Coding & DSA

- 1 Subarray with a given sum / Numbers of Subarrays with a given sum
- 2 Number of subarray divisible by 'k' / Number of pairs divisible by 'k'
- 3 kth largest number
- 4 Largest element in k size window (Deque Solution)
- 5 All sorting techniques (Merge Sort, Quick Sort, Count Sort, Radix Sort, Insertion Sort, Selection Sort,Bubble Sort)
- 6 Rain Water Problem
- 7 Largest Rectangle in a histogram
- 8 Kadane
- 9 Missing Number Repeated Number (No extra space)
- 10 Largest Number formed ([1,23,9,98,7] = 9987231)
- 11 Stock Buy and Sell (Greedy)
- 12 Next Largest Number (Stack Solution)
- 13 Largest window of contiguous 1's , k swaps allowed (Binary string is given)
- 14 MinStack
- 15 Stack using queue / Queue using stack
- 16 Stack and queue using linked list .
- 17 Find a number in rotated sorted array ([1,2,3,4,5,6] -> [5,6,1,2,3,4], find 3 in this in log(n) time)

Linked List

- 18 Sorting of Linked List
- 19 Find the cycle and remove it (O(n) solution)
- 20 kth node from the end of the linked list
- 21 Reverse a linked list and doubly linked list (Iterative and recursive both)
- 22 Josephus Problem

Binary Tree and BST

- 23 Preorder, Inorder, Postorder, Level order traversal (Iterative and recursive)
- 24 Left,Right,Top,Bottom,Vertical,Diagonal View of a tree(Iterative and recursive).
- 25 All Root to leaf paths
- 26 Height of tree, Minimum Depth of a tree
- 27 Find a path with a given sum
- 28 Diameter of the tree
- 29 LCA of the two nodes in Tree
- 30 Minimum distance between two nodes (Use LCA)
- 31 Nodes at a given level

Graphs

- 32 BFS , DFS
- 33 Number of Connected Components (Also find all the connected components and store and print them)
- 34 Snakes and Ladders
- 35 Topological Sort
- 36 Prims and Kruksal (Concept only)
- 37 Bellman Ford, Floyd Warshall (Concept only)
- 38 Dijsktras

Miscellaneous

- 39 Median of a running stream (Max heap and Min heap)
- 40 First non repeating character of a running stream (Queue and map)
- 41 K largest/smallest elemnts in an array (Sorting not allowed, Use max or min heap)

Language Specific

- 42 Memory management
- 43 Garbage collection
- 44 Internal implementation of DS (map,vector,etc..)
- 45 OOPs (Knowledge about five fundamentals and know how to write a class with some methods)
- 46 Generator functions, Lambda Functions, decorators (Python specific)

React Js

- 47 What is dom?
- 48 Virtual dom and how it is different from DOM
- 49 React Redux , React Router
- 50 Components, props, states (basic definition)