

Problem 599: Minimum Index Sum of Two Lists

Problem Information

Difficulty: Easy

Acceptance Rate: 58.94%

Paid Only: No

Tags: Array, Hash Table, String

Problem Description

Given two arrays of strings `list1` and `list2`, find the **common strings with the least index sum**.

A **common string** is a string that appeared in both `list1` and `list2`.

A **common string with the least index sum** is a common string such that if it appeared at `list1[i]` and `list2[j]` then `i + j` should be the minimum value among all the other **common strings**.

Return all the common strings with the least index sum. Return the answer in **any order**.

Example 1:

Input: `list1 = ["Shogun", "Tapioca Express", "Burger King", "KFC"], list2 = ["Piatti", "The Grill at Torrey Pines", "Hungry Hunter Steakhouse", "Shogun"]`
Output: `["Shogun"]`
Explanation: The only common string is "Shogun".

Example 2:

Input: `list1 = ["Shogun", "Tapioca Express", "Burger King", "KFC"], list2 = ["KFC", "Shogun", "Burger King"]`
Output: `["Shogun"]`
Explanation: The common string with the least index sum is "Shogun" with index sum = $(0 + 1) = 1$.

Example 3:

****Input:**** list1 = ["happy", "sad", "good"], list2 = ["sad", "happy", "good"] ****Output:**** ["sad", "happy"] ****Explanation:**** There are three common strings: "happy" with index sum = (0 + 1) = 1. "sad" with index sum = (1 + 0) = 1. "good" with index sum = (2 + 2) = 4. The strings with the least index sum are "sad" and "happy".

****Constraints:****

* `1 <= list1.length, list2.length <= 1000` * `1 <= list1[i].length, list2[i].length <= 30` * `list1[i]` and `list2[i]` consist of spaces `' '` and English letters. * All the strings of `list1` are ****unique****. * All the strings of `list2` are ****unique****. * There is at least a common string between `list1` and `list2`.

Code Snippets

C++:

```
class Solution {
public:
    vector<string> findRestaurant(vector<string>& list1, vector<string>& list2) {

    }
};
```

Java:

```
class Solution {
    public String[] findRestaurant(String[] list1, String[] list2) {

    }
}
```

Python3:

```
class Solution:
    def findRestaurant(self, list1: List[str], list2: List[str]) -> List[str]:
```