

# 重要公告

- 一、即日起，為了防疫及個人健康，也讓大家有一個相對比較舒適的 coding 環境，修習進階程式設計課程的同學，可以在任何地方撰寫老師所出的程式作業，不一定要擠到通風不怎麼理想之電腦教室(一)寫程式，但還是必須於上課時段上線寫程式，不得到處遊蕩；為了老師能完全掌握修課同學於上課時段是否確實認真的在寫程式，請無法到電腦教室(一)上課的同學，務必登入老師的 **WebEX 個人會議室**（網址：<https://moe-tw.webex.com/meet/hsiao.jy>），請以完整姓名登入會議室，以方便老師可以隨時瞭解同學的學習狀況或同學可以問問題。
- 二、不在電腦教室寫程式的同學，驗收方式是將評測平台通過的畫面截圖，截圖須包含學號、題號、評測紀錄等資訊，上傳到雲端學院課程的該題討論版內，讓助教可以隨時去驗收，未完成留言驗收或延遲完成該動作，將依延遲時間長短酌減該程式分數 10~50 分不等。(若在課堂上，請直接舉手檢查即可，無須上傳及留言)

## 進階程式設計課程作業#15

(請使用 C 或 C++ 語言撰寫解決下列問題之程式)

### Classmates

#### 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 consist of two integers  $X, Y$ , which shows that the  $X^{\text{th}}$  student is classmate with the  $Y^{\text{th}}$  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
```