Traffic Terrors

Filename: `traffic`

The Problem

In the city of Odnalro, pronounced “Odd Nal Row”, accidents at intersections are commonplace. Unfortunately, sometimes a closed intersection closes other intersections because it's the only intermediate intersection between two intersections.

For example, Intersection 1 may be connected to Intersection 2. Intersection 2 may be connected to Intersections 1, 3, 4 and 5. If there is an accident at Intersection 1, only Intersection 1 is affected and doesn't stop the flow of traffic to others. However, if there is an accident at Intersection 2, the entire traffic grid is destroyed.

When this happens, the county is required to pay for the lost time various residents experienced. They have enlisted your help to know when they have to pay

Given a traffic grid and an intersection where an accident has taken place, tell the county whether the accident has disallowed traffic from accessing more than that intersection. All roads are guaranteed to be two way. Before an accident, it is guaranteed that any intersection will be accessible by any other intersection.

The Input

Input will start with a single positive integer, *n*, representing the number of traffic grids this program will be accepting. Following that are *n* traffic grid descriptions. Each traffic grid begins with a single integer, *k*, greater than 1 but less than 50 defining the number of intersections in the city. Following that are *k* intersections. Each intersection begins with a number *l*, greater than 0, representing the number of roads that meet at that intersection. Following that number are *l* other numbers, representing the other intersections that intersection is connected to. Intersection numbers start at 1, not 0, so the first line is intersection 1's connections, etc. Following these *k* lines is another line with an integer, *c*, greater than or equal to 0. Following that number are *c* other integers, representing accident cases that need to be tested. See Sample Input for clarification.

The Output

For each traffic grid, output a single line: “City #*N*”, where *N* is the number of the current city you're on. After that, output a line for each accident: “yes” for accidents that stopped more traffic than a single intersection, alone; “no” for accidents that only stopped traffic at one intersection. Print a blank line after the output for each city.

Sample Input

```
2
5
1 2
4 1 3 4 5
1 2
1 2
1 2
2 1 2
5
1 2
2 1 3
2 2 4
2 3 5
1 4
2 4 5
```

Sample Output

```
City #1
no
yes

City #2
yes
no
```