Coding Question Intermediate

04 March 2025

09:31

1. Array & String Problems

- 1. Find Second Largest Element in an array.
- 2. Check if a String is Palindrome (without using extra space).
- 3. Find Missing Number in an array of 1 to N (with one missing).
- 4. Reverse Words in a String without using extra space.
- 5. Sort an Array of 0s, 1s, and 2s without using extra space.

2. Searching & Sorting

- 6. Binary Search Implementation (Iterative & Recursive).
- **7. Find First and Last Occurrence** of an element in a sorted array.
- 8. Sort an Array using QuickSort or MergeSort.
- **9. Find Kth Smallest Element** in an unsorted array.
- 10. Find Intersection of Two Sorted Arrays.

3. Recursion & Backtracking

- 11. Find Factorial of a Number using Recursion.
- 12. Generate All Subsets (Power Set) of a Given Set.
- 13. Find All Permutations of a String.
- 14. N-Queens Problem ($N \le 4$ for simplicity).
- 15. Find Fibonacci Number using Recursion & DP.

4. Linked List & Stack/Queue

- 16. Reverse a Linked List (Iterative & Recursive).
- 17. Find the Middle of a Linked List (without using extra space).
- 18. Implement Stack using Queues or vice versa.
- 19. Check for Balanced Parentheses using a Stack.
- 20. Implement a Queue using a Linked List.