City Grid

Cities are powered with power lines, normally running underground or just above ground along tall poles. Generally, all of these power lines are found at a single height, and has been this way for years now. When two wires must overlap, they have to use a wire junction to make sure they do not interfere with each other.

Oswalt's Ordinary Power Supply (OOPS) has now been charged with the task of wiring up a new city. Wiring a city for power is a really daunting task. You have to minimize costs while maintaining a maximum throughput of power. Using too much wire, crossing wires, and even location of power suppliers all play a role in how much it costs to produce. OOPS has to make a drastic cut in costs, really fast. Specifically, there is a lack of wire junctions throughout the company, and they need to recycle some of the old ones they used in earlier projects for newer ones. They realize that if a set of wire junctions are all directly connected to each other, they can effectively be replaced by a single wire junction without any hit in power throughput. Given a list of wire junctions and their connections, let OOPS know which wire junctions they can replace.

Input

Input begins with a single number *C*, the number of cities OOPS plans to "recycle." Each city is described starting with two space separated integers, *J* (*J* < 250) and *W* (*W* < 30000), the number of wire junctions and number of wires connecting the junctions respectively. On the following *W* lines are two space separated integers denoting a wire connecting junctions *A* and *B* (junctions are numbered starting at 1. No two wires will be overlapping without a junction.

Output

For each city, output a single line containing the numbers of the junctions that OOPS can replace with a single junction, separated by spaces and ordered from least to greatest number. If there are two such maximum sets, use the one that has the lower number first. Ex. 3 6 8 12 14 would be preferred over 3 6 9 11 17. OOPS only cares about sets containing at least three junctions, otherwise there is no cost gain in replacing it, so when there are no such junctions, output "Cannot recycle" instead (without the quotes).

(Sample input/output on next page)

Sample Input

```
3
3 2
1 2
2 3
3 3
1 2
2 3
1 3
10 17
1 2
2 9
9 3
3 7
7 6
6 5
5 7
5 4
4 8
1 8
8 9
9 10
10 7
7 8
7 9
8 10
```

Sample Output

```
Cannot recycle
1 2 3
7 8 9 10
```