

Problem 1456: Maximum Number of Vowels in a Substring of Given Length

Problem Information

Difficulty: Medium

Acceptance Rate: 61.12%

Paid Only: No

Tags: String, Sliding Window

Problem Description

Given a string `s` and an integer `k`, return the maximum number of vowel letters in any substring of `s` with length `k`.

Vowel letters in English are `'a'`, `'e'`, `'i'`, `'o'`, and `'u'`.

Example 1:

Input: `s = "abciidef", k = 3` **Output:** `3` **Explanation:** The substring `"iii"` contains 3 vowel letters.

Example 2:

Input: `s = "aeiou", k = 2` **Output:** `2` **Explanation:** Any substring of length 2 contains 2 vowels.

Example 3:

Input: `s = "leetcode", k = 3` **Output:** `2` **Explanation:** `"lee"`, `"eet"` and `"ode"` contain 2 vowels.

Constraints:

`1 <= s.length <= 105` `s` consists of lowercase English letters. `1 <= k <= s.length`

Code Snippets

C++:

```
class Solution {  
public:  
    int maxVowels(string s, int k) {  
  
    }  
};
```

Java:

```
class Solution {  
    public int maxVowels(String s, int k) {  
  
    }  
}
```

Python3:

```
class Solution:  
    def maxVowels(self, s: str, k: int) -> int:
```