

5724. Minimum Absolute Sum Difference

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You are given two positive integer arrays `nums1` and `nums2` , both of length `n` .

The **absolute sum difference** of arrays `nums1` and `nums2` is defined as the **sum** of $|\text{nums1}[i] - \text{nums2}[i]|$ for each $0 \leq i < n$ (**0-indexed**).

You can replace **at most one** element of `nums1` with **any** other element in `nums1` to **minimize** the absolute sum difference.

Return the *minimum absolute sum difference* **after** replacing at most one element in the array `nums1` . Since the answer may be large, return it **modulo** $10^9 + 7$.

$|x|$ is defined as:

- x if $x \geq 0$, or
- $-x$ if $x < 0$.

User Accepted:	0
User Tried:	0
Total Accepted:	0
Total Submissions:	0
Difficulty:	Medium

Example 1:

Input: nums1 = [1,7,5], nums2 = [2,3,5]

Output: 3

Explanation: There are two possible optimal solutions:

- Replace the second element with the first: $[1, \underline{7}, 5] \Rightarrow [1, \underline{1}, 5]$, or
- Replace the second element with the third: $[1, \underline{7}, 5] \Rightarrow [1, \underline{5}, 5]$.

Both will yield an absolute sum difference of $|1-2| + (|1-3| \text{ or } |5-3|) + |5-5| = 3$.

Example 2:

Input: nums1 = [2,4,6,8,10], nums2 = [2,4,6,8,10]

Output: 0

Explanation: nums1 is equal to nums2 so no replacement is needed. This will result in an absolute sum difference of 0.

Example 3:

Input: nums1 = [1,10,4,4,2,7], nums2 = [9,3,5,1,7,4]

Output: 20

Explanation: Replace the first element with the second: [1, 10, 4, 4, 2, 7] => [10, 10, 4, 4, 2, 7].

This yields an absolute sum difference of $|10-9| + |10-3| + |4-5| + |4-1| + |2-7| + |7-4| = 20$

Constraints:

- `n == nums1.length`
- `n == nums2.length`
- `1 <= n <= 105`
- `1 <= nums1[i], nums2[i] <= 105`

JavaScript



```
1  /**
2   * @param {number[]} nums1
3   * @param {number[]} nums2
4   * @return {number}
5   */
6  var minAbsoluteSumDiff = function(nums1, nums2) {
7
8  };
```