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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.*;

class Sum_two_matrix{
   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 l=0; l<row; l++){
```

```
            for(int k=0; k<col; k++){
                mat2[l][k] = 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();
        }
        sc.close();
    }
}
```

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