

There is a collection of input strings and a collection of query strings. For each query string, determine how many times it occurs in the list of input strings.

For example, given input ***strings*** = ['*ab*', '*ab*', '*abc*'] and ***queries*** = ['*ab*', '*abc*', '*bc*'], we find **2** instances of '*ab*', **1** of '*abc*' and **0** of '*bc*'. For each query, we add an element to our return array, ***results*** = [2, 1, 0].

Function Description

Complete the function *matchingStrings* in the editor below. The function must return an array of integers representing the frequency of occurrence of each query string in *strings*.

matchingStrings has the following parameters:

- *strings* - an array of strings to search
- *queries* - an array of query strings

Input Format

The first line contains an integer *n*, the size of ***strings***.

Each of the next *n* lines contains a string ***strings*[*i*]**.

The next line contains *q*, the size of ***queries***.

Each of the next *q* lines contains a string ***q*[*i*]**.

Constraints

$$1 \leq n \leq 1000$$

$$1 \leq q \leq 1000$$

$$1 \leq |\mathbf{strings}[i]|, |\mathbf{queries}[i]| \leq 20 .$$

Output Format

Return an integer array of the results of all queries in order.