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.

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 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

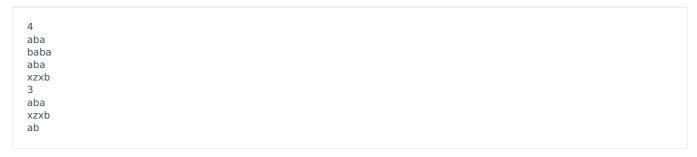
```
1 \le n, q \le 1000

1 \le |strings[i]|, |queries[i]| \le 20.
```

Output Format

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

Sample Input 0



Sample Output 0

```
2
1
0
```

Explanation 0

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.

Sample Input 1

d	ef		
d	e		
f	jh		
3			
d	e		
Ir	nn		
f	jh		

Sample Output 1

```
1
0
1
```

Sample Input 2

```
13
abcde
sdaklfj
asdjf
na
basdn
sdaklfj
asdjf
na
asdjf
na
basdn
sdaklfj
asdjf
sdaklfj
asdjf
na
basdn
sdaklfj
asdjf
sdaklfj
asdjf
```

Sample Output 2

