7 Friend Circles

You are given a social network of people and friendships between them. Your goal is to determine the number of distinct friend circles (connected groups of friends) in the network.

Each person has some number of friends, and friendships are mutual. A **friend circle** is a group of students who are all connected through direct or indirect friendships.

For example, if person A is friends with B, and B is friends with C, then A, B, and C are all in the same friend circle — even if A and C are not directly connected.

Your task is to write a program that calculates the total number of friend circles based on a list of friendship pairs.

7.1 Input

The first line contains two integers: `N` and `F`, where:

- `N` is the total number of people in the network, numbered from `1` to `N`.

- `F` is the total number of direct friendships.

The next `F` lines each contain two integers, `A` and `B`, meaning that person `A` and person `B` are friends.

7.2 Output

The output will be a single integer representing the number of friend circles.

7.3 Sample Input/Output

Sample Input	Sample Output
5 3	2
1 2	
2 3	
4 5	

Explanation: In this example there are 5 people and 3 friendships: people 1-2-3 form one circle, and people 4-5 form another, therefore there are 2 friend circles.