F. Marks

time limit per test: 1 second
memory limit per test: 256 megabytes
input: standard input
output: standard output

Vasya, or Mr. Vasily Petrov is a dean of a department in a local university. After the winter exams he got his hands on a group's gradebook.

Overall the group has n students. They received marks for m subjects. Each student got a mark from 1 to 9 (inclusive) for each subject.

Let's consider a student the *best at some subject*, if there is no student who got a higher mark for this subject. Let's consider a student *successful*, if there exists a subject he is the *best at*.

Your task is to find the number of *successful* students in the group.

Input
The first input line contains two integers n and m ($1 \le n, m \le 100$) — the number of students and the number of subjects, correspondingly. Next n lines each containing m characters describe the gradebook. Each character in the gradebook is a number from 1 to 9. Note that the marks in a rows are not sepatated by spaces.

Output
Print the single number — the number of *successful* students in the given group.

Examples

input Copy
```
3 3
223
232
112
```

output Copy
```
2
```

input Copy
```
3 5
91728
11828
11111
```

output Copy
```
3
```

Note
In the first sample test the student number 1 is the best at subjects 1 and 3, student 2 is the best at subjects 1 and 2, but student 3 isn't the best at any subject.

In the second sample test each student is the best at at least one subject.

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→ Group Contests

- Sheet #10 (General Hard)
- Sheet #9 (General medium)
- Sheet #8 (General easy)
- Sheet #7 (Recursion)
- Sheet #6 (Math - Geometry)
- Sheet #5 (Functions)
- Sheet #4 (Strings)
- Contest #3.1
- Sheet #3 (Arrays)
- Contest #2
- Sheet #2 (Loops)
- Contest #1
- Sheet #1 (Data type - Conditions)

Sheet #10 (General Hard)

Finished

Practice

→ About Time Scaling

This contest uses time limits scaling policy (depending on a programming language). The system automatically adjusts time limits by the following multipliers for some languages. Despite scaling (adjustment), the time limit cannot be more than 30 seconds. Read the details by the link.