

# Problem 3325: Count Substrings With K-Frequency Characters I

## Problem Information

**Difficulty:** Medium

**Acceptance Rate:** 55.19%

**Paid Only:** No

**Tags:** Hash Table, String, Sliding Window

## Problem Description

Given a string `s` and an integer `k`, return the total number of substrings of `s` where **at least one** character appears **at least** `k` times.

**Example 1.**

**Input:** `s = "abacb", k = 2`

**Output:** 4

**Explanation:**

The valid substrings are:

\* `"aba"` (character `'a'` appears 2 times). \* `"abac"` (character `'a'` appears 2 times). \* `"abacb"` (character `'a'` appears 2 times). \* `"bacb"` (character `'b'` appears 2 times).

**Example 2.**

**Input:** `s = "abcde", k = 1`

**Output:** 15

**Explanation:**

All substrings are valid because every character appears at least once.

**\*\*Constraints:\*\***

\*`1` <= s.length <= 3000` \*`1` <= k <= s.length` \*`s` consists only of lowercase English letters.

## Code Snippets

**C++:**

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

**Java:**

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

**Python3:**

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