1855. Maximum Distance Between a Pair of Values

Description

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

A pair of indices `(i, j)`, where `0 <= i < nums1.length` and `0 <= j < nums2.length`, is **valid** if both `i <= j` and `nums1[i] <= 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 `arr[i-1] >= arr[i]` for every `1 <= i < arr.length`.

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).
```

Constraints:

- `1 <= nums1.length, nums2.length <= 10^5`
- `1 <= nums1[i], nums2[j] <= 10^5`
- Both `nums1` and `nums2` are **non-increasing**.