A. Connected Components

Given an undirected graph with N vertices (numbered from 1 to N) and M edges. Your task is to determine the number of **connected components** in the graph using the **Disjoint Set Union (DSU)** data structure.

Input

The first line contains two integers N and M ($1 \le N, M \le 10^5$) — the number of vertices and edges, respectively.

The next M lines each contain two integers u and v (($1 \le u, v \le N$) — representing an undirected edge between vertex u and vertex v.

Output

Print a single integer — the number of connected components in the graph.

Example

input	Скопировать
8 7 1 2 2 3 3 4 4 5 6 7 7 8 1 5	

output	Скопировать
2	