2360. Substring With Largest Variance

Difficulty : Hard

The **variance** of a string is defined as the largest difference between the number of occurrences of **any** 2 characters present in the string. Note the two characters may or may not be the same.

Given a string s consisting of lowercase English letters only, return *the **largest variance** possible among all **substrings** of* s.

A **substring** is a contiguous sequence of characters within a string.

Example 1:

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Input: s = "aababbb"
Output: 3
Explanation:
All possible variances along with their respective substrings are listed below:
- Variance 0 for substrings "a", "aa", "ab", "abab", "aababb", "ba", "b", "bb", and "bbb".
- Variance 1 for substrings "aab", "aba", "abb", "aabab", "ababb", "aababbb", and "bab".
- Variance 2 for substrings "aaba", "ababbb", "abbb", and "babb".
- Variance 3 for substring "babbb".
Since the largest possible variance is 3, we return it.
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Example 2:

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Input: s = "abcde"
Output: 0
Explanation:
No letter occurs more than once in s, so the variance of every substring is 0.
```

Constraints:

- 1 <= s.length <= 10^4
- s consists of lowercase English letters.