Main.java

```java
import java.util.Scanner;

public class Main {
    public static void main(string[] args) {
        int[] scores = new int[9];
        Scanner scanner = new Scanner(System.in);

        System.out.println("Enter 9 integer scores:");

        for (int i = 0; i < 9; i++) {
            scores[i] = scanner.nextInt();
        }

        System.out.println("Scores entered:");
        for (int score : scores) {
            System.out.print(score + " ");
        }
    }
}

```

```
Enter 9 integer scores:
10
40
5
47
9
5
8
6
2
Scores entered:
10 40 5 47 9 5 8 6 2

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

Main.java

```java
import java.util.Scanner;

public class Main {
    public static void main(String[] args) {
        float[][] price = new float[10][3];
        Scanner scanner = new Scanner(System.in);

        for (int i = 0; i < 10; i++) {
            System.out.println("Enter prices for product " + (i + 1) + ":");
            for (int j = 0; j < 3; j++) {
                price[i][j] = scanner.nextFloat();
            }
        }

        System.out.println("Prices entered:");
        for (int i = 0; i < 10; i++) {
            System.out.print("Product " + (i + 1) + ": ");
            for (int j = 0; j < 3; j++) {
                System.out.print(price[i][j] + " ");
            }
            System.out.println();
        }

        scanner.close();
    }
}
```

```
50
Enter prices for product 3:
5
10
15
Enter prices for product 4:
20
30
10
Enter prices for product 5:
80
4020
50
Enter prices for product 6:
70
50
60
Enter prices for product 7:
20
50
40
Enter prices for product 8:
12
10
150
Enter prices for product 9:
150
10
20
Enter prices for product 10:
300
20
50
Prices entered:
Product 1: 40.0 50.0 10.0
Product 2: 100.0 20.0 50.0
Product 3: 5.0 10.0 15.0
Product 4: 20.0 30.0 10.0
Product 5: 80.0 4020.0 50.0
Product 6: 70.0 50.0 60.0
Product 7: 20.0 50.0 40.0
Product 8: 12.0 10.0 150.0
Product 9: 150.0 10.0 20.0
Product 10: 300.0 20.0 50.0
```

Main.java

```java
import java.util.Scanner;

public class Main {
    public static void main(string[] args) {
        int[][] matrix = new int[][]{{5, 5, 5}, {5, 5, 5}, {5, 5, 5}, {5, 5, 5}};

        System.out.println("Output:");
        for (int i = 0; i < matrix.length; i++) {
            for (int j = 0; j < matrix[i].length; j++) {
                System.out.print(matrix[i][j] + " ");
            }
            System.out.println();
        }
    }
}
```

```
Output:
5 5 5
5 5 5
5 5 5
5 5 5


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

Main.java

```java
public class Main {
    public static void main(String[] args) {
        byte[] values = new byte[10];

        for (int i = 0; i < values.length; i++) {
            values[i] = 1;
        }

        for (byte value : values) {
            System.out.print(value + " ");
        }
    }
}
```

```
1 1 1 1 1 1 1 1 1 1

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

Main.java

```java
import java.util.Scanner;

public class Main {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        int numberOfTests = 5;
        int[] scores = new int[numberOfTests];
        for (int i = 0; i < numberOfTests; i++) {
            System.out.print("Enter score for test " + (i + 1) + ": ");
            scores[i] = scanner.nextInt();
        }
        int total = 0;
        for (int score : scores) {
            total += score;
        }
        double average = (double) total / numberOfTests;
        System.out.printf("The average score is: %.2f%n", average);
    }
}
```

```
Enter score for test 1: 95
Enter score for test 2: 87
Enter score for test 3: 98
Enter score for test 4: 94
Enter score for test 5: 93
The average score is: 93.40


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

Main.java

```java
import java.util.Scanner;

public class Main {

    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        int[][] matrixA = new int[2][2];
        int[][] matrixB = new int[2][2];

        boolean running = true;

        while (running) {
            System.out.println("Menu:");
            System.out.println("a. Enter Matrix A");
            System.out.println("b. Enter Matrix B");
            System.out.println("c. Display A + B");
            System.out.println("d. Display A - B");
            System.out.println("e. Display A * B");
            System.out.println("f. Exit");
            System.out.print("Choose an option: ");
            String choice = scanner.nextLine().toLowerCase();

            switch (choice) {
                case "a":
                    matrixA = enterMatrix(scanner, "A");
                    break;
                case "b":
                    matrixB = enterMatrix(scanner, "B");
                    break;
                case "c":
                    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;
```

```
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]: 2
Element [2][1]: 3
Element [2][2]: 4
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]: 4
Element [1][2]: 3
Element [2][1]: 2
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: e
Result of A * B:
8 5
20 13
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: d
```

Main.java

```
                    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) + "]: ");
                matrix[i][j] = scanner.nextInt();
            }
        }
        scanner.nextLine();
        return matrix;
    }

    public static int[][] addMatrices(int[][] a, int[][] b) {
        int[][] result = new int[2][2];
        for (int i = 0; i < 2; i++) {
            for (int j = 0; j < 2; j++) {
                result[i][j] = a[i][j] + b[i][j];
            }
        }
        return result;
    }

    public static int[][] subtractMatrices(int[][] a, int[][] b) {
        int[][] result = new int[2][2];
        for (int i = 0; i < 2; i++) {
            for (int j = 0; j < 2; j++) {
                result[i][j] = a[i][j] - b[i][j];
            }
```

```
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: e
Result of A * B:
8 5
20 13
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: d
Result of A - B:
-3 -1
1 3
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:
5 5
5 5
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.
```

Main.java

```
        for (int i = 0; i < 2; i++) {
            for (int j = 0; j < 2; j++) {
                result[i][j] = a[i][j] + b[i][j];
            }
        }
        return result;
    }

    public static int[][] subtractMatrices(int[][] a, int[][] b) {
        int[][] result = new int[2][2];
        for (int i = 0; i < 2; i++) {
            for (int j = 0; j < 2; j++) {
                result[i][j] = a[i][j] - b[i][j];
            }
        }
        return result;
    }

    public static int[][] multiplyMatrices(int[][] a, int[][] b) {
        int[][] result = new int[2][2];
        for (int i = 0; i < 2; i++) {
            for (int j = 0; j < 2; j++) {
                result[i][j] = a[i][0] * b[0][j] + a[i][1] * b[1][j];
            }
        }
        return result;
    }

    public static void displayMatrix(int[][] matrix, String operation) {
        System.out.println("Result of " + operation + ":");
        for (int[] row : matrix) {
            for (int element : row) {
                System.out.print(element + " ");
            }
            System.out.println();
        }
    }
}
```

```
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: e
Result of A * B:
8 5
20 13
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: d
Result of A - B:
-3 -1
1 3
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:
5 5
5 5
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.
```