

1) MATRIX

```
import java.util.*;

class Matrix {

    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in);

        int a[][] = { { 3, 6 }, { 6, 2 } };

        int b[][] = { { 5, 9 }, { 9, 3 } };

        int c[][] = new int[2][2];

        int i, j, k;

        System.out.println("\nGiven A Matrix is...");

        for (i = 0; i < 2; i++) {

            for (j = 0; j < 2; j++) {

                System.out.print(a[i][j] + "\t");

            }

            System.out.println("\n");

        }

        System.out.println("\nGiven B Matrix is...");

        for (i = 0; i < 2; i++) {

            for (j = 0; j < 2; j++) {

                System.out.print(b[i][j] + "\t");

            }

            System.out.println("\n");

        }

        for (i = 0; i < 2; i++) {

            for (j = 0; j < 2; j++) {
```

```
        c[i][j] = a[i][j] + b[i][j];
    }
}

System.out.println("\nMatrix Addition is...");

for (i = 0; i < 2; i++) {
    for (j = 0; j < 2; j++) {
        System.out.print(c[i][j] + "\t");
    }
    System.out.println("\n");
}

for (i = 0; i < 2; i++) {
    for (j = 0; j < 2; j++) {
        c[i][j] = a[i][j] - b[i][j];
    }
}

System.out.println("\nMatrix Subtraction is...");

for (i = 0; i < 2; i++) {
    for (j = 0; j < 2; j++) {
        System.out.print(c[i][j] + "\t");
    }
    System.out.println("\n");
}

for (i = 0; i < 2; i++) {
    for (j = 0; j < 2; j++) {
        for (k = 0; k < 2; k++) {
```

```
        c[i][j] = c[i][j] + a[i][k] * b[k][j];

    }

}

System.out.println("\nMatrix Multiplication is...");

for (i = 0; i < 2; i++) {

    for (j = 0; j < 2; j++) {

        System.out.print(c[i][j] + "\t");

    }

    System.out.println("\n");

}

}
```

OUTPUT:

```
C:\Users\ABC\Downloads\EXPIREMENT\2d array nd string function> java Matrix.java

Given A Matrix is...
3      6
6      2

Given B Matrix is...
5      9
9      3

Matrix Addition is...
8      15
15     5

Matrix Subtraction is...
-2     -3
-3     -1

Matrix Multiplication is...
67     42
45     59

C:\Users\ABC\Downloads\EXPIREMENT\2d array nd string function>^S^S
```

2) STRING COMPARE

```
public class Stringcomp {  
  
    public static void main(String[] args) {  
  
        String a = "Apple";  
  
        String b = "Apple";  
  
        String c = "Strawberry";  
  
        String d = new String("Apple");  
  
        System.out.println(a.equals(b));  
  
        System.out.println(a.equals(c));  
  
        System.out.println(a.equals(d));  
  
    }  
}
```

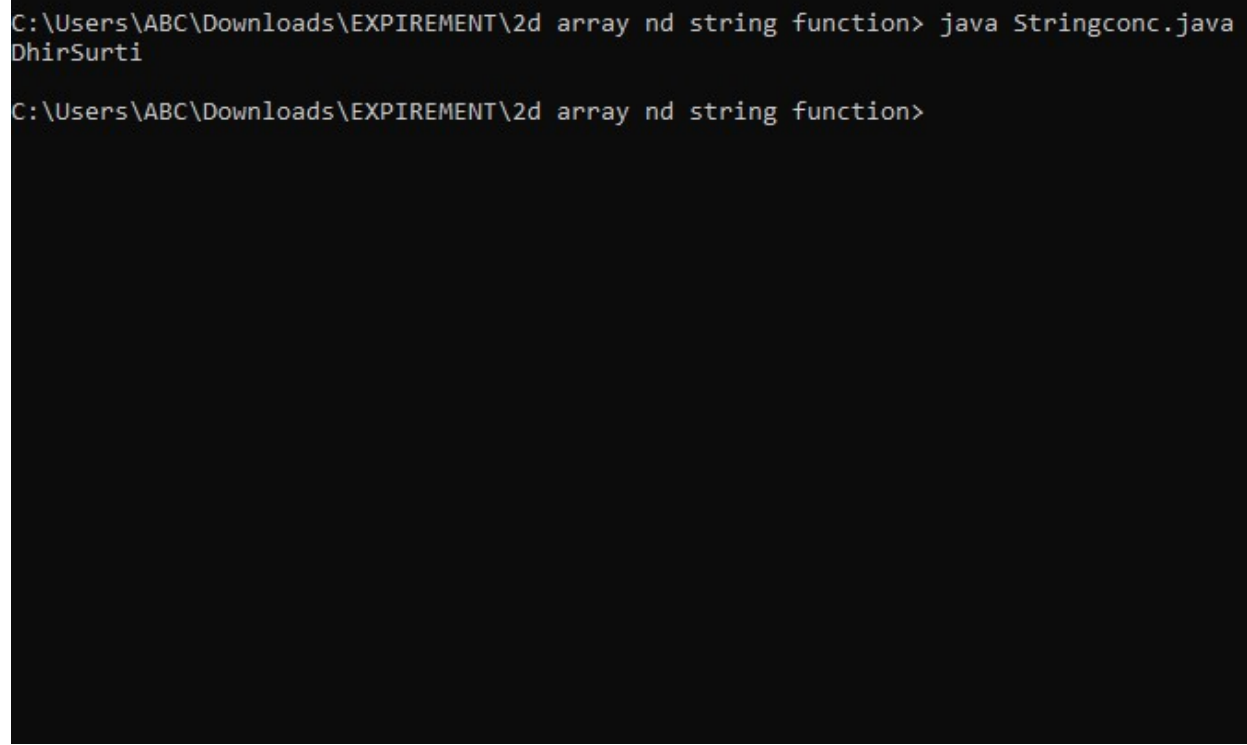
OUTPUT:

```
C:\Users\ABC\Downloads\EXPIREMENT\2d array nd string function> java Stringcomp.java  
true  
false  
true  
C:\Users\ABC\Downloads\EXPIREMENT\2d array nd string function>_
```

3) STRING CONCATENATION

```
public class Stringconc {  
  
    public static void main(String[] args) {  
  
        String a1 = "Dhir";  
  
        String a2 = "Surti";  
  
        String a3 = a1.concat(a2);  
  
        System.out.println(a3);  
  
    }  
}
```

OUTPUT:

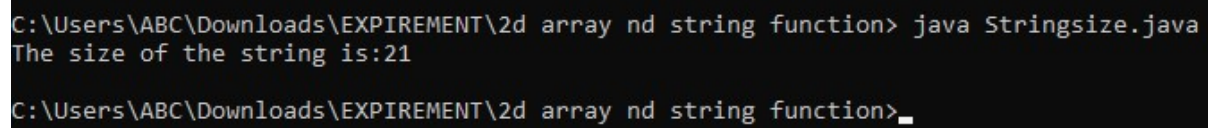


```
C:\Users\ABC\Downloads\EXPIREMENT\2d array nd string function> java Stringconc.java  
DhirSurti  
  
C:\Users\ABC\Downloads\EXPIREMENT\2d array nd string function>
```

4) STRING SIZE

```
public class Stringsize {  
  
    public static void main(String[] args) {  
  
        String a = "He is playing cricket";  
  
        System.out.println("The size of the string is:" + a.length());  
  
    }  
  
}
```

OUTPUT:



```
C:\Users\ABC\Downloads\EXPIREMENT\2d array nd string function> java Stringsize.java  
The size of the string is:21  
  
C:\Users\ABC\Downloads\EXPIREMENT\2d array nd string function> _
```