**[Merge Sorted Array](https://leetcode.com/problems/merge-sorted-array/)**

**public** **class** MergeSortedArray {

**public** **static** **void** main(String[] args) {

// **TODO** Auto-generated method stub

**int**[] nums1 = {1, 2, 3, 0, 0, 0};

**int**[] nums2 = {2, 5 , 6};

*merge*(nums1 , 3 , nums2 , 3);

**for**(**int** i : nums1) {

System.***out***.print(i + " ");

}

}

**public** **static** **void** merge(**int**[] nums1, **int** m, **int**[] nums2, **int** n) {

**if**(nums1 == **null** && nums2 == **null**) {

**return**;

}

m = m - 1;

n = n - 1;

**int** j = nums1.length - 1;

**while**(m >= 0 && n >= 0) {

**if**(nums1[m] > nums2[n]) {

nums1[j--] = nums1[m--];

}

**else** {

nums1[j--] = nums2[n--];

}

}

**while**(n >= 0) {

nums1[j--] = nums2[n--];

}

**while**(m >= 0) {

nums1[j--] = nums1[m--];

}

**return**;

}

}

Time Complexity : O(m) , length of greater array

Space Complexity : O(1), constant space