TSOC '15 Contest 2 #3 - Funny Anagrams

Time limit: 1.0s   **Memory limit:** 513M

The remaining group continues to traverse the caves when suddenly, they are ambushed! Gigantic spiders tear Tom to pieces, and in the scuffle, Paul is pinned to the ground by a falling boulder. Max, Mehdi, Joey and Alex have no choice but to leave Paul behind as the spider creatures swarm over him. He is gone now.

To cheer up the group, Max tells the group about funny anagrams, an anagram of a base string that contains a funny substring. For example, Boris's name anagrams to "Bikini Rhos Rusk", which contains the word "Bikini". Now isn't that quite hilarious! Given a base string and funny substring, tell Max how many funny anagrams he can make!

Here are the rules of anagramming, according to an interview with `Master Max` himself.

> Well, my rules are sort of different. First, I get just enough of my alphabet toys to spell out the base string. Then, I use some of them to spell out the funny substring, and I glue them together in order. **I now consider the substring as a single, unique character.** I can't move any individual alphabet toys from the substring anymore, as they are glued together, but I *can* move the entire substring around. Afterward, I mix them up and see how many combinations I can make!

Input Specification

The input will consist of lowercase alphabet characters (a - z) and a newline.

The first line of input has the funny substring, with length $1 \leq length \leq 100$. **The characters may repeat in any way.**

The second line of input will have the base string, with length $1 \leq length \leq 100$.

Output Specification

A single integer: The number of funny anagrams that Max can create (modulo $10^9 + 7$).

Sample Input

```
ab
aab
```

Sample Output

```
2
```

Explanation

Max glues an `a` and `b` together from the base string to get the unique character `ab`. By the definition of an anagram, he has to use the remaining `a` from the base string:

> An anagram is a type of wordplay, the result of rearranging the letters of a word or phrase to produce a new word or phrase, using all the original letters exactly once.

Therefore Max can make two anagrams, `a` + `ab` and `ab` + `a`.