Problem A
CIRCUSES

Input File: A.DAT
Program Source File: A.PAS or A.C or A.CPP

Consider a town where all the streets are one-way and each street leads from one circus to another. It is also known that starting from a circus and wallking through town's streets you can never reach the same circus, i.e. the town's streets form no cycles.

With these assumptions your task is to write a program that finds the **minimum number** of men that can visit all the circuses of this town in such a way that no circus is visited by more than one man. Each man starts his trip from a circus and can visit other circuses following the town's streets. There are no restrictions about the starting circus for each man.

Your program should read sets of data from a text file. The first line of the input file contains the number of the data sets. Each data set specifies the structure of a town and has the format:

no_of_circuses
no_of_streets
S_1 E_1
S_2 E_2
…………..
$S_{no\_of\_streets}$ $E_{no\_of\_streets}$

The first line of each data set contains a positive integer **no_of_circuses** (greater than **0** and less or equal to **120**) which is the number of circuses in the town. The second line contains a positive integer **no_of_streets** (possibly **0**) which is the number of streets in the town. The next **no_of_streets** lines, one for each street in the town, are randomly ordered and represent the town's streets. The line corresponding to street k (**k ≤ no_of_streets**) consists of two positive integers, separated by one blank: **S_k** (**1 ≤ S_k ≤ no_of_circuses**) - the number of the circus that is the start of the street, and **E_k** (**1 ≤ E_k ≤ no_of_circuses**) – the number of the circus that is the end of the street. Circuses are represented by integers from **1** to **no_of_circuses.**

There are no blank lines between consequtive sets of data. Input data are correct.

The result of the program is on standard output. For each input data set the program prints on a single line, starting from the beginnig of the line, one integer: the minimum number of men required to visit all the circuses in the town.

An example of program input and output:

input	output
2	2
4	1
3	
3 4	
1 3	
2 3	
3	
3	
1 3	
1 2	
2 3	