



1.

  
Online Java Compiler



Main.java

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


Run


Share

Output

```
java -cp /tmp/41sQN6H1K4/Main
Enter 9 integer scores:
5
3
6
1
5
9
8
7
0
Scores entered:
5 3 6 1 5 9 8 7 0
=== Code Execution Successful ===
```

2.

  
Online Java Compiler



Main.java

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

Run

Share

## Output

```
java -cp /tmp/v8jfmU39U5/Main
```

```
Enter prices for product 1:
```

```
15
```

```
602
```

```
23
```

```
Enter prices for product 2:
```

```
5
```

```
0
```

```
90
```

```
Enter prices for product 3:
```

```
5
```

```
98
```

```
6
```

```
Enter prices for product 4:
```

```
8
```

```
9
```

```
4
```

```
Enter prices for product 5:
```

```
5
```

```
6
```

```
4
```

```
Enter prices for product 6:
```

```
59
```

```
26
```

```
100
```

```

36
Enter prices for product 8:
59
592
03
Enter prices for product 9:
25
10
20
Enter prices for product 10:
15
59
63
Prices entered:
Product 1: 15.0 60.0 23.0
Product 2: 5.0 0.0 90.0
Product 3: 5.0 9.0 6.0
Product 4: 8.0 9.0 4.0
Product 5: 5.0 6.0 4.0
Product 6: 59.0 26.0 100.0
Product 7: 89.0 9.0 36.0
Product 8: 59.0 59.0 3.0
Product 9: 25.0 10.0 20.0
Product 10: 15.0 59.0 63.0

```

3.

Main.java	Output
<pre> 1  import java.util.Scanner; 2  public class Main { 3      public static void main(String[] args) { 4          int[][] matrix = new int[][]{{5, 5, 5}, {5, 5, 5}, {5, 5, 5}, {5, 5, 5}}; 5          System.out.println("Output:"); 6          for (int i = 0; i &lt; matrix.length; i++) { 7              for (int j = 0; j &lt; matrix[i].length; j++) { 8                  System.out.print(matrix[i][j] + " "); 9              } 10             System.out.println(); 11         } 12     } 13 } </pre>	<pre> java -cp /tmp/xF9v1jduu5/Main Output: 5 5 5 5 5 5 5 5 5 5 5 5  === Code Execution Successful === </pre>

4.

Main.java	Output
<pre>1 public class Main { 2     public static void main(String[] args) { 3         byte[] values = new byte[10]; 4         for (int i = 0; i &lt; values.length; i++) { 5             values[i] = 1; 6         } 7         for (byte value : values) { 8             System.out.print(value + " "); 9         } 10    } 11 } 12 }</pre>	<pre>java -cp /tmp/Tpbe6hHjhw/Main 1 1 1 1 1 1 1 1 1 1 === Code Execution Successful ===</pre>

7.

Main.java	Output
<pre>1 import java.util.Scanner; 2 public class Main { 3     public static void main(String[] args) { 4         Scanner scanner = new Scanner(System.in); 5         int numberOfTests = 5; 6         int[] scores = new int[numberOfTests]; 7         for (int i = 0; i &lt; numberOfTests; i++) { 8             System.out.print("Enter score for test " + (i + 1) + ": "); 9             scores[i] = scanner.nextInt(); 10        } 11        int total = 0; 12        for (int score : scores) { 13            total += score; 14        } 15        double average = (double) total / numberOfTests; 16        System.out.printf("The average score is: %.2f\n", average); 17    } 18 }</pre>	<pre>java -cp /tmp/DiYL22iW19/Main Enter score for test 1: 2 Enter score for test 2: 6 Enter score for test 3: 3 Enter score for test 4: 89 Enter score for test 5: 9 The average score is: 5.60 === Code Execution Successful ===</pre>

8.



```

        displayMatrix(addMatrices(matrixA, matrixB), "A + B");
        break;
    case "d":
        displayMatrix(subtractMatrices(matrixA, matrixB), "A - B");
        break;
    case "e":
        displayMatrix(multiplyMatrices(matrixA, matrixB), "A * B");
        break;
    case "f":
        running = false;
        break;
    default:
        System.out.println("Invalid option, please try again.");
    }
}
System.out.println("Exiting program.");
scanner.close();
}

public static int[][] enterMatrix(Scanner scanner, String matrixName) {
    int[][] matrix = new int[2][2];
    System.out.println("Enter values for Matrix " + matrixName + ":");
    for (int i = 0; i < 2; i++) {
        for (int j = 0; j < 2; j++) {
            System.out.print("Element [" + (i + 1) + "][" + (j + 1) + "]: ");
            scanner.nextLine();
            matrix[i][j] = scanner.nextInt();
        }
    }
}

```

```

Main.java
51     }
52     }
53     scanner.nextLine();
54     return matrix;
55 }
56 public static int[][] addMatrices(int[][] a, int[][] b) {
57     int[][] result = new int[2][2];
58     for (int i = 0; i < 2; i++) {
59         for (int j = 0; j < 2; j++) {
60             result[i][j] = a[i][j] + b[i][j];
61         }
62     }
63     return result;
64 }
65 public static int[][] subtractMatrices(int[][] a, int[][] b) {
66     int[][] result = new int[2][2];
67     for (int i = 0; i < 2; i++) {
68         for (int j = 0; j < 2; j++) {
69             result[i][j] = a[i][j] - b[i][j];
70         }
71     }
72     return result;
73 }
74 public static int[][] multiplyMatrices(int[][] a, int[][] b) {
75     int[][] result = new int[2][2];
76     for (int i = 0; i < 2; i++) {
77         for (int j = 0; j < 2; j++) {
78             result[i][j] = a[i][0] * b[0][j] + a[i][1] * b[1][j];
79         }
80     }
81     return result;
82 }
83 public static void displayMatrix(int[][] matrix, String operation) {
84     System.out.println("Result of " + operation + ":");
85     for (int[] row : matrix) {
86         for (int element : row) {
87             System.out.print(element + " ");
88         }
89         System.out.println();
90     }
91 }
92 }

```

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: 2

Invalid option, please try again.

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: 10

Invalid option, please try again.

Menu:

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