Permutastic

You are given two strings. Consider every distinct string of length at least three that occurs contiguously and exactly in both input strings. Different occurrences of the same substring contribute only one substring.

Group these common substrings by their letters: two substrings belong to the same group if one is a permutation of the other (equivalently, if every letter occurs equally often in both). Count the number of groups. Permutations are used only to decide which common substrings share a group: a substring is considered only if that exact substring occurs contiguously in both input strings.

For example, for **taupermutations** and **mutatetau**, the common substrings of at least three letters are `tau, mut, muta, mutat, uta, utat, tat`. The substrings `tau` and `uta` belong to the same group, while each of the other five substrings belongs to a different group, so the answer is 6.

Input

Two strings, s_1 and s_2, made up of lowercase English letters (`a`–`z`), one on each line, where $1 \leq |s_1|, |s_2| \leq 300$.

Output

Output the number of groups of common substrings. If there is no common substring of length at least three, output 0.

Sample Input 1

```
taupermutations
mutatetau
```

Sample Output 1

```
6
```

Sample Input 2

```
midcentralprogrammingcontest
centraltestpark
```

Sample Output 2

```
17
```

Sample Input 3

```
eat
tea
```

Sample Output 3

```
0
```

Sample Explanation

In the third sample, `eat` is a permutation of `tea`, but the two input strings have no exact common substring of length at least three. Therefore, the answer is 0.