- **EASY**

- **Max Score: 30 Points**

AS Sorting 1

Write a program to sort a given matrix `mat[][]` of dimensions `N*M` (row and column) in column wise order.

Your task is to sort each column of a matrix in ascending order and finally print the updated matrix/2D Array.

Input Format

First line contains integer `N` and `M` denoting the rows and columns of matrix `mat[][]`

Each of the next `N` lines contains `M` integers denoting the matrix elements

Output Format

Print the matrix after sorting column wise

Example 1

Input

```
3 5
9 7 8 11 21
1 4 3 7 2
4 3 14 9 12
```

Output

```
1 3 3 7 2
4 4 8 9 12
9 7 14 11 21
```

Explanation

The matrix is sorted column wise

Example 2

Input

```
5 9
9 14 62 23 25 25 41 33 95
78 7 30 97 51 35 41 42 92
79 32 45 30 62 92 87 8 19
52 100 36 11 57 85 73 91 54
90 94 98 21 12 79 80 78 72
```

Output

```
9 7 30 11 12 25 41 8 19
52 14 36 21 25 35 41 33 54
78 32 45 23 51 79 73 42 72
79 94 62 30 57 85 80 78 92
90 100 98 97 62 92 87 91 95
```

Constraints

```
1 <= N <= 20
1 <= M <= 20
-10^6<=mat[i][j]<=10^6
```

- **2D-Arrays**
- **Sorting**

My code

// n java
import java.util.*;

```java
import java.lang.*;
import java.io.*;

public class Main
{
    public static void main (String[] args) throws
java.lang.Exception
    {
        //your code here
        Scanner s=new Scanner(System.in);
        int n=s.nextInt();
         int m=s.nextInt();
        int arr[][]=new int [n][m];
        for(int i=0;i<n;i++)
                for(int j=0;j<m;j++)
                        arr[i][j]=s.nextInt();

          for(int i=0;i<m;i++)
                {
                        int arrb[]=new int[n];
                    for(int j=0;j<n;j++)
                      {
                      arrb[j]=arr[j][i];
                       }
                        Arrays.sort(arrb);

                        for(int j=0;j<n;j++)
                    {
                    arr[j][i]=arrb[j];
                     }
```

```java
        }
        for(int i=0;i<n;i++)
        {
            for(int j=0;j<m;j++)
            {
            System.out.print(arr[i][j]+" ");
            }
            System.out.println("");
        }
    }
}
```