

2341 - Big List

Description

Tiny is a not very intelligent boy and wants to compete with his brother Axe to make him look bad any day. He is holding a list of mathematical calculations (questions) and their answers. He wants to ask some of those calculations to Axe and see if he accepts. He knows almost all of the questions he has in the list, and told them to his brother without looking at the list (then sometimes, Tiny can say some question which is not in the list).

There is a problem, the list is very big. And when Axe responds Tiny takes a while to find the question with their answer in the list. Tiny needs help with the list and you should make an application that allows him to instantly find the question and their correct response, in order to know if Axe answer is fine. Also the program should tell him if their memory failed and said some question which is not in the list, not to allow Axe to respond in vain.

Input specification

First line contain two integer numbers **N** and **M** ($1 \leq N, M \leq 10^4$), the number of mathematical calculations (questions) in the list and the number of questions which Axe must respond. The following **N** lines contains two space-separated strings, questions and their answers, each string has between **1** and **15** characters (*digits or '+'*). The following **M** lines, may be of two forms:

- Only one string (*question of Tiny*), if it is not in the list.
- Two strings (*question of Tiny* and **Axe response**) if it is in the list.

You can safely assume, that input meet above specifications. There are no repeated mathematical calculation in the list.

Output specification

You should print **M** lines, one for each *question of Tiny*. If question is not in the list, you should print "*not found*". If question is in the list, you should print "*ok*" if *Axe response* is fine, otherwise you should print "*wrong*".

Sample input

```
3 3
2+4+1 7
0+9+1 10
7+2+6 15
7+2+8
```

2+4+1 10

7+2+6 15

Sample output

not found

wrong

ok

Hint(s)

Source	Nelson González Peñate
Added by	ymondelo20
Addition date	2013-04-09
Time limit (ms)	15000
Test limit (ms)	2500
Memory limit (kb)	256000
Output limit (mb)	64
Size limit (bytes)	30000
Enabled languages	Bash C C# C++ Java Pascal Perl PHP Python Ruby Text