

進階程式設計課程作業#17

(請使用 C 或 C++ 語言撰寫解決下列問題之程式)

Relationship networks

Problem Description

Social networks, such as Facebook or Twitter, recommend friends based on existing friendships. In the problem, you're given the number of students in a school, and some "classmate" relationship. You should then be able to deduce how many classes are there in the school.

Input

There will be multiple test cases in a run. Each test case will span multiple lines. The first line will consist of two positive integers $N \leq 5000$, $M < N*(N-1)$ where N is the number of students in the school, and M is the number of relationships that will be given to you. Suppose the students are numbered $0 \dots N-1$. The next M lines will each consists of two integers X, Y , which shows that the X^{th} student is classmate with the Y^{th} student.

Output

For each test case, output a line consisting of the number of classes in the school.

Sample Input:

```
5 3
0 1
1 2
3 4
6 3
0 1
2 3
4 5
```

Sample Output::

```
2
3
```