Rajalakshmi Engineering College

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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

```java
import java.util.*;
class main{
 public static void main(String[] args){
     Scanner sc=new Scanner(System.in);
     int n1=sc.nextInt();int n2=sc.nextInt();
     int[][] m1=new int[n1][n2];int[][] m2=new int[n1][n2];int[][] sum=new int[n1][n2];
     for (int i=0;i<n1;i++){
       for(int j=0;j<n2;j++){
         m1[i][j]=sc.nextInt();
       }
     }
     for (int i=0;i<n1;i++){
       for(int j=0;j<n2;j++){
         m2[i][j]=sc.nextInt();
       }
     }
```

```java
        for (int i=0;i<n1;i++){
            for(int j=0;j<n2;j++){
                sum[i][j]=m1[i][j]+m2[i][j];
            }
        }
        for (int i=0;i<n1;i++){
            for(int j=0;j<n2;j++){
                System.out.print(sum[i][j]+" ");
            }
            System.out.println();
        }
    }
}
```

Status : Correct   *Marks : 10/10*