LeetCode Sorting and Searching Questions

This list includes 30 LeetCode problems focused on sorting and searching, ranging from easy to rigorous difficulty, and contains some of the best problems that are commonly recommended for mastering these concepts.

Sorting Questions

Easy

1. Sort an Array
2. Merge Sorted Array
3. Squares of a Sorted Array
4. Relative Sort Array
5. Intersection of Two Arrays
6. Missing Number
7. Height Checker
8. Sort Colors - A classic problem to understand the Dutch National Flag algorithm.
9. Intersection of Two Arrays II - Uses sorting for intersection logic.

Medium

10. Sort Colors
11. Kth Largest Element in an Array
12. Meeting Rooms II
13. Maximum Gap
14. Wiggle Sort II
15. Top K Frequent Elements
16. Find K-th Smallest Pair Distance

Hard

17. Merge Intervals - A must-know problem for understanding interval merging.
18. First Missing Positive - Involves clever sorting with constant space.
19. Largest Number
20. Reverse Pairs - A more rigorous problem using merge sort to count inversions.
21. Russian Doll Envelopes - Combines sorting with dynamic programming for nested intervals.
22. Minimum Number of Arrows to Burst Balloons

Searching Questions

Easy

1. Binary Search - The classic binary search problem.
2. Search Insert Position - Basic application of binary search.
3. First Bad Version - Binary search with a twist.
4. Guess Number Higher or Lower

Medium

5. Search in Rotated Sorted Array - Combines binary search with rotated arrays.
6. Find Peak Element - Binary search to find peaks in an array.
7. Find First and Last Position of Element in Sorted Array - Binary search variations for boundaries.
8. Search a 2D Matrix II

Hard

9. Median of Two Sorted Arrays - A tricky problem often asked in interviews, combining binary search with median logic.
10. Search in Rotated Sorted Array II - A more complex version of the rotated array search.
11. Find Minimum in Rotated Sorted Array II - A variant requiring handling of duplicates in rotated arrays.
12. Maximum Number of Events That Can Be Attended - Combines sorting with a priority queue for event management.