

Product Owner's Problem

Any product owner (PO) of a company feels that being the PO is a very difficult job. More than coding, managing the programmers and distributing the tasks between various programmers prove to be a tiring task. There are many tasks to be completed and he has a team of talented programmers to do this for him. But the PO always has a problem distributing tasks among them. For a programmer i , the PO wants to give him **at least** X_i tasks to complete in a day. But different programmers have different capacities. Any programmer i can do **at most** Y_i number of tasks in a single day. PO is very aware of every programmer's capability and will not give anyone more work than his maximum capacity.

Now he needs your help to tell him the number of ways in which he can distribute the given number of tasks among his team.

Input:

First line contains T (≤ 60), number of test cases. Then, each test case begins with a single line containing two space separated integers: N (**number of tasks to be completed**) and M (**number of programmers in his team**).

$1 \leq N, M \leq 100$ and $0 \leq X_i, Y_i \leq 100$

Then follow M lines. The i th line contains two integers which are the corresponding X_i and Y_i .

Output:

For each test case, print the case number followed by the number of ways of distributing the tasks mod **1000000007**.

See the sample I/O.

Sample Input	Sample Output
2 3 2 0 3 1 3 5 3 0 2 1 3 2 3	Case 1: 3 Case 2: 5

Limits:

Language	Time	Memory
C	1 Second	50MB
C++	1 Second	50MB
Java	1 Second	50MB
C#	1 Second	50MB
PHP	1 Second	50MB