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 0

```
4
aba
baba
aba
xzxb
3
aba
xzxb
ab
```

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

```
3
def
de
fgh
3
de
lmn
fgh
```

Sample Output 1

```
1
0
1
```

Sample Input 2

```
13
abcde
sdaklfj
asdjf
na
basdn
sdaklfj
asdjf
na
asdjf
na
basdn
sdaklfj
asdjf
5
abcde
sdaklfj
asdjf
na
basdn
```

Sample Output 2

```
1
3
4
3
2
```