Equivalent Words

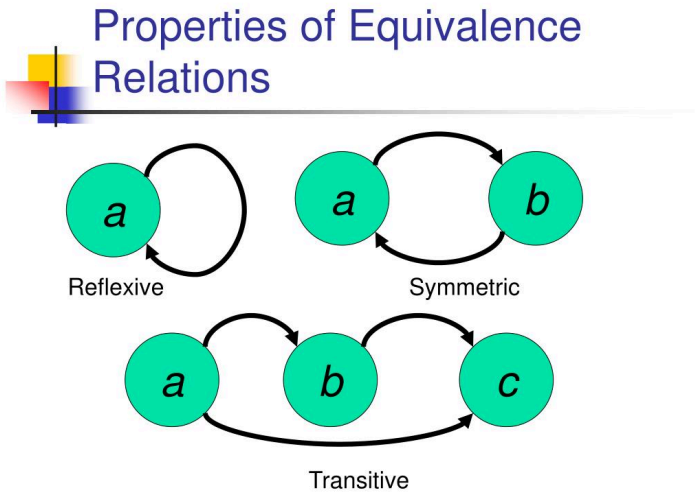
TIME LIMIT: 1 seconds
MEMORY LIMIT: 1024 MB

For those of you who have taken MA 276, Introduction to Proofs, you are well aware of the fact that Rose-Hulman's math department is obsessed with equivalence relations. They love the three properties of an equivalence relation set.

- Reflexive: all elements are equivalent to themselves, *A* is equivalent to *A*.
- Symmetric: if *A* is equivalent to *B*, then *B* is equivalent to *A*.
- Transitive: if *A* is equivalent to *B* and *B* is equivalent to *C*, then *A* is equivalent to *C*.

However, as helpful as these properties are in math, they are not so good in English, an unfortunate area where the math department may struggle. In their papers they write, many of the math faculty have gotten into the poor habit of declaring words as 'equivalent' as they write. For example, a math professor may write "= rose hulman math department" to mean for the remainder of the paper, "rose", "hulman", "math", and "department" are to be treated as the same word. Once a professor adds an equivalence relation to the writing, only the lines written after it are affected by that equivalence relation. Students, trying to understand the professor, make guesses on what the text could be trying to say.

Your task is to determine if a guess is a possible correct translation. For each line a student guesses, you need to figure out whether or not that guess was valid. To be a successful guess, the guess and source line must have the same length, and for every word *i*, the *i*th words in the guess line must be in the same equivalence class as the *i*th word in the source line. Any word not mentioned in any declaration is only equivalent to itself.



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INPUT:
The first line will contain an integer $1 \leq n \leq 10{,}000$

The following *n* lines will contain either

- An equivalence declaration of the form "= word1 word2 word3 …" where each word is only made of lowercase letters, space separated.
- A source line to be translated, a series of words, space separated, all lowercase.

Then, separated by an empty line, follow a number of guess lines equal to the number of source lines. Each guess line is the students guess for the corresponding source line. Guess lines will be a series of words, space separated, all lowercase.

Each input will be

OUTPUT:
Output one line per guess. Output should be "Could be!" if the guess is a possible translation. Otherwise,the output line should be "Could not be!"

Sample Input 1	Sample Output 1
6 welcome to class = welcome to we are going welcome learn today = learn today going welcome lets jump right in class it and get to with the learning welcome to class we are going to learn today lets jump right in to it and get going with the learning	Could be! Could be! Could not be! Could be!

Sample Input 2	Sample Output 2
5 this is a source line = this is = a source = is a line this is a source line a a a a a a a a a a	Could not be! Could be!