88. Merge Sorted Array

Description | Hints | Submissions | Discuss | Solution

Pick One

Given two sorted integer arrays *nums1* and *nums2*, merge *nums2* into *nums1* as one sorted array.

Note:

- The number of elements initialized in *nums1* and *nums2* are *m* and *n* respectively.
- You may assume that *nums1* has enough space (size that is greater or equal to *m* + *n*) to hold additional elements from *nums2*.

Example:

```
Input:
nums1 = [1,2,3,0,0,0], m = 3
nums2 = [2,5,6],       n = 3

Output: [1,2,2,3,5,6]
```

```java
public class L88 {
/*
 * 这个是合并两个连个有序数组，本题目可以从后面到前面进行处理
 * 循环递归解决，最大的放最后面，倒序进行处理
 */
    public void merge(int[] nums1, int m, int[] nums2, int n) {
        int i = m - 1;
        int j = n - 1;
        int index = m + n - 1;


        while (i >= 0 && j >= 0) {
           if(nums1[i] > nums2[j]) {
               nums1[index--] = nums1[i--];
           }else {
               nums1[index--] = nums2[j--];
           }
       }

        while (i >= 0) {
           nums1[index--] = nums1[i--];
       }
        while (j >= 0) {
           nums1[index--] = nums2[j--];
       }
    }

}
```