

Main.java

```
1 import java.util.Scanner;
2
3 public class Main {
4     public static void main(String[] args) {
5         int[] scores = new int[9];
6         Scanner scanner = new Scanner(System.in);
7
8         System.out.println("Enter 9 integer scores:");
9
10        for (int i = 0; i < 9; i++) {
11            scores[i] = scanner.nextInt();
12        }
13
14        System.out.println("Scores entered:");
15        for (int score : scores) {
16            System.out.print(score + " ");
17        }
18    }
19 }
20
```

Enter 9 integer scores:  
10 9 8 9 7 10 10 9 10  
Scores entered:  
10 9 8 9 7 10 10 9 10  
...Program finished with exit code 0  
Press ENTER to exit console.

The screenshot shows a Java development environment with the following interface elements:

- Top Bar:** Includes icons for file operations (New, Open, Save, Run, Stop, Share, Save), a language dropdown (Language: Java), and settings.
- Code Editor:** Displays the file `Main.java` containing the following Java code:

```
1 import java.util.Scanner;
2
3 public class Main {
4     public static void main(String[] args) {
5         int[][] matrix = new int[][]{{5, 5, 5}, {5, 5, 5}, {5, 5, 5}, {5,
6
7         System.out.println("Output:");
8         for (int i = 0; i < matrix.length; i++) {
9             for (int j = 0; j < matrix[i].length; j++) {
10                 System.out.print(matrix[i][j] + " ");
11             }
12             System.out.println();
13         }
14     }
15 }
```
- Terminal Window:** Shows the output of the program execution:

```
Output:
5 5 5
5 5 5
5 5 5
5 5 5
...Program finished with exit code 0
Press ENTER to exit console.
```

Run Debug Stop Share Save Beautify

Language Java



input

Main.java

```
1 import java.util.Scanner;
2
3 public class Main {
4     public static void main(String[] args) {
5         float[][] price = new float[5][2];
6         Scanner scanner = new Scanner(System.in);
7
8         for (int i = 0; i < 5; i++) {
9             System.out.println("Enter prices for product " + (i + 1) + ":");
10            for (int j = 0; j < 2; j++) {
11                price[i][j] = scanner.nextFloat();
12            }
13        }
14
15        System.out.println("Prices entered:");
16        for (int i = 0; i < 5; i++) {
17            System.out.print("Product " + (i + 1) + ": ");
18            for (int j = 0; j < 2; j++) {
19                System.out.print(price[i][j] + ".");
20            }
21            System.out.println();
22        }
23
24        scanner.close();
25    }
26}
27
```

```
Enter prices for product 1:
54
45
Enter prices for product 2:
15
13
Enter prices for product 3:
45
4815
Enter prices for product 4:
15
15
Enter prices for product 5:
51
15
Prices entered:
Product 1: 54.0.45.0.
Product 2: 15.0.13.0.
Product 3: 45.0.4815.0.
Product 4: 15.0.15.0.
Product 5: 51.0.15.0.

...Program finished with exit code 0
Press ENTER to exit console.
```

Run Debug Stop Share Save Beautify

Language

input

Main.java

```
1 public class Main {  
2     public static void main(String[] args) {  
3         byte[] values = new byte[10];  
4  
5         for (int i = 0; i < values.length; i++) {  
6             values[i] = 1;  
7         }  
8  
9  
10        for (byte value : values) {  
11            System.out.print(value + " ");  
12        }  
13    }  
14}  
15
```

```
1 1 1 1 1 1 1 1 1 1  
...Program finished with exit code 0  
Press ENTER to exit console.
```

The screenshot shows a Java development environment with a dark theme. At the top, there is a toolbar with icons for file operations (New, Open, Save, Run, Stop, Share, Save, Beautify) and settings. The main area displays a Java code editor with the file name "Main.java". The code implements a simple program to calculate the average of five test scores using the Scanner class.

```
1 import java.util.Scanner;
2
3 public class Main {
4     public static void main(String[] args) {
5         Scanner scanner = new Scanner(System.in);
6         int numberOfTests = 5;
7         int[] scores = new int[numberOfTests];
8
9         for (int i = 0; i < numberOfTests; i++) {
10             System.out.print("Enter score for test ");
11             scores[i] = scanner.nextInt();
12         }
13
14         int total = 0;
15         for (int score : scores) {
16             total += score;
17         }
18         double average = (double) total / numberOfTests;
19
20         System.out.printf("The average score is %f", average);
21     }
22 }
```

The right side of the interface shows the standard Java console output. It prompts for five integer inputs (89, 79, 98, 100, 97) and then prints the calculated average (92.60). The output ends with a message indicating the program has finished and prompting the user to press Enter to exit.

```
Enter score for test 1: 89
Enter score for test 2: 79
Enter score for test 3: 98
Enter score for test 4: 100
Enter score for test 5: 97
The average score is: 92.60
...
Program finished with exit code 0
Press ENTER to exit console.
```

