Problem 358: Rearrange String k Distance Apart

Problem Information

Difficulty: Hard
Acceptance Rate: 39.46%
Paid Only: Yes
Tags: Hash Table, String, Greedy, Sorting, Heap (Priority Queue), Counting

Problem Description

Given a string `s` and an integer `k`, rearrange `s` such that the same characters are **at least** distance `k` from each other. If it is not possible to rearrange the string, return an empty string `""`.

Example 1:

Input: s = "aabbcc", k = 3 **Output:** "abcabc" **Explanation:** The same letters are at least a distance of 3 from each other.

Example 2:

Input: s = "aaabc", k = 3 **Output:** "" **Explanation:** It is not possible to rearrange the string.

Example 3:

Input: s = "aaadbbcc", k = 2 **Output:** "abacabcd" **Explanation:** The same letters are at least a distance of 2 from each other.

Constraints:

* `1 <= s.length <= 3 * 105` * `s` consists of only lowercase English letters. * `0 <= k <= s.length`

Code Snippets

C++:

```
class Solution {
public:
string rearrangeString(string s, int k) {

}
};
```

Java:

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

}
}
```

Python3:

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