Coding Question Sheet

ARRAY

1.	Retrieve even and odd elements present in an array.
2.	Reverse The Array.
3.	Sum of all elements present in an array.
4.	Sum of even and odd elements present in an array.
5.	Two Sum.
6.	Find the maximum and minimum elements present in an array.
7.	Remove Duplicate elements from an array.
8.	Find the "Kth" max and min element of an array
9.	Given an array which consists of only 0, 1 and 2. Sort the array without using any sorting algorithm.
10.	Move all the negative elements to one side of the array.
11.	Display all the possible combination pairs subarray of an array.
12.	Find Largest sum contiguous Subarray
13.	Minimum no. of Jumps to reach end of an array.
14.	Find if there is any subarray with sum equal to 0.
15.	Merge 2 sorted arrays without using Extra space.
16.	Copy an array element to another array.
17.	Find maximum product subarray.
18.	Find the count of pairs which is equal to the target "K".
19.	Kadane's Algorithm
20.	Best time to buy and Sell stock.
21.	Maximum profit by buying and selling a share at most twice.
22.	Chocolate Distribution problem.
23.	Spiral traversal on a Matrix.
24.	Search an element in a Matrix.
25.	Find row with maximum no. of 1's.

STRINGS

1) Reverse A String.
2) Check Whether The String is Palindrome or not.
3) Find The Duplicate Character in the String.
4) Write a program to find the longest palindrome in a String.
5) Print all Subsequences of a string.
6) Longest Common Prefix.
7) Valid Parentheses.
8) Count of number of given string in 2D character array.
9) Word Break Problem.
10) Excel Sheet column title.

SEARCHING

1) Ternary Search
2) Find first and last positions of an element in a sorted array.
3) Search Insert Position.
4) Find missing number.
5) Two elements whose sum is closest to zero.

SORTING

1) Bubble Sort
2) Insertion Sort
3) Selection Sort
4) Merge Sort
5) Quick Sort
6) Find Majority Elements
7) Sort Array By Parity.
8) Height Checker.
9) Sorting String Using Bubble Sort.
10) Book Allocation Problem.

Linked List

1) Write a program to reverse the linked list.
2) Write a program to detect loop in a linked list.
3) Write a program to delete loop in a linked list.
4) Remove Duplicates in a sorted linked list.
5) Write a program to move the last element to front in a linked list.
6) Add "1" to a number represented as a linked list.
7) Find the middle element in a linked list.
8) Check if a linked list is a circular linked list.

Stack

1) Implement Stack using Scratch.
2) Find the middle element of a stack.
3) Check The Expression has valid or balanced parenthesis or not.
4) Arithmetