

2. Accept two  $n \times m$  matrices. Write a Java program to find addition of these matrices.

```
MatrixAddition.java x
1 import java.util.Scanner;
2 //Author -> ITVoyagers, visit -> itvoyagers.in
3 class MatrixAddition
4 {
5     public static int[][] matrix()
6     {
7         Scanner s = new Scanner(System.in);
8         int m[][]= new int[2][2];
9         for(int i=0; i < 2; i++)
10        {
11            for(int j=0; j < 2; j++)
12            {
13                m[i][j] = s.nextInt();
14                System.out.print("\t");
15            }
16            System.out.print("\n");
17        }
18        //Author -> ITVoyagers, visit -> itvoyagers.in
19        return m;
20    }
}
```

```
21 //Author -> ITVoyagers, visit -> itvoyagers.in
22 public static void main(String[] args)
23 {
24     int a[][] = new int[2][2];
25     int b[][] = new int[2][2];
26     int res[][] = new int[2][2];
27     System.out.println("\n Enter values for first matrix. \t");
28     a = matrix();
29     System.out.println("\n Enter values for second matrix. \t");
30     b = matrix();
31     //Author -> ITVoyagers, visit -> itvoyagers.in
32     System.out.println("\n Resultant matrix. \t");
33     for(int i=0; i < 2; i++)
34     {
35         for(int j=0; j < 2; j++)
36         {
37             res[i][j] = a[i][j] + b[i][j];
38             System.out.print("\t" + res[i][j] + "\t");
39         }
40         System.out.print("\n");
41     }
42 }//Author -> ITVoyagers, visit -> itvoyagers.in
43 }
```

**Output:**

```
Enter values for first matrix.
```

```
1      2
```

```
3      4
```

```
Enter values for second matrix.
```

```
5      6
```

```
7      8
```

```
Resultant matrix.
```

```
6      8  
10     12
```