

OBJECT ORIENTED PROGRAMMING LAB**Experiment No.: 2****Aim**

Read 2 matrices from the console and perform matrix addition.

Procedure

```
import java.util.Scanner;
class AddMatrix
{
public static void main(String args[])
{
int row, col,i,j;
Scanner in = new Scanner(System.in);

System.out.println("Enter the number of rows");
row = in.nextInt();

System.out.println("Enter the number columns");
col = in.nextInt();

int mat1[][] = new int[row][col];
int mat2[][] = new int[row][col];
int res[][] = new int[row][col];

System.out.println("Enter the elements of matrix1");

for ( i= 0 ; i < row ; i++ )
{

for ( j= 0 ; j < col ;j++ )
mat1[i][j] = in.nextInt();

System.out.println();
}
System.out.println("Enter the elements of matrix2");

for ( i= 0 ; i < row ; i++ )
{

for ( j= 0 ; j < col ;j++ )
```

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```
mat2[i][j] = in.nextInt();

System.out.println();
}

for ( i= 0 ; i < row ; i++ )
for ( j= 0 ; j < col ;j++ )
res[i][j] = mat1[i][j] + mat2[i][j] ;

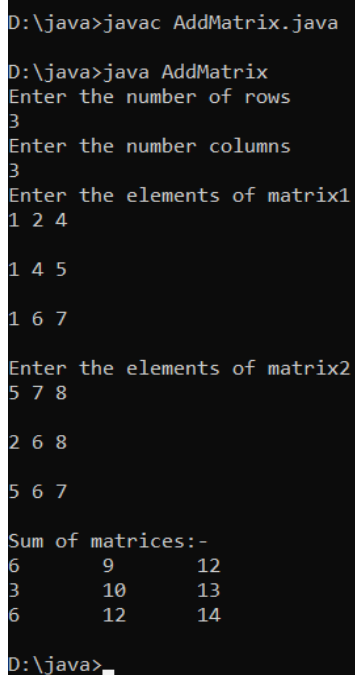
System.out.println("Sum of matrices:-");

for ( i= 0 ; i < row ; i++ )
{
for ( j= 0 ; j < col ;j++ )
System.out.print(res[i][j]+"\\t");

System.out.println();
}

}
}
```

Output Screenshot



The screenshot shows a Windows command prompt where a Java program named 'AddMatrix.java' is compiled and then executed. The program prompts the user to enter the number of rows (3) and columns (3). It then asks for the elements of two matrices. Matrix 1 is entered as 1 2 4, 1 4 5, and 1 6 7. Matrix 2 is entered as 5 7 8, 2 6 8, and 5 6 7. Finally, the program outputs the sum of the two matrices in a 3x3 grid.

```
D:\java>javac AddMatrix.java

D:\java>java AddMatrix
Enter the number of rows
3
Enter the number columns
3
Enter the elements of matrix1
1 2 4
1 4 5
1 6 7
Enter the elements of matrix2
5 7 8
2 6 8
5 6 7
Sum of matrices:-
6      9      12
3      10     13
6      12     14

D:\java>
```