88 Explore GPTs

Today

Recursion Problem List

Hashmap Interview Questions

Top Graph Problems

Math Interview Problems

String Problems Difficulty Level

Array Problems Summary

Merge Intervals Example

Fast and Slow Pointers

Matrix Pattern Problems

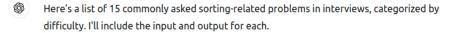
Two Pointers Problems

Sorting based top 15 problem commonly asked in interview questions.

give input and output of the problem.

list 5 easy, 5 medium, 5 hard difficulty problems.

< 8/8 >



## **Easy Problems:**

- 1. Sort Colors (LeetCode 75)
  - Input: `[2, 0, 2, 1, 1, 0]`
  - Output: `[0, 0, 1, 1, 2, 2]` \(\psi\)



- 2. Merge Sorted Array (LeetCode 88)
  - Input: `nums1 = [1, 2, 3, 0, 0, 0], m = 3, nums2 = [2, 5, 6], n = 3`
  - Output: `[1, 2, 2, 3, 5, 6]`
- 3. Intersection of Two Arrays II (LeetCode 350)
  - Input: `nums1 = [1, 2, 2, 1], nums2 = [2, 2]`
  - Output: `[2, 2]`
- 4. Single Number (LeetCode 136)
  - Input: `[2, 2, 1]`
  - Output: `1`
- 5. Valid Anagram (LeetCode 242)
  - Input: `s = "anagram", t = "nagaram"`
  - Output: `true`

## (J.

## Medium Problems:

- 1. 3Sum (LeetCode 15)
  - Input: `[-1, 0, 1, 2, -1, -4]`
  - Output: `[[-1, -1, 2], [-1, 0, 1]]`
- 2. Sort an Array (LeetCode 912)
  - Input: `[5, 2, 3, 1]`
  - Output: `[1, 2, 3, 5]`
- 3. Top K Frequent Elements (LeetCode 347)
  - Input: `nums = [1, 1, 1, 2, 2, 3], k = 2`
  - Output: `[1, 2]`
- 4. Kth Largest Element in an Array (LeetCode 215)
  - Input: `[3, 2, 1, 5, 6, 4], k = \(\frac{1}{2}\)
  - Output: `5`
- 5. Contains Duplicate II (LeetCode 219)
  - Input: `nums = [1, 2, 3, 1], k = 3`
  - Output: `true`

## **Hard Problems:**

- 1. Median of Two Sorted Arrays (LeetCode 4)
  - Input: `nums1 = [1, 3], nums2 = [2]`
  - Output: `2.0`
- 2. Largest Rectangle in Histogram (LeetCode 84)
  - Input: `[2, 1, 5, 6, 2, 3]`
  - Output: `10`
- 3. Find the K-th Smallest Pair Distance (LatCode 719)
  - Input: `nums = [1, 3, 1], k = 1`
  - Output: `0`
- 4. Wiggle Sort II (LeetCode 324)
  - Input: `[1, 5, 1, 1, 6, 4]`
  - Output: `[1, 6, 1, 5, 1, 4]`
- 5. Counting Inversions (Variation of LeetCode 493)
  - Input: `[1, 3, 2, 3, 1]`
  - Output: `4`

These problems test various aspects of sorting and manipulation of arrays, from basic sorting to more complex scenarios involving multiple data structures and algorithms.











