**📘 LeetCode Two-Pointer Problems Cheat Sheet**

**✅ 15+ Popular Two-Pointer LeetCode Problems**

**1️⃣ Two Sum II – Input Array Is Sorted**

**Problem #:** 167  
🔗 LeetCode 167  
**Pattern:** Left/right pointers on sorted array.

**2️⃣ 3Sum**

**Problem #:** 15  
🔗 LeetCode 15  
**Pattern:** Fix one index, use two pointers for the remaining sum.

**3️⃣ 4Sum**

**Problem #:** 18  
🔗 LeetCode 18  
**Pattern:** Nested two-pointers after sorting.

**4️⃣ Container With Most Water**

**Problem #:** 11  
🔗 LeetCode 11  
**Pattern:** Move pointers inward to maximize area.

**5️⃣ Remove Duplicates from Sorted Array**

**Problem #:** 26  
🔗 LeetCode 26  
**Pattern:** Slow/fast pointer.

**6️⃣ Remove Element**

**Problem #:** 27  
🔗 LeetCode 27  
**Pattern:** In-place overwrite with slow pointer.

**7️⃣ Move Zeroes**

**Problem #:** 283  
🔗 LeetCode 283  
**Pattern:** Two pointers to compact non-zeroes.

**8️⃣ Valid Palindrome**

**Problem #:** 125  
🔗 LeetCode 125  
**Pattern:** Left/right pointers, skip non-alphanumeric.

**9️⃣ Reverse String**

**Problem #:** 344  
🔗 LeetCode 344  
**Pattern:** Simple swap inward.

**🔟 Squares of a Sorted Array**

**Problem #:** 977  
🔗 LeetCode 977  
**Pattern:** Two pointers to fill array from ends.

**1️⃣1️⃣ Merge Sorted Array**

**Problem #:** 88  
🔗 LeetCode 88  
**Pattern:** Two pointers filling from back.

**1️⃣2️⃣ Longest Substring Without Repeating Characters**

**Problem #:** 3  
🔗 LeetCode 3  
**Pattern:** Sliding window with set.

**1️⃣3️⃣ Minimum Size Subarray Sum**

**Problem #:** 209  
🔗 LeetCode 209  
**Pattern:** Sliding window sum.

**1️⃣4️⃣ Trapping Rain Water**

**Problem #:** 42  
🔗 LeetCode 42  
**Pattern:** Two pointers with leftMax/rightMax.

**1️⃣5️⃣ Find the Duplicate Number**

**Problem #:** 287  
🔗 LeetCode 287  
**Pattern:** Floyd’s Tortoise and Hare (cycle detection).

**1️⃣6️⃣ Remove Duplicates from Sorted Array II**

**Problem #:** 80  
🔗 LeetCode 80  
**Pattern:** Two pointers allowing up to 2 duplicates.

**✨ Patterns Covered**

✅ Sorted array scanning  
✅ Slow/fast pointer overwrites  
✅ Sliding window  
✅ Reversals and swaps  
✅ Cycle detection

✅ **Tip:**  
Focus on #11 (Container With Most Water), #15 (3Sum), and #26 (Remove Duplicates)—these are asked frequently.