Problem I
Appear
Time limit: 1 second
Memory: 1024 megabytes

Problem Description

Mị is a girl with beautiful qualities, deserving of happiness. However, due to a karmic debt, she has become the daughter-in-law of the local chief Pá Tra, where she endures a humiliating and painful existence, especially due to the pressure and mental torment inflicted by A Sử - Pá Tra's son and Mị's husband. Mị's suffering is vividly illustrated in the scene where she wishes to celebrate the spring festival.

A Sử, who cannot even be called a husband, sees Mị merely as a servant. When he learns that Mị wants to go out for the spring festivities, he poses a difficult question to ensure that a gentle girl like Mị cannot answer and must stay home to serve him. His question is as follows: "Given a string **A** consisting only of lowercase Latin letters with length **N**, and **Q** questions where each question contains a string **B** with a length smaller than **A**, count how many times each string **B** appears in string **A**."

Since Mị is focused on getting ready to celebrate spring, she believes that you will be able to help answer these questions, and she is confident in your abilities. If possible, you and Mị could also enjoy the festivities together! >.<

Input Structure:

- Line 1: A string **A** with length **N** ($N \leq 10^6$).
- Line 2: An integer **Q** ($Q \leq 100$).
- The following **Q** lines: Each line contains a string **B** with length $\leq 10^6$.

Output Structure:

- For each question, output the number of times string **B** appears in string **A**.

Example:

INPUT	OUTPUT
ababaaa 3 ba aa hihi	2 2 0