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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

```
// You are using Java
import java.util.*;
public class Main{
    public static void main(String[] args){
        Scanner s = new Scanner(System.in);

        //read rows and columns
        int N=s.nextInt();
        int M=s.nextInt();
        int[][] mat1=new int[N][M];
        int[][] mat2=new int[N][M];
        int[][] result=new int[N][M];

        //read first matrix
        for(int i=0;i<N;i++){
            for(int j=0;j<M;j++){
                mat1[i][j]=s.nextInt();
```

```
        }
        }

        //read second matrix
        for(int i=0;i<N;i++){
            for(int j=0;j<M;j++){
                mat2[i][j]=s.nextInt();
            }
        }

        //add Matrices
        for(int i=0;i<N;i++){
            for(int j=0;j<M;j++){
                result[i][j]=mat1[i][j]+mat2[i][j];
            }
        }

        //print result
        for(int i=0;i<N;i++){
            for(int j=0;j<M;j++){
                System.out.print(result[i][j]+" ");
            }
            System.out.println();
        }
    }
}
```

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