

Peter found a digital dictionary which is far better than normal dictionaries. The digital dictionary has an input field in which one can search any string and the dictionary displays all the words whose prefix is that input string. Now you are given a task to make your own digital dictionary. You will be given words that you can store in your database and then you need to design the search functionality .

Input Format

Single integer N which denotes the number of words which are to be stored in the database of the dictionary.

N lines of input, where in each line there is a string made up of lowercase/uppercase letter

Single integer Q which denotes the number of queries.

Q number of lines describing the query string on each line given by user.

Output Format

If word with prefix exists in the database, then you need to print all the words with the given prefix in lexicographical order in separate lines else you need to print No suggestions

INPUT CONSTRAINTS

$1 \leq N \leq 30000$

$\text{sum}(\text{len}(\text{stringi})) \leq 2 * 10^5$

$1 \leq Q \leq 10^3$