

Merge sorted Array

nums1 = [1, 2, 3, 0, 0] nums2 = [2, 5, 6]

num1 and num2 = [1, 2, 2, 3, 5, 6]

→ first merge them, then sort.

int[] mergedArray = new int[arr1.length + arr2.length]

// Use for loop to populate array

for (int i = 0; i < arr1.length; i++)

mergedArray[i] = array1[i];

// all the elements of array1 moved to mergedArray.

for (int i = 0; i < arr2.length; i++)

mergedArray[i + arr1.length] = array2[i];

// [1, 2, 3, 0, 0, 0, elements of array2]

then Arrays.sort(); or bubble sort

This approach doesn't work!

nums1 = [1, 2, 3, 0, 0] → Size = 3

nums2 = [2, 5, 6] → Size = 3

idea is to take
nums2 add in
nums1

new code

nums1 last element = m-1

nums2 last element = n-1

last position in nums1 = m+n-1

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while (j >= 0)
    num1 is exhausted or num2 element > num1 element
    if (i < 0 || nums[j] > num[i])
        nums[k--] = nums[j--]
    else
        nums[k--] = nums1[i--]
```