

## 6540 Fibonacci Tree

Coach Pang is interested in Fibonacci numbers while Uncle Yang wants him to do some research on Spanning Tree. So Coach Pang decides to solve the following problem:

Consider a bidirectional graph  $G$  with  $N$  vertices and  $M$  edges. All edges are painted into either white or black. Can we find a Spanning Tree with some positive Fibonacci number of white edges? (Fibonacci number is defined as 1, 2, 3, 5, 8, ...)

### Input

The first line of the input contains an integer  $T$ , the number of test cases.

For each test case, the first line contains two integers  $N$  ( $1 \leq N \leq 10^5$ ) and  $M$  ( $0 \leq M \leq 10^5$ ).

Then  $M$  lines follow, each contains three integers  $u, v$  ( $1 \leq u, v \leq N, u \neq v$ ) and  $c$  ( $0 \leq c \leq 1$ ), indicating an edge between  $u$  and  $v$  with a color  $c$  ('1' for white and '0' for black).

### Output

For each test case, output a line 'Case # $x$ :  $s$ '.  $x$  is the case number and  $s$  is either 'Yes' or 'No' (without quotes) representing the answer to the problem.

### Sample Input

```
2
4 4
1 2 1
2 3 1
3 4 1
1 4 0
5 6
1 2 1
1 3 1
1 4 1
1 5 1
3 5 1
4 2 1
```

### Sample Output

```
Case #1: Yes
Case #2: No
```