



Problem F Small Circle

Time limit: 1 second

Memory limit: 2048 megabytes

Problem Description

H1de, a junior coder fresh out of college, is eagerly anticipating his first day at work next Monday. He's keen on understanding the intricate web of relationships within the company of N people. Thus far, he's aware of only two distinct groups: the CEO's group and the Chairman's group. Fortunately, he has M experienced seniors who are willing to provide insights into the employee relationships. However, there's a catch – the information they provide might be inaccurate, whether intentionally or inadvertently. Any contradictory information should be flagged as potentially false.

Recognizing that this problem could be tackled using competitive programming techniques, H1de is hopeful. Unfortunately, H1de's proficiency in competitive programming is lacking, to the extent that he struggles with basic concepts like utilizing the STL library. He reaches out to the best future competitive programmer – that is you – for help.

Input Format

The first line contains two integers N and M . N is the number of people in the company, and these people are numbered from 1 to N . M is the number of seniors who provide insight into the employee relationship. The i -th of the following M lines represents the information provided by the i -th senior and contains a character c_i and two integers a_i and b_i . If c_i is $+$, a_i and b_i are in the same group. If c_i is $-$, a_i and b_i are in different groups.

Output Format

If there is no contradictory information, output "They are nice guys" without quotes. If the first k seniors provide some contradictory information, output k . If there are multiple possible answers, output the smallest one.

Technical Specification

- $2 \leq N \leq 10^6$
- $1 \leq M \leq 10^6$
- For $1 \leq i \leq M$, we have the following
 - $a_i, b_i \in [1, N]$
 - $a_i \neq b_i$
 - c_i is either $-$ or $+$.



Sample Input 1

```
3 3
- 1 2
- 2 3
+ 3 1
```

Sample Output 1

```
They are nice guys
```

Sample Input 2

```
3 3
- 1 2
- 2 3
- 3 1
```

Sample Output 2

```
3
```