

5751. Maximum Distance Between a Pair of Values

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You are given two **non-increasing 0-indexed** integer arrays `nums1` and `nums2`.

A pair of indices (i, j) , where $0 \leq i < \text{nums1.length}$ and $0 \leq j < \text{nums2.length}$, is **valid** if both $i \leq j$ and $\text{nums1}[i] \leq \text{nums2}[j]$. The **distance** of the pair is $j - i$.

Return the **maximum distance** of any **valid pair** (i, j) . If there are no valid pairs, return `0`.

An array `arr` is **non-increasing** if $\text{arr}[i-1] \geq \text{arr}[i]$ for every $1 \leq i < \text{arr.length}$.

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

Example 1:

Input: `nums1 = [55,30,5,4,2]`, `nums2 = [100,20,10,10,5]`

Output: `2`

Explanation: The valid pairs are $(0,0)$, $(2,2)$, $(2,3)$, $(2,4)$, $(3,3)$, $(3,4)$, and $(4,4)$. The maximum distance is 2 with pair $(2,4)$.

Example 2:

Input: `nums1 = [2,2,2]`, `nums2 = [10,10,1]`

Output: `1`

Explanation: The valid pairs are $(0,0)$, $(0,1)$, and $(1,1)$. The maximum distance is 1 with pair $(0,1)$.

Example 3:

Input: `nums1 = [30,29,19,5]`, `nums2 = [25,25,25,25,25]`

Output: `2`

Explanation: The valid pairs are $(2,2)$, $(2,3)$, $(2,4)$, $(3,3)$, and $(3,4)$. The maximum distance is 2 with pair $(2,4)$.

Example 4:

Input: `nums1 = [5,4]`, `nums2 = [3,2]`

Output: `0`

Explanation: There are no valid pairs, so return `0`.

Constraints:

- $1 \leq \text{nums1.length} \leq 10^5$
- $1 \leq \text{nums2.length} \leq 10^5$
- $1 \leq \text{nums1}[i], \text{nums2}[j] \leq 10^5$
- Both `nums1` and `nums2` are **non-increasing**.

Java

```
1 class Solution {
2     public int maxDistance(int[] nums1, int[] nums2) {
3
4     }
5 }
```