# 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/hsiaojy),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 程式設計作業#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  $N \le 5000$ ,  $M < N^*(N-1)$  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...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:**

53

0 1

12

3 4

63

0 1

23

4 5

### **Sample Output::**

2

3