Rajalakshmi Engineering College

Name: Arilli Jagadeesh A
Email: 241901502@rajalakshmi.edu.in
Roll no: 241901502
Phone: 9361250488
Branch: REC
Department: CSE (CS) - Section 2
Batch: 2028
Degree: B.E - CSE (CS)

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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.*;

public class Main {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);

        int n = sc.nextInt();
        int m = sc.nextInt();

        int[][] mat1 = new int[n][m];
        int[][] mat2 = new int[n][m];
        int[][] result = new int[n][m];

        // First matrix
        for (int i = 0; i < n; i++) {
            for (int j = 0; j < m; j++) {
                mat1[i][j] = sc.nextInt();
```

```
        }
        }

        // Second matrix
        for (int i = 0; i < n; i++) {
            for (int j = 0; j < m; j++) {
                mat2[i][j] = sc.nextInt();
            }
        }

        // Addition
        for (int i = 0; i < n; i++) {
            for (int j = 0; j < m; j++) {
                result[i][j] = mat1[i][j] + mat2[i][j];
                System.out.print(result[i][j] + " ");
            }
        }
    }
}
```

Status : Correct ***Marks : 10/10***