

Sparse Arrays

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. Return an array of the results.

Example

```
strings = ['ab', 'ab', 'abc']  
queries = ['ab', 'abc', 'bc']
```

There are **2** instances of 'ab', **1** of 'abc' and **0** of 'bc'. For each query, add an element to the 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:

- *string strings[n]* - an array of strings to search
- *string queries[q]* - an array of query strings

Returns

- *int[q]*: an array of results for each query

Input Format

The first line contains and 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 *queries[i]*.

Constraints

$$1 \leq n \leq 1000$$

$$1 \leq q \leq 1000$$

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

Sample Input

```
4  
aba  
baba  
aba  
xzzxb  
3  
aba  
xzzxb  
ab
```

Sample Output

```
2
1
0
```

Explanation

Here, "*aba*" occurs twice, in the first and third string. The string "*xzxb*" occurs once in the fourth string, and "*ab*" does not occur at all.