Sudhir Loves Programmer Strings



A programmer string contains letters that can be rearranged to form the word 'programmer' and is a substring of a longer string. Note that the strings 'programmer', 'grammproer', and 'xprozmerqgram' are all classified as programmer strings by this definition. Given a string, determine the number of indices that lie between the two shortest programmer strings that it contains.

Example

s = 'programmerxxxprozmerqgram'



In this example, indices 0 - 9 form one programmer string and indices 13 - 24 contain another. The number of indices between the programmer strings are 3, thus the function will return 3.

Input Format

A single string consisting of two or more programmer strings

Constraints

- String s consists of lowercase English alphabetic letters only, ascii[a-z].
- $1 \le$ the length of $s \le 105$.

Output Format

The number of indices which are between the two shortest programmer strings within s

Sample Input 0

progxrammerrxproxgrammer

Sample Output 0

2