88. Merge Sorted Array

Solved

Easy | Topics | Companies | Hint

You are given two integer arrays `nums1` and `nums2`, sorted in **non-decreasing order**, and two integers `m` and `n`, representing the number of elements in `nums1` and `nums2` respectively.

Merge `nums1` and `nums2` into a single array sorted in **non-decreasing order**.

The final sorted array should not be returned by the function, but instead be *stored inside the array* `nums1`. To accommodate this, `nums1` has a length of `m + n`, where the first `m` elements denote the elements that should be merged, and the last `n` elements are set to `0` and should be ignored. `nums2` has a length of `n`.

Example 1:

> **Input:** nums1 = [1,2,3,0,0,0], m = 3, nums2 = [2,5,6], n = 3
> **Output:** [1,2,2,3,5,6]
> **Explanation:** The arrays we are merging are [1,2,3] and [2,5,6].
> The result of the merge is [1,2,2,3,5,6] with the underlined elements coming from nums1.

Example 2:

> **Input:** nums1 = [1], m = 1, nums2 = [], n = 0
> **Output:** [1]
> **Explanation:** The arrays we are merging are [1] and [].
> The result of the merge is [1].

Example 3:

> **Input:** nums1 = [0], m = 0, nums2 = [1], n = 1
> **Output:** [1]
> **Explanation:** The arrays we are merging are [] and [1].
> The result of the merge is [1].
> Note that because m = 0, there are no elements in nums1. The 0 is only there to ensure the merge result can fit in nums1.

Constraints:

- `nums1.length == m + n`
- `nums2.length == n`
- `0 <= m, n <= 200`
- `1 <= m + n <= 200`
- -10^9 `<= nums1[i], nums2[j] <=` 10^9