

Problem 1775: Equal Sum Arrays With Minimum Number of Operations

Problem Information

Difficulty: **Medium**

Acceptance Rate: 54.44%


Paid Only: No

Tags: Array, Hash Table, Greedy, Counting

Problem Description

You are given two arrays of integers `nums1` and `nums2`, possibly of different lengths. The values in the arrays are between `1` and `6`, inclusive.

In one operation, you can change any integer's value in **any** of the arrays to **any** value between `1` and `6`, inclusive.

Return **the** minimum number of operations required to make the sum of values in `nums1` **equal** to the sum of values in `nums2`. Return `-1`  if it is not possible to make the sum of the two arrays equal.

Example 1:

Input: `nums1 = [1,2,3,4,5,6], nums2 = [1,1,2,2,2,2]` **Output:** `3` **Explanation:** You can make the sums of `nums1` and `nums2` equal with 3 operations. All indices are 0-indexed. - Change `nums2[0]` to 6. `nums1 = [1,2,3,4,5,6], nums2 = [6,1,2,2,2,2]`. - Change `nums1[5]` to 1. `nums1 = [1,2,3,4,5,1], nums2 = [6,1,2,2,2,2]`. - Change `nums1[2]` to 2. `nums1 = [1,2,2,4,5,1], nums2 = [6,1,2,2,2,2]`.

Example 2:

Input: `nums1 = [1,1,1,1,1,1], nums2 = [6]` **Output:** `-1` **Explanation:** There is no way to decrease the sum of `nums1` or to increase the sum of `nums2` to make them equal.

Example 3:

****Input:**** nums1 = [6,6], nums2 = [1] ****Output:**** 3 ****Explanation:**** You can make the sums of nums1 and nums2 equal with 3 operations. All indices are 0-indexed. - Change nums1[0] to 2. nums1 = [****_2_****,6], nums2 = [1]. - Change nums1[1] to 2. nums1 = [2,****_2_****], nums2 = [1]. - Change nums2[0] to 4. nums1 = [2,2], nums2 = [****_4_****].

****Constraints:****

***`1`** <= nums1.length, nums2.length <= 105 ***`1`** <= nums1[i], nums2[i] <= 6`

Code Snippets

C++:

```
class Solution {
public:
    int minOperations(vector<int>& nums1, vector<int>& nums2) {

    }
};
```

Java:

```
class Solution {
    public int minOperations(int[] nums1, int[] nums2) {

    }
}
```

Python3:

```
class Solution:
    def minOperations(self, nums1: List[int], nums2: List[int]) -> int:
```