

# Rajalakshmi Engineering College

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Batch: 2028

Degree: B.E - CSE

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## 2024\_28\_III\_OOPS Using Java Lab

### 2028\_REC\_OOPS using Java\_Week 3\_Q4

Attempt : 1

Total Mark : 10

Marks Obtained : 10

#### **Section 1 : Coding**

##### **1. Problem Statement**

Sesha is developing a weather monitoring system for a region with multiple weather stations. Each weather station collects temperature data hourly and stores it in a 2D array.

Write a program that can add the temperature data from two different weather stations to create a combined temperature record for the region.

##### ***Input Format***

The first line of input consists of two space-separated integers N and M, representing the number of rows and columns of the matrices, respectively.

The next N lines consist of M space-separated integers, representing the values of the first matrix.

The following N lines consist of M space-separated integers, representing the values of the second matrix.

### ***Output Format***

The output prints the addition of the two matrices in N rows and M columns, representing the combined temperature record.

Refer to the sample output for formatting specifications.

### ***Sample Test Case***

Input: 3 3

1 2 3

4 5 6

7 8 9

1 1 1

2 2 2

3 3 3

Output: 2 3 4

6 7 8

10 11 12

### ***Answer***

```
import java.util.Scanner;

class Main {
    public static void main(String args[]) {
        Scanner sc = new Scanner(System.in);
        int row = sc.nextInt();
        int col = sc.nextInt();
        int[][] mat1 = new int[row][col];
        int[][] mat2 = new int[row][col];
        int[][] res = new int[row][col];
        for(int i=0; i<row; i++)
            for(int j=0; j<col; j++)
                mat1[i][j] = sc.nextInt();
        for(int i=0; i<row; i++)
            for(int j=0; j<col; j++)
                mat2[i][j] = sc.nextInt();
        for(int i=0; i<row; i++)
            for(int j=0; j<col; j++)
                res[i][j] = mat1[i][j] + mat2[i][j];
        for(int i=0; i<row; i++) {
            for(int j=0; j<col; j++)
                System.out.print(res[i][j] + " ");
            System.out.println();
        }
    }
}
```

```
        for(int j=0; j<col; j++)  
            res[i][j] = mat1[i][j] + mat2[i][j];  
        for(int i=0; i<row; i++) {  
            for(int j=0; j<col; j++)  
                System.out.print(res[i][j] + " ");  
            System.out.println();  
        }  
        sc.close();  
    }  
}
```

**Status :** Correct

**Marks :** 10/10