# 1. Binary Search / Divide and Conquer Approach

* **2.** Find First and Last position of Element
* **7.** Guess Number Higher or Lower
* **8.** Fibonacci Number
* **9.** Binary Search
* **10.** Peak Index in a Mountain Array
* **15.** First Bad Version
* **62.** Kth Smallest Element in a BST
* **65.** Minimum Loss
* **77.** Next Greater Element I
* **501.** Find Mode in Binary Search Tree

# 2. Tree Traversals / Binary Search Trees

* **1.** Find mode in Binary Search Tree
* **49.** Tree: Top View
* **51.** Binary Tree Inorder Traversal
* **52.** Binary Tree Preorder Traversal
* **53.** Binary Tree Postorder Traversal
* **54.** Binary Tree Level Order Traversal
* **55.** Is this Binary Search Tree
* **56.** Validate Binary Search Tree
* **57.** Utopian Tree
* **58.** Binary Tree Right Side View
* **59.** Find Bottom Left Tree Value
* **61.** Bottom View of Binary Tree
* **62.** Kth Smallest Element in a BST
* **73.** Self Balancing Tree

# 3. Two-pointer Approach / Sliding Window

* **4.** Reverse String
* **5.** Reverse Vowels of a String
* **22.** Reverse Vowels of a String
* **24.** Reverse Only Letters
* **25.** Reverse a Linked List
* **37.** Maximum Sum of Distinct Subarray with Length K
* **38.** Substrings of Size Three with Distinct Characters
* **42.** Partition List
* **45.** Swap Nodes In Pair
* **47.** Linked List Cycle II
* **48.** Rotate List

# 4. Sorting / Greedy Algorithms

* **13.** Arranging Coins
* **18.** Majority Element
* **21.** Merge Sorted Array
* **32.** Merge Two List
* **34.** Merge Sorted Array
* **11.** Partition Array into Disjoint Array
* **12.** Make Sum Divisible by P
* **31.** Priyanka and Toys
* **35.** Minimum Amount of Time To Collect Garbage

# 5. Hashing / Sets

* **16.** Two Sum
* **19.** Valid Anagram
* **28.** Intersection of Two Linked List
* **29.** Missing Number
* **33.** Contains Duplicate II
* **39.** Fraudulent Activity Notification
* **50.** Winning Lottery Ticket
* **66.** Maximum Element
* **67.** Sherlock and Array
* **70.** Sherlock and the Valid String

# 6. Dynamic Programming

* **14.** Subarray Sums Divisible by K
* **20.** Happy Number
* **30.** Equal Stack
* **63.** Game of Thrones - 1
* **75.** Game of Two Stacks

# 7. Stack/Queue-based

* **46.** Implement Stack Using Queue
* **66.** Maximum Element
* **30.** Equal Stacks
* **40.** Drawing Book
* **26.** The Full Counting Sort

# 8. Graph / Matrix-based

* **36.** Diagonal Traverse II
* **41.** Subsets
* **69.** The K Weakest Rows in Matrix
* **71.** The Grid Search
* **74.** Road Repairing

# 9. Math-based / Number Theory

* **6.** Valid Perfect Square
* **13.** Arranging Coins
* **3.** Valid Palindrome
* **43.** Palindrome Index
* **67.** Beautiful Pair
* **76.** Sherlock and Moving Tiles