Sparse Arrays



There is a collection of N strings (There can be multiple occurrences of a particular string). Each string's length is no more than ${\bf 20}$ characters. There are also ${\bf Q}$ queries. For each query, you are given a string, and you need to find out how many times this string occurs in the given collection of ${\bf N}$ strings.

Input Format

The first line contains N, the number of strings.

The next N lines each contain a string.

The $N+2^{\rm nd}$ line contains Q, the number of queries.

The following Q lines each contain a query string.

Constraints

```
1 \le N \le 1000

1 \le Q \le 1000

1 \le length \ of \ any \ string \le 20
```

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.