

A long period of warmth

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

Write a program that gives the warmest settlement, which means that it is the settlement that has the longest period in which temperatures are above a given K temperature.

Input

The first line of the *standard input* contains the count of days ($1 \leq N \leq 1000$), the count of settlements ($1 \leq M \leq 1000$), and a temperature limit ($20 \leq K \leq 50$). The next N lines each contain M integers separated by spaces: the expected temperature for the i^{th} settlement for the j^{th} day ($0 \leq T \leq 50$).

Output

The first line of the *standard output* should contain the index of the settlement which has the longest period in which temperatures are above a given K temperature. If there is more than one solution, the output should be the smallest index.

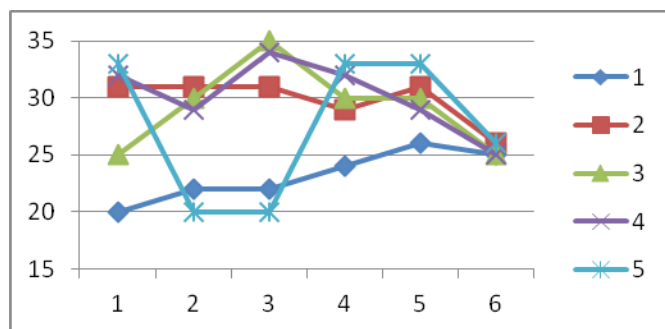
Example

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

2



Limits

Time limit: 0.1 second

Memory limit: 32 MB

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