Forest X41530_en

A forest is a graph without cycles, and each of its connected components is a tree. Given an undirected graph, is it a forest? In case it is, how many trees does it have?

Input

Input consists of several graphs. Every graph starts with its number of vertices n and its number of edges m, followed by m pairs x y indicating an edge between vertices x and y. Assume $1 \leq n \leq 10^4$, $0 \leq m < n$, that vertices are numbered from 0 to $n - 1$, and that there are neither repeated edges nor edges of the type x x.

Output

For every graph, if it is a forest print the number of trees it has. Otherwise, print "`no`".

Sample input 1

```
1 0
2 1  1 0
2 0
4 3  0 1  1 2  0 2
8 6  0 4  5 3  3 1  3 7  2 4  6 0
8 6  0 1  2 1  3 4  4 5  5 3  7 6
10 9  0 1  0 2  1 3  1 4  2 5  2 6  3 7  3 8  3 9
```

Sample output 1

```
1
1
2
no
2
no
1
```

Problem information

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Generation: 2026-01-25T15:59:57.374Z