-jar\bin\win32_x86_64_71.0.4

Employee [id=123, name=Rama, salary=30000]
Employee [id=123, name=Rama, salary=30000]

Type tags, projects, or working set names to match (incl. * as

local

Package Explorer

- corejava
 - JRE System Library [JavaSE-21]
 - src
 - array
 - ArrayOperations.java
 - bank
 - calculator
 - ShapeAreaCalculator.java
 - employee
 - Employee.java
 - EmployeeMain.java
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 - ShiftOperator.java
 - urnaryprgm.java
 - module-info.java

Outline

- array
 - ArrayOperations
 - reverseArray(int[]): void
 - findLargestNumber(int[]): int
 - sortArrayDescending(int[]): void
 - main(String[]): void

EmployeeMain.java

```
26     int largest = arr[0];
27     for (int i = 1; i < arr.length; i++) {
28         if (arr[i] > largest) {
29             largest = arr[i];
30         }
31     }
32     return largest;
33 }
34
35 // Method to sort the array in descending order
36 public static void sortArrayDescending(int[] arr) {
37     Arrays.sort(arr); // First sort in ascending order
38     // Then reverse the array to get descending order
39     reverseArray(arr);
40 }
41
42 public static void main(String[] args) {
43     // Example array
44     int[] arr = {17, 32, 19, 18, 12, 16};
45
46     // Print original array
47     System.out.println("Original Array: " + Arrays.toString(arr));
48
49     // Reverse the array
50     reverseArray(arr);
51     System.out.println("Reversed Array: " + Arrays.toString(arr));
52
53     // Find the largest number
```

Console

```
<terminated> ArrayOperations [Java Application] C:\Users\DELL\AppData\Local\Temp\Rar$EXe9188.2728\sts-4.26.0.RELEASE\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64_21.0.4
Original Array: [17, 32, 19, 18, 12, 16]
Reversed Array: [16, 12, 18, 19, 32, 17]
Largest Number: 32
Sorted Array in Descending Order: [32, 19, 18, 17, 16, 12]
```

The screenshot shows the Eclipse IDE interface. The Package Explorer on the left displays the project structure: corejava > JRE System Library [JavaSE-21] > src > array > ArrayOperations.java, bank > calculator > ShapeAreaCalculator.java, employee > Employee.java, EmployeeMain.java, packageoperator > logicaloperator.java, RelationalOperator.java, ShiftOperator.java, unaryprgm.java, student > Student.java, module-info.java. The main editor shows the Student.java file with the following code:

```
58 // System.out.println("Marks in Subjects: ");
59 for (int i = 0; i < 5; i++) {
60     System.out.println("Subject " + (i + 1) + ": " + marks[i]);
61 }
62 System.out.println("Total Marks: " + total);
63 System.out.println("Average Marks: " + average);
64 System.out.println("Grade: " + grade);
65 }
66
67
68 public static void main(String[] args) {
69     // Create a Student object
70     Student student = new Student();
71
72     // Input student details and marks
73     student.inputStudentDetails();
74
75     // Calculate total, average, and grade
76     student.calculateTotalAndAverage();
77     student.calculateGrade();
78
79     // Display results
80     student.displayResults();
81 }
```

The Outline on the right shows the class structure:

- student
 - Student
 - name: String
 - marks: int[]
 - total: int
 - average: double
 - grade: String
 - inputStudentDetails(): void
 - calculateTotalAndAverage(): void
 - calculateGrade(): void
 - displayResults(): void
 - main(String[]): void

The screenshot shows the Eclipse IDE interface with the console output of the Student application. The console output is as follows:

```
<terminated> Student [Java Application] C:\Users\DELL\AppData\Local\Temp\Rar$EXa9188.2728\sts-4.26.0.RELEASE\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_21.0.4.v2024-03-20\jre\bin\java.exe
Student Name: Meena
Marks in Subjects:
Subject 1: 89
Subject 2: 90
Subject 3: 97
Subject 4: 86
Subject 5: 94
Total Marks: 456
Average Marks: 91.2
Grade: A
```



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 - module-info.java

Boot Dashboard X

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

local

EmployeeMain... BankCustom... BankCustom... ShapeAreaCal... X

```
1 package calculator;
2
3
4 import java.util.Scanner;
5
6 public class ShapeAreaCalculator {
7
8     // Method to calculate the area of a triangle
9     public static double calculateTriangleArea(double base, double height) {
10         return 0.5 * base * height;
11     }
12
13     // Method to calculate the area of a rectangle
14     public static double calculateRectangleArea(double length, double width) {
15         return length * width;
16     }
17
18     // Method to calculate the area of a circle
19     public static double calculateCircleArea(double radius) {
20         return Math.PI * radius * radius;
21     }
22
23     public static void main(String[] args) {
24         Scanner scanner = new Scanner(System.in);
25
26         System.out.println("Choose the shape to calculate area:");
27         System.out.println("1. Triangle");
28         System.out.println("2. Rectangle");
29     }
30 }
```

Outline X

- calculator
 - ShapeAreaCalculator
 - calculateTriangleArea(double, double)
 - calculateRectangleArea(double, double)
 - calculateCircleArea(double, double)
 - main(String[]): void

Problems Javadoc Declaration Console X

```
<terminated> ShapeAreaCalculator [Java Application] C:\Users\DELL\AppData\Local\Temp\Rar$EXa9188.2728\sts-4.26.0.RELEASE\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64
3. Circle
Enter your choice (1, 2, or 3): 2
Enter the length of the rectangle: 7
Enter the width of the rectangle: 8
The area of the rectangle is: 56.0
```