

**OBJECT ORIENTED PROGRAMMING LAB****Name: Manya Madhu****Roll No: 17****Batch: S2 RMCA B****Date: 06-04-2022****Experiment No : 2****Aim**

The program to read 2 matrices from the console and perform Matrix addition.

**Procedure**

```
import java.util.Scanner;
class AddTwoMatrix
{
    public static void main(String args[])
    {
        int m, n, c, d;
        Scanner in = new Scanner(System.in);

        System.out.println("Enter the number of rows and columns of matrix");
        m = in.nextInt();
        n = in.nextInt();

        int first[][] = new int[m][n];
        int second[][] = new int[m][n];
        int sum[][] = new int[m][n];

        System.out.println("Enter the elements of first matrix");

        for (c = 0; c < m; c++)
            for (d = 0; d < n; d++)
                first[c][d] = in.nextInt();

        System.out.println("Enter the elements of second matrix");

        for (c = 0 ; c < m; c++)
            for (d = 0 ; d < n; d++)
                second[c][d] = in.nextInt();

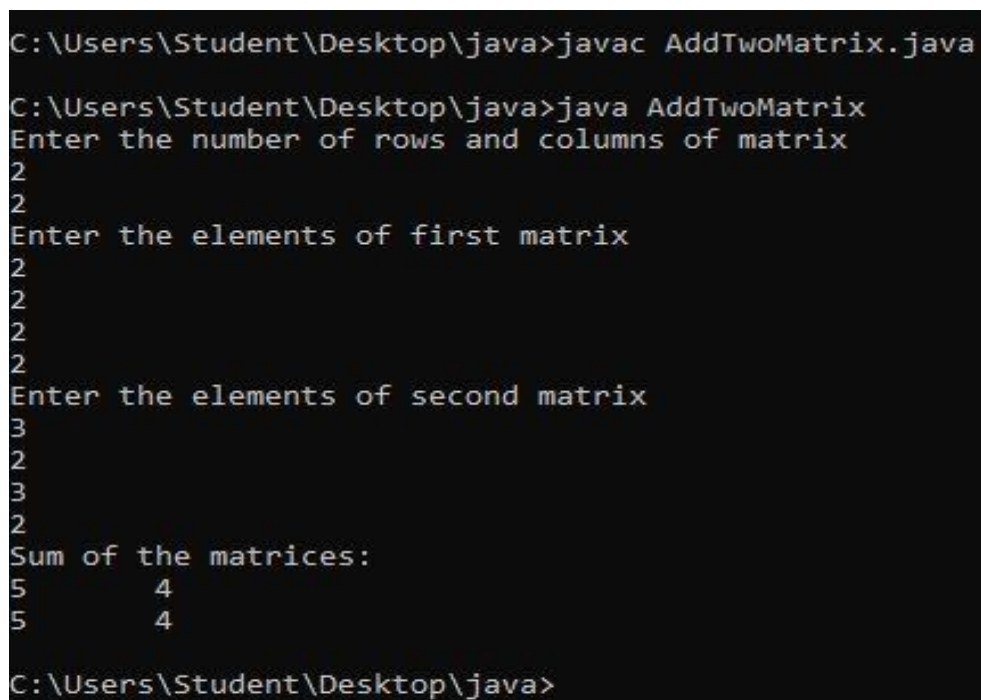
        for (c = 0; c < m; c++)
            for (d = 0; d < n; d++)
                sum[c][d] = first[c][d] + second[c][d]; //replace '+' with '-' to subtract matrices

        System.out.println("Sum of the matrices:");
```

```
for (c = 0; c < m; c++)
{
    for (d = 0; d < n; d++)
        System.out.print(sum[c][d] + "\t");

    System.out.println();
}
}
```

## Output Screenshot



The screenshot shows a Windows command prompt window with the following text:

```
C:\Users\Student\Desktop\java>javac AddTwoMatrix.java

C:\Users\Student\Desktop\java>java AddTwoMatrix
Enter the number of rows and columns of matrix
2
2
Enter the elements of first matrix
2
2
2
2
Enter the elements of second matrix
3
2
3
2
Sum of the matrices:
5      4
5      4

C:\Users\Student\Desktop\java>
```

The program prompts the user to enter the number of rows and columns of the matrix (2 and 2). It then prompts for the elements of the first matrix (2, 2, 2, 2) and the elements of the second matrix (3, 2, 3, 2). Finally, it displays the sum of the matrices as a 2x2 grid: 5 4 and 5 4.