

<https://course.acciojob.com/idle?question=7251cda0-018c-4e39-92dc-9340e8aabcbb>

● EASY

● Max Score: 30 Points

## Print Matrix Column Wise

Given a 2-D matrix  $A$  with  $N$  rows and  $M$  columns. Print the matrix in column-major order.

Your task is to complete the function `printMatrixColumnwise` which receives the input matrix,  $N$ , and  $M$  as its parameters and prints the matrix in column major order.

### Input Format

The first line contains the number of test cases.

For each test case: The first line contains two integers  $N$  and  $M$  denoting the number of rows and columns respectively.

The next  $N$  lines contains  $M$  integers each denoting the elements of matrix  $A$ .

### Output Format

For each test case print  $N \times M$  space-separated integers, the elements of the matrix column wise in a single line.

### Example 1

Input:

```
1
3 3
1 2 3
4 5 6
7 8 9
```

Output:

```
1 4 7 2 5 8 3 6 9
```

Explanation:

The elements of the matrix have been printed column wise.

## Example 2

Input:

```
1
2 2
1 3
2 4
```

Output:

```
1 2 3 4
```

Explanation:

The elements of the matrix have been printed column wise.

## Constraints

$1 \leq T \leq 10$

$1 \leq N, M \leq 1000$

$0 \leq A[i] \leq 100000$

### Topic Tags

- **2D-Arrays**

# My code

// in java

import java.util.\*;

```
class Solution {  
    public void printMatrixColumnwise(int[][] mat,int n,int m) {  
        //Write code here and print output  
        for (int j = 0; j < m; j++)  
            for (int i = 0; i < n; i++)  
                System.out.print(mat[i][j]+" ");  
        System.out.print("\n");  
    }  
}
```

```
public class Main {  
    public static void main(String[] args) {  
        Scanner sc = new Scanner(System.in);  
        int t;  
        t = sc.nextInt();  
        while(t>0)  
        {  
            int n;  
            int m;  
            n = sc.nextInt();  
            m = sc.nextInt();  
            int[][] matrix = new int[n][m];  
            for (int i = 0; i < n; i++)  
                for (int j = 0; j < m; j++)  
                    matrix[i][j] = sc.nextInt();  
            Solution Obj = new Solution();  
            Obj.printMatrixColumnwise(matrix,n,m);  
            t--;  
        }  
    }  
}
```

```
    }  
    sc.close();  
}  
}
```