

J. Prefix Query

Time Limit: 5 seconds

Problem description

You are given a database of N strings and you need to handle Q queries. Each query contains a prefix string, and for each query, you need to find out how many strings in the database have the given prefix.

Input:

The first line contains an integer N ($1 \leq N \leq 10,000,000$), the number of strings in the database.

The next N lines each contain one string from the database. Each string consists of lowercase English letters and has a length of at most 100 characters.

The next line contains an integer Q ($1 \leq Q \leq 100$), the number of queries.

The next Q lines each contain one string representing a query. Each query string consists of lowercase English letters and has a length of at most 100 characters.

Output:

For each query, print the count of strings in the database that have the given prefix on a new line.

Example:

ID	Input	Output
1	1000 string1 string2 string3 ... string999 string1000 2 string str	1000 1000
2	3 aabb bbcc ccdd 2 aa cc	1 1
3	3 aa bb cc	1 0

	2 aa dd	
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