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Programming Contest



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## Writings on the Wall

Input: Standard Input  
Output: Standard Output



After years of studying the drawings on a wall, in an ancient Malaysian temple, a famous archaeologist believes that she has unlocked its secret. Her theory is that the drawings are characters of an ancient language and that they are organized into long strings, which she identified to her student. The student took pictures of the drawings, for analysis back in the office, and needed two photos to record each string: one which includes the left most part of the string and one with the right most part of the string .

Back at the office they realized that there are only 26 different characters, which they mapped into the English alphabet 'a' to 'z'. Unfortunately, the student forgot to put markers on the wall before he took the pictures and there may be some overlapping in the photos. For example, the photo of the left part “xyzabcabc” can be combined with the photo of the right part “abcabcxyz” in the following three different ways:

```
xyzabcabcabcxyz  
xyzabcabcabcxyz  
xyzabcabcxyz
```

Your task is analyze the available pairs of left and right photos and compute the number of possible lengths of their original strings.

**Input**

The input starts with an integer  $T$  ( $1 \leq T \leq 100$ ), on a line by itself, that indicates the number of cases. Each case contains two strings, separated by a single blank space on a line by themselves, which describe the left and right photos respectively. Each string consists of lowercase alphabet ('a', 'b', ..., 'z'), does not contain blank spaces and has a length between 1 and 50000, inclusive.

**Output**

For each case, the output consists of a single integer on a line by itself. The integer represents the number of possible string lengths.

| Sample Input        | Output for the Sample Input |
|---------------------|-----------------------------|
| 3                   | 3                           |
| xyzabcabc abcabcxyz | 2                           |
| xyzabcd abcdxyz     | 1                           |
| acmicpc kualalumpur |                             |