Problem 1839: Longest Substring Of All Vowels in Order

Problem Information

Difficulty: Medium
Acceptance Rate: 51.17%
Paid Only: No
Tags: String, Sliding Window

Problem Description

A string is considered **beautiful** if it satisfies the following conditions:

* Each of the 5 English vowels (`'a'`, `'e'`, `'i'`, `'o'`, `'u'`) must appear **at least once** in it. * The letters must be sorted in **alphabetical order** (i.e. all `'a'`s before `'e'`s, all `'e'`s before `'i'`s, etc.).

For example, strings `"aeiou"` and `"aaaaaaeiiiioou"` are considered **beautiful** , but `"uaeio"`, `"aeoiu"`, and `"aaaeeeooo"` are **not beautiful**.

Given a string `word` consisting of English vowels, return _the**length of the longest beautiful substring** of _`word` _. If no such substring exists, return_`0`.

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

Example 1:

Input: word = "aeiaaio _aaaaeiiiiouuu_ ooaauuaeiu" **Output:** 13 **Explanation:** The longest beautiful substring in word is "aaaaeiiiiouuu" of length 13.

Example 2:

Input: word = "aeeeiiiioooauuu _aeiou_ " **Output:** 5 **Explanation:** The longest beautiful substring in word is "aeiou" of length 5.

Example 3:

Input: word = "a" **Output:** 0 **Explanation:** There is no beautiful substring, so return 0.

Constraints:

* `1 <= word.length <= 5 * 105` * `word` consists of characters `'a'`, `'e'`, `'i'`, `'o'`, and `'u'`.

Code Snippets

C++:

```
class Solution {
public:
int longestBeautifulSubstring(string word) {

}
};
```

Java:

```
class Solution {
public int longestBeautifulSubstring(String word) {

}
}
```

Python3:

```
class Solution:
def longestBeautifulSubstring(self, word: str) -> int:
```