Problem A
Adventure

Time limit: 8 seconds
Memory limit: 2048 megabytes

Problem Description

In the land of mice, there's a mouse scientist named `strstr`. While studying the sky, he spotted a yellow orb hanging high above, full of holes and craters. Convinced it's a massive cheese, he got all the mice in the country excited to build a spaceship and go on a journey to this giant cheese.

Building the spaceship requires going through lots of research papers. When `strstr` gets hold of one, he wants to search for certain keywords to confirm if the paper is relevant to the spaceship project. The keyword occurrence is based on the maximum number of non-overlapping substrings that appear in the text. A substring of a string is a contiguous sequence of characters within that string.

For example, if the content of a paper is "`ababa baabaa`," the keyword "`aba`" appears 2 times. If the content of a paper is "`cdcdcdc`," the keyword "`cdc`" appears 2 times.

Unfortunately, the mouse country hasn't developed a robust and fast search system, leaving `strstr` quite frustrated. So, he turns to you for help, hoping you can assist him in solving this problem.

Input Format

The first line contains a positive integer T representing the number of test cases. For each test case, the first line consists of the content of the paper, which is composed of all printable ASCII characters and spaces. Following that, the next line contains a positive integer n, indicating the total number of keywords to search for. Subsequently, there are n lines, each representing a keyword. The content of each keyword consists of all printable ASCII characters and does not include spaces.

Output Format

For each keyword, output an integer representing the number of occurrences of that keyword.

Technical Specification

- $1 \leq T \leq 5$
- The total length of the content of all test cases' papers does not exceed 10^6 characters.
- The total length of all test cases' keywords does not exceed 10^6 characters.
- The total number of all test case's keywords does not exceed 10^3.

Sample Input 1

```
2
ababa baabaa
3
aba
a
!@#$^
cdcdc#dc
1
cdc
```

Sample Output 1

```
2
7
0
1
```