

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`.

Sup.

$n_1 = [\underbrace{1, 2, 3}_m, \underbrace{0, 0, 0}_n]$, $n_2 = [2, 5, 6]$

quiero

Sabemos q. colu. está ord. \Rightarrow al final está el num más grande de colu.

Necesito poder compararlos \Rightarrow 2 punteros

$n_1 = [1, 2, 3, 0, 0, 0]$ $n_2 = [2, 5, 6]$

\uparrow \uparrow \uparrow
 a c b

$c =$ donde voy a ir poniendo el result. (comparo los núm. + grandes)

Close

while ($b \geq 0$)if ($n_1[a] > n_2[b]$) $n_1[c] = n_1[a]$ $c--; a--;$ else if ($a < 0 \parallel n_1[a] \leq n_2[b]$) $n_1[c] = n_2[b]$ $c--; b--;$

Real

```
int c = n+m-1;
while(n-1>=0){
    if(m>=1 && nums1[m-1]>nums2[n-1]){
        m--;
        nums1[c--] = nums1[m];
    } else{
        n--;
        nums1[c--] = nums2[n];
    }
}
```

$m = a + 1$ y $n = b + 1$