Connectivity of Dzongs

Time: 2s | Memory: 256 MB

Problem Statement

After the monsoon, several roads between Dzongs have been destroyed. Dzongs that can still reach each other through surviving roads belong to the same group and share administration. The government wants to understand how fragmented the country has become.

Your task: determine how many separate groups exist.

(A group is a set of Dzongs where every Dzong can reach every other Dzong through surviving roads. An isolated Dzong with no roads counts as its own group of size 1.)

Input Format

Line 1: integers N M — Dzongs and surviving roads.
Next M lines: u v — a road between Dzong u and Dzong v.

Output Format

A single integer — number of groups.

Constraints / Notes

$1 \le N \le 2x10^5$ | $0 \le M \le 2x10^5$ | $1 \le u, v \le N$
Roads are bidirectional.

Sample Input

```
5 2
1 2
4 5
```

Sample Output

```
3
```