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

```
stringList = ['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* with the following parameters:

- $string\ string\ List[n]$: an array of strings to search
- $string\ queries[q]$: an array of query strings

Returns

• int[q]: the results of each query

Input Format

The first line contains and integer n, the size of stringList[]. Each of the next n lines contains a string stringList[i]. The next line contains q, the size of queries[]. Each of the next q lines contains a string queries[i].

Constraints

```
egin{aligned} 1 &\leq n \leq 1000 \ 1 &\leq q \leq 1000 \ 1 &\leq |stringList[i]|, |queries[i]| \leq 20 \ . \end{aligned}
```

Sample Input 0

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

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

Sample Output 2

```
1
3
4
3
2
```