

Merge Sorted Array Problem

p1 → m = 3

nums1: [1, 2, 3, 0, 0, 0]

p2 → n = 3

nums2: [2, 5, 6]

Merging Process:

1. Compare nums1[p1] and nums2[p2]
2. Place the larger value in nums1[p]
3. Move pointers (p, p1, p2) accordingly

Final nums1: [1, 2, 2, 3, 5, 6]

Edge Case 1:
nums1 = [1], m = 1
nums2 = [], n = 0
Output: [1]

Edge Case 2:
nums1 = [0], m = 0
nums2 = [1], n = 1
Output: [1]