

# Sparse Arrays

## Problem Statement

There are  $N$  strings. Each string's length is no more than  $20$  characters. There are also  $Q$  queries. For each query, you are given a string, and you need to find out how many times this string occurred previously.

## Input Format

The first line contains  $N$ , the number of strings.  
The next  $N$  lines each contain a string.  
The  $N+2^{\text{nd}}$  line contains  $Q$ , the number of queries.  
The following  $Q$  lines each contain a query string.

## Constraints

$1 \leq N \leq 1000$   
 $1 \leq Q \leq 1000$   
 $1 \leq \text{length of any string} \leq 20$

## Sample Input

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