duality

- Time limit: 1 second
- Memory limit: 256 MB

The theory of "4-ranking" says that any map can be colored with 4 colors, so that any two regions that are neighbors have different colors.

Now you are going to solve a simpler problem.

You are given a graph and you have to decide whether it is possible to color the vertices of this graph using only 2 colors in such a way that no two vertices that are neighbors (i.e. connected by an edge) are the same color.

To simplify the problem, you can consider the following assumptions: 1. No vertex has a ring (edge to itself) 2. The graph is not directed. That is, if it is said that the vertex a is connected to b through the edge ab, you must assume that the vertex b is also connected to a by the edge ab 3. The graph is connected. That is, there is a path from each vertex to all other vertices

Input

Questions

100 duality

100 Quick sort

All submissions

Final submissions

The input contains a large number of test cases. For each test case, the number n<200 is given first, which represents the number of vertices. Each vertex is named by a number from 0 to n - 1. In the

next line, the value of L is given, which represents the number of edges. In L of the next line, two numbers are given in each line, which represent two vertices that are connected to each other. An entry with n = 0 indicates the end of the program

Output

You have to decide whether you can color this graph with two colors or not and print it like the example

Sample input

```
3
3
0 1
1 2
2 0
3
2
0 1
1 2
9
8
0 1
0 2
0 3
```

```
0 4
0 5
0 6
0 7

0 8
0
```

Sample output

```
NOT BICOLORABLE.
BICOLORABLE.
BICOLORABLE.
```

POST AN ANSWER TO THIS QUESTION

.The training period is over

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