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, $results = [2, 1, 0]$.

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 $q[i]$.

Constraints

$1 \leq n \leq 1000$
$1 \leq q \leq 1000$
$1 \leq |strings[i]|, |queries[i]| \leq 20$.

Output Format

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

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
```