

---

## Frequencies on a board

P66664\_en

---

We have a board with  $m$  rows and  $n$  columns. In each board cell there is a digit ( $0, \dots, 9$ ). Write a program that computes the frequency of each digit in each of the  $n$  columns of the board. The number of rows of a board can be very large.

### Input

The input is a series of cases. Each case consists of two integers greater than zero  $m$  and  $n$  denoting, respectively, the number of rows and columns on the board, followed by a row-by-row description of the board's digits.

### Output

For each case in the input, a frequency table. The table has ten rows, respectively representing the digits  $0, \dots, 9$  and  $n$  columns. The table value in row  $d$  column  $j$  should be the frequency of digit  $d$  in column  $j$  of the corresponding input board. A blank line appears after the frequency table.

#### Sample input

```
6 3
0 1 0
6 8 5
4 2 9
0 1 5
5 9 5
0 9 1

5 4
0 1 0 0
2 3 0 0
4 5 0 0
6 7 0 0
8 9 5 5

1 5
0 2 4 6 8

3 1
7
8
9
```

#### Sample output

```
3 0 1
0 2 1
0 1 0
0 0 0
1 0 0
1 0 3
1 0 0
0 0 0
0 1 0
0 2 1

1 0 4 4
0 1 0 0
1 0 0 0
0 1 0 0
1 0 0 0
0 1 1 1
1 0 0 0
0 1 0 0
1 0 0 0
0 1 0 0

1 0 0 0 0
0 0 0 0 0
0 1 0 0 0
0 0 0 0 0
0 0 1 0 0
0 0 0 0 0
0 0 0 1 0
0 0 0 0 0
0 0 0 0 1
0 0 0 0 1
0 0 0 0 0
```

0  
0  
0  
0  
0  
0  
0

0  
1  
1  
1

### **Problem information**

Author : Pro1

Generation : 2024-06-28 09:22:39

© *Jutge.org*, 2006–2024.

<https://jutge.org>