**Count Substrings with Exactly K Distinct Characters**

You are given a string s of lowercase English alphabets and an integer k. Your task is to count all possible substrings of s that contain exactly k distinct characters.

**Input:**

* A string s consisting of lowercase English letters.
* An integer k, where 1 ≤ 𝑘 ≤ 26
* The length of the string satisfies 1 ≤ 𝑛 ≤ 104

**Output:**

* Return an integer that represents the number of substrings of s that contain exactly k distinct characters.

**Examples:**

* Example 1  
  Input: s = "pqpqs", k = 2

Output: 7  
Explanation: The possible substrings with exactly 2 distinct characters are: "pq", "pqp", "qp", "pqs", "pq", "qs", and "pq". Thus, there are 7 such substrings.

**Constraints:**

* A string s consisting of lowercase English letters.
* An integer k, where 1 ≤ 𝑘 ≤ 26
* The length of the string satisfies 1 ≤ 𝑛 ≤ 104

**Test Cases:**

1. Input: s = "pqpqs", k = 2

Output: 7

1. Input: s = "aabacbebebe", k = 3

Output: 10

1. Input: s = "a", k = 1

Output: 1

1. Input: s = "abc", k = 3

Output: 1

1. Input: s = "abc", k = 2

Output: 2

**Edge Cases:**

1. Small values of k: If k = 1, count the number of substrings with only one distinct character (such as repeated characters).
2. Large values of k: If k > n, it is impossible to have a substring with k distinct characters, so the result is 0.
3. String with all identical characters: If the string consists of repeated characters, count substrings based on their length for different values of k.