Task illuminati

# Illuminati

Mouse Johannes is firmly convinced that some conspirators of Illuminati are secretly meeting in his cave system. Mouse Stofl does not believe in conspiracy theories. Since the symbol of the Illuminati is the triangle, they are interested, whether there is a triangle in the cave system.

The cave system is given as a graph. A triangle are three nodes that are each mutually connected by an edge. Figure out, whether there is a triangle in the cave system.

### Input

The first line of the input contains two integers N and M ( $1 \le N$ ,  $0 \le M$ ) – the number of nodes and edges in the graph.

Each of the following M lines contains two integers  $a_i$  and  $b_i$  ( $0 \le a_i, b_i < N, a_i \ne b_i$ ) denoting an edge between node  $a_i$  and node  $b_i$ . Each pair of vertices a, b is given at most once.

## **Output**

If the cave system contains a Triangle, print a single line with "Illuminati confirmed!". Otherwise print a line with "That is too far fetched.".

#### Limits

There are two groups of test, each of which is worth 50 points.

- In the first test group  $N \le 10$ ,  $M \le \frac{N \cdot (N-1)}{2}$
- In the second test group  $N \le 30$ ,  $M \le \frac{N \cdot (N-1)}{2}$

## **Examples**

Input	Output
3 3	Illuminati confirmed!
0 1	
0 2	
2 1	

Input	Output
4 4	That is too far fetched.
0 1	
1 3	
3 2	
0 2	



# **Swiss Olympiad in Informatics**

Workshop 2019

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Input	Output
4 4	Illuminati confirmed!
2 3	
3 0	
1 3	
2 0	

Input	Output
5 6	That is too far fetched.
0 2	
4 3	
4 0	
1 4	
1 2	
2 3	