Run Debug Stop Share Save Beautify Language Java input

MatrixOperations.java

```
1 import java.util.Scanner;
2 public class MatrixOperations {
3     public static void main(String[] args) {
4         Scanner scanner = new Scanner(System.in);
5         int[][] matrixA = new int[2][2];
6         int[][] matrixB = new int[2][2];
7
8         boolean running = true;
9         while (running) {
10             System.out.println("Menu:");
11             System.out.println("a. Enter Matrix A");
12             System.out.println("b. Enter Matrix B");
13             System.out.println("c. Display A + B");
14             System.out.println("d. Display A - B");
15             System.out.println("e. Display A * B");
16             System.out.println("f. Exit");
17             System.out.print("Choose an option: ");
18             String choice = scanner.nextLine().toLowerCase();
19
20             switch (choice) {
21                 case "a":
22                     matrixA = enterMatrix(scanner, "A");
23                     break;
24                 case "b":
25                     matrixB = enterMatrix(scanner, "B");
26                     break;
27                 case "c":
28                     displayMatrix(addMatrices(matrixA, matrixB), "A + B");
29                     break;
30                 case "d":
31                     displayMatrix(subtractMatrices(matrixA, matrixB), "A - B");
32                     break;
33                 case "e":
34                     displayMatrix(multiplyMatrices(matrixA, matrixB), "A * B");
35                     break;
36                 case "f":
37                     running = false;
38                     break;
39                 default:
40                     System.out.println("Invalid option, please try again.");
41             }
42         }
43
44         System.out.println("Exiting program.");
45         scanner.close();
46     }
47 }
```

Menu:

- a. Enter Matrix A
- b. Enter Matrix B
- c. Display A + B
- d. Display A - B
- e. Display A \* B
- f. Exit

Choose an option: a

Enter values for Matrix A:

Element [1][1]: 1  
Element [1][2]: 0  
Element [2][1]: 0  
Element [2][2]: 1

Menu:

- a. Enter Matrix A
- b. Enter Matrix B
- c. Display A + B
- d. Display A - B
- e. Display A \* B
- f. Exit

Choose an option: b

Enter values for Matrix B:

Element [1][1]: 0  
Element [1][2]: 1  
Element [2][1]: 1  
Element [2][2]: 0

Menu:

- a. Enter Matrix A
- b. Enter Matrix B
- c. Display A + B
- d. Display A - B
- e. Display A \* B
- f. Exit

Choose an option: c

Result of A + B:

1 1  
1 1

Menu:

- a. Enter Matrix A
- b. Enter Matrix B
- c. Display A + B
- d. Display A - B
- e. Display A \* B
- f. Exit

Choose an option: f

Exiting program.

... Program finished with exit code 0

Press ENTER to exit console.

```

47
48     public static int[][] enterMatrix(Scanner scanner, String matrixName) {
49         int[][] matrix = new int[2][2];
50         System.out.println("Enter values for Matrix " + matrixName + ":");
51         for (int i = 0; i < 2; i++) {
52             for (int j = 0; j < 2; j++) {
53                 System.out.print("Element [" + (i + 1) + "][" + (j + 1) + "]: ");
54                 matrix[i][j] = scanner.nextInt();
55             }
56         }
57         scanner.nextLine();
58         return matrix;
59     }
60
61     public static int[][] addMatrices(int[][] a, int[][] b) {
62         int[][] result = new int[2][2];
63         for (int i = 0; i < 2; i++) {
64             for (int j = 0; j < 2; j++) {
65                 result[i][j] = a[i][j] + b[i][j];
66             }
67         }
68         return result;
69     }
70
71     public static int[][] subtractMatrices(int[][] a, int[][] b) {
72         int[][] result = new int[2][2];
73         for (int i = 0; i < 2; i++) {
74             for (int j = 0; j < 2; j++) {
75                 result[i][j] = a[i][j] - b[i][j];
76             }
77         }
78         return result;
79     }
80
81     public static int[][] multiplyMatrices(int[][] a, int[][] b) {
82         int[][] result = new int[2][2];
83         for (int i = 0; i < 2; i++) {
84             for (int j = 0; j < 2; j++) {
85                 result[i][j] = a[i][0] * b[0][j] + a[i][1] * b[1][j];
86             }
87         }
88         return result;
89     }
90
91     public static void displayMatrix(int[][] matrix, String operation) {
92         System.out.println("Result of " + operation + ":");
93         for (int[] row : matrix) {
94             for (int element : row) {
95                 System.out.print(element + " ");
96             }
97             System.out.println();
98         }
99     }
100 }
```

Menu:  
a. Enter Matrix A  
b. Enter Matrix B  
c. Display A + B  
d. Display A - B  
e. Display A \* B  
f. Exit  
Choose an option: a  
Enter values for Matrix A:  
Element [1][1]: 1  
Element [1][2]: 0  
Element [2][1]: 0  
Element [2][2]: 1  
Menu:  
a. Enter Matrix A  
b. Enter Matrix B  
c. Display A + B  
d. Display A - B  
e. Display A \* B  
f. Exit  
Choose an option: b  
Enter values for Matrix B:  
Element [1][1]: 0  
Element [1][2]: 1  
Element [2][1]: 1  
Element [2][2]: 0  
Menu:  
a. Enter Matrix A  
b. Enter Matrix B  
c. Display A + B  
d. Display A - B  
e. Display A \* B  
f. Exit  
Choose an option: c  
Result of A + B:  
1 1  
1 1  
Menu:  
a. Enter Matrix A  
b. Enter Matrix B  
c. Display A + B  
d. Display A - B  
e. Display A \* B  
f. Exit  
Choose an option: f  
Exiting program.

...Program finished with exit code 0  
Press ENTER to exit console.[]