Problem F
Maze

ACM-ICPC Thailand
Mini Programming Contest
Local Training 2016

You are in a strange maze. This maze is made from a series of rooms. Rooms can be connected by magic portals, but each portal is one way only. One of the rooms contains an exit. Is it possible to escape?

Input

Input starts with a line containing a single integer N, with $0 < N < 100$. This tells you how many test cases there will be.

Each following pair lines contains a single test case. The first line of each test case contains three numbers. The first is an integer n, with $1 < n < 500$. This is the number of rooms in the maze. The other two numbers are distinct integers between 0 and $n - 1$ (inclusive). The first number identifies the starting room, and the second identifies the room that has the exit. Each room in the maze is labelled with a unique number between 0 and n-1.

The next line begins with a natural number E with $0 < E < \frac{n^2}{2}$. This tells you how many pairs of numbers $x\ y$ will follow. The pair $x\ y$ tells you there is a portal from room x to room y, so each must be between 0 and $n - 1$.

Note that portals are one way. Just because there is a portal from x to y does not mean there is a portal from y to x. There are no portals from a room to itself. There is at most one direct portal from one room to another.

Output

With a separate line for each test case output the string *yes* if it is possible to escape the maze, and *no* if it is not.

I/O Example

Sample Input	Sample Output
2 3 1 0 4 1 2 1 0 2 0 0 2 5 1 3 5 2 1 1 2 3 4 2 4 4 2	yes no