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 $1 \le n \le 10^4$, $0 \le m < n$, 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 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
2
no
2
no
1
```

Problem information

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