Continuously the warmest settlement

We have the weather forecast for the next N days for M settlements.

Write a program that gives the warmest settlement. The warmest settlement is the settlement which has the most count of days when its temperature is higher than temperatures of all the other settlements.

Input

The first line of the *standard input* contains the count of days (1≤N≤1000), the count of settlements (1≤M≤1000), and a temperature limit (20≤L≤50). The next N lines each contain M integers separated by spaces: the expected temperature for the ith settlement for the jth day (0≤T≤50).

Output

The first line of the *standard output* should contain the index of the settlement which has the most count of days when its temperature is higher than temperatures of all the other settlements (if there is more than one solution, the output should be the smallest one with the smallest index).
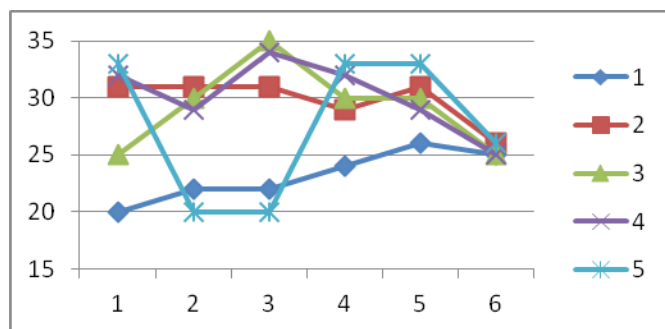
Example

Input

```
5 6 30
20 22 22 24 26 21
31 31 31 29 31 20
20 30 35 30 30 21
32 29 34 32 29 30
33 20 20 33 33 30
```

Output

```
5
```


Limits

Time limit: 0.1 second

Memory limit: 32 MB

Evaluation: In 40% of tests, the count of data is ≤20