

Problem 2068: Check Whether Two Strings are Almost Equivalent

Problem Information

Difficulty: Easy

Acceptance Rate: 63.99%

Paid Only: No

Tags: Hash Table, String, Counting

Problem Description

Two strings `word1` and `word2` are considered **almost equivalent** if the differences between the frequencies of each letter from `'a'` to `'z'` between `word1` and `word2` is **at most** `3`.

Given two strings `word1` and `word2`, each of length `n`, return `true` **if** `word1` **and** `word2` **are** **almost equivalent**, or `false` **otherwise**.

The **frequency** of a letter `x` is the number of times it occurs in the string.

Example 1.

Input: `word1 = "aaaa", word2 = "bccb"` **Output:** `false` **Explanation:** There are 4 'a's in "aaaa" but 0 'a's in "bccb". The difference is 4, which is more than the allowed 3.

Example 2.

Input: `word1 = "abcdeef", word2 = "abaaacc"` **Output:** `true` **Explanation:** The differences between the frequencies of each letter in `word1` and `word2` are at most 3: - 'a' appears 1 time in `word1` and 4 times in `word2`. The difference is 3. - 'b' appears 1 time in `word1` and 1 time in `word2`. The difference is 0. - 'c' appears 1 time in `word1` and 2 times in `word2`. The difference is 1. - 'd' appears 1 time in `word1` and 0 times in `word2`. The difference is 1. - 'e' appears 2 times in `word1` and 0 times in `word2`. The difference is 2. - 'f' appears 1 time in `word1` and 0 times in `word2`. The difference is 1.

Example 3.

****Input:**** word1 = "cccddabba", word2 = "babababab" ****Output:**** true ****Explanation:**** The differences between the frequencies of each letter in word1 and word2 are at most 3: - 'a' appears 2 times in word1 and 4 times in word2. The difference is 2. - 'b' appears 2 times in word1 and 5 times in word2. The difference is 3. - 'c' appears 3 times in word1 and 0 times in word2. The difference is 3. - 'd' appears 2 times in word1 and 0 times in word2. The difference is 2.

****Constraints:****

* `n == word1.length == word2.length` * `1 <= n <= 100` * `word1` and `word2` consist only of lowercase English letters.

Code Snippets

C++:

```
class Solution {
public:
    bool checkAlmostEquivalent(string word1, string word2) {

    }
};
```

Java:

```
class Solution {
    public boolean checkAlmostEquivalent(String word1, String word2) {

    }
}
```

Python3:

```
class Solution:
    def checkAlmostEquivalent(self, word1: str, word2: str) -> bool:
```