PROGRAM NO :2

AIM : Read two matrices from the console and perform matrix addition.

ALGORITHM :

Step 1 : Read the count of total number of elements in each matrix.
Step 2 : Declare two 2D array.
Step 3 : Read the matrices and store it into the array.
Step 4 : Perform addition between the elements of the two arrays which has the same index and store the result in another array.
Step 5 : Display the resultant matrix.

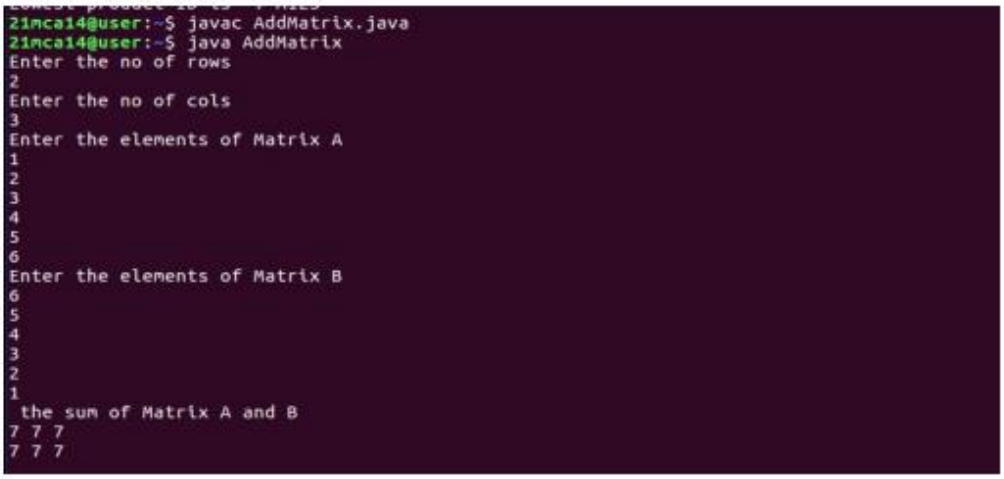
SOURCE CODE :

```
import java.util.Scanner;

class AddMatrix{
	public static void main(String args[]){
		int i,j,rows,cols;
		Scanner n=new Scanner(System.in);
		System.out.println("Enter the no of rows: ");
		rows=n.nextInt();
		System.out.println("Enter the no of cols: ");
		cols=n.nextInt();
		int A[][]= new int[rows][cols];
		int B[][]=new int[rows][cols];
		System.out.println("Enter the elements of Matrix A: ");
		for(i=0;i<rows;i++){
			for(j=0;j<cols;j++){
					A[i][j]=n.nextInt();
				}
		}
		System.out.println("Enter the elements of Matrix B: ");
		for(i=0;i<rows;i++){
			for(j=0;j<cols;j++){
				B[i][j]=n.nextInt();
			}
		}
		int C[][]=new int[rows][cols];
		System.out.println(" The sum of Matrix A and B: ");
		for(i=0;i<rows;i++){
			for(j=0;j<cols;j++){
				C[i][j]=A[i][j]+B[i][j];
				System.out.print(C[i][j]+" ");
			}
```

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

OUTPUT :



RESULT :

Program is successfully executed and output is verified.