Problem G − How Many Dependencies?

Time Limit: 1 second

In this problem you will need to find out which task has the most number of dependencies. A task **A** depends on another task **B** if **B** is a direct or indirect dependency of **A**.

For example, if **A** depends on **B** and **B** depends on **C**, then **A** has two dependencies, one direct and one indirect.

You can assume there will be no cyclic dependencies in the input.

Input

The input consists of a set of scenarios. Each scenario begins with one integer **N**, $\mathbf{0 < N \leq 100}$, in a line indicating how many tasks this scenario contains. Then there will be **N** lines, one for each task. Each line will contain an integer $\mathbf{0 \leq T \leq N-1}$, the number of direct dependencies of that task, plus **T** integers, the identifiers of that dependencies. Tasks are numbered from **1** to **N**.

The input ends with a scenario where $\mathbf{N = 0}$.

Output

For each scenario, print the number of the task with the greatest number of dependencies alone in a line. If there are ties, show the task with the lowest identifier.

Sample Input

```
3
1 2
1 3
0
4
2 2 4
0
2 2 4
0
0
```

Sample Output

```
1
1
```

Problem setter: João Paulo Fernandes Farias