Below are the most asked problems in Adobe, Microsoft, Amazon and Google which are on GeekforGeeks:

Arrays

- 1. Subarray with given sum
- 2. Count the triplets
- 3. Kadane's Algorithm
- 4. Missing number in array
- 5. Merge two sorted arrays
- 6. Rearrange array alternatively
- 7. Number of pairs
- 8. Inversion of Array
- 9. Sort an array of 0s, 1s and 2s
- **10.** Equilibrium point

String

- 1. Reverse words in a given string
- 2. Permutations of a given string
- 3. Longest Palindrome in a String
- 4. Recursively remove all adjacent duplicates
- 5. Check if string is rotated by two places
- 6. Roman Number to Integer
- 7. Anagram
- 8. Remove Duplicates
- 9. Form a Palindrome
- 10. Longest Distinct Characters in the string

Linked list

- 1. Finding middle element in a linked list
- 2. Reverse a linked list
- 3. Rotate a Linked List
- 4. Reverse a Linked List in groups of given size
- 5. Intersection point in Y shaped linked lists
- 6. Detect Loop in linked list
- 7. Remove loop in Linked List
- 8. n'th node from end of linked list
- 9. Flattening a Linked List
- 10. Merge two sorted linked lists

Stack and queue

- 1. Parenthesis Checker
- 2. Next larger element
- 3. Queue using two Stacks
- 4. Stack using two queues
- 5. Get minimum element from stack
- 6. LRU Cache
- 7. Circular tour
- 8. First non-repeating character in a stream
- 9. Rotten Oranges
- 10. Maximum of all subarrays of size k

Tree

- 1. Print Left View of Binary Tree
- 2. Check for BST
- 3. Print Bottom View of Binary Tree

- 4. Print a Binary Tree in Vertical Order
- 5. <u>Level order traversal in spiral form</u>
- 6. Connect Nodes at Same Level
- 7. Lowest Common Ancestor in a BST
- 8. Convert a given Binary Tree to Doubly Linked List
- 9. Write Code to Determine if Two Trees are Identical or Not
- 10. Given a binary tree, check whether it is a mirror of itself

Heap

- 1. Find median in a stream
- 2. Heap Sort
- 3. Operations on Binary Min Heap
- 4. Rearrange characters
- 5. Merge K sorted linked lists
- 6. Kth largest element in a stream

Recursion

- 1. Flood fill Algorithm
- 2. Number of paths
- 3. Combination Sum Part 2
- 4. Special Keyboard
- 5. <u>Josephus problem</u>

Hashing

- 1. Relative Sorting
- 2. Sorting Elements of an Array by Frequency

- 3. Largest subarray with 0 sum
- 4. Common elements
- 5. Find all four sum numbers
- 6. Swapping pairs make sum equal
- 7. Count distinct elements in every window
- 8. Array Pair Sum Divisibility Problem
- 9. Longest consecutive subsequence
- 10. Array Subset of another array

Graph

- 1. Depth First Traversal
- 2. Breadth First Traversal
- 3. Detect cycle in undirected graph
- 4. Detect cycle in a directed graph
- 5. Topological sort
- 6. Find the number of islands
- 7. Implementing Dijkstra
- 8. Minimum Swaps
- 9. Strongly Connected Components
- 10. Shortest Source to Destination Path

Greedy

- 1. Activity Selection
- 2. N meetings in one room
- 3. Coin Piles
- 4. Maximize Toys
- 5. Page Faults in LRU

- 6. <u>Largest number possible</u>
- 7. Minimize the heights
- 8. Minimize the sum of product
- 9. <u>Huffman Decoding</u>
- 10. Minimum Spanning Tree

Dynamic programming

- 1. Minimum Operations
- 2. Max length chain
- 3. Minimum number of Coins
- 4. Longest Common Substring
- 5. Longest Increasing Subsequence
- 6. Longest Common Subsequence
- 7. 0 1 Knapsack Problem
- 8. <u>Maximum sum increasing subsequence</u>
- 9. Minimum number of jumps
- 10. Edit Distance

Divide and conquer

- 1. Find the element that appears once in sorted array
- 2. Search in a Rotated Array
- 3. Binary Search
- 4. Sum of Middle Elements of two sorted arrays
- 5. Quick Sort
- 6. Merge Sort
- 7. K-th element of two sorted Arrays

Backtracking

- 1. N-Queen Problem
- 2. Solve the Sudoku
- 3. Rat in a Maze Problem
- 4. Word Boggle
- 5. Generate IP Addresses

Bit manipulations

- 1. Find first set bit
- 2. Rightmost different bit
- 3. Check whether K-th bit is set or not
- 4. Toggle bits given range
- 5. Set kth bit
- 6. Power of 2
- 7. Bit Difference
- 8. Rotate Bits
- 9. Swap all odd and even bits
- 10. Count total set bits