1. Develop a JAVA program to add TWO matrices of suitable order N (The value of N should be read from command line arguments).

Add.java

```
import java.util.Scanner;
public class Add
{
   public static void main(String[] args)
   {
     if (args.length != 1)
     {
        System.out.println("Usage: java MatrixAddition <order_M_N>");
            return;
     }
      int m, n;    //Declare matrix size
      Scanner scan = new Scanner(System.in);
      m = Integer.parseInt(args[0]);//Initialize first matrix size
      n = Integer.parseInt(args[1]);  //Initialize second matrix size

      int a[][] = new int[m][n];    //Declare first matrix
      int b[][] = new int[m][n];    //Declare second matrix
      int c[][] = new int[m][n];    //Declare third matrix
        //Initialize the first matrix
      System.out.println("Enter all the elements of first matrix:");
      for (int i = 0; i < m; i++)
        {
           for (int j = 0; j < n; j++)
           {
              a[i][j] = scan.nextInt();
           }
        }
      System.out.println("");
        //Initialize the second matrix
      System.out.println("Enter all the elements of second matrix:");
      for (int i = 0; i < m; i++)
        {
           for (int j = 0; j < n; j++)
           {
              b[i][j] = scan.nextInt();
           }
        }
```

```
//Loop to add matrix elements
      for (int i = 0; i < m; i++)
         {
            for (int j = 0; j < n; j++)
            {

                  c[i][j] = a[i][j] + b[i][j];

            }
         }
      //Print the resultant matrix
      System.out.println("Matrix after addition:");
      for (int i = 0; i < m; i++)
         {
            for (int j = 0; j < n; j++)
            {
               System.out.print(c[i][j]+" ");
            }
            System.out.println("");
         }
      }
}
```

OUTPUT:

```
Java Add 3 3
Enter all the elements of first matrix:
1 2 3
4 5 6
7 8 9

Enter all the elements of second matrix:
9 8 7
6 5 4
3 2 1
Matrix after addition:
10 10 10
10 10 10
10 10 10
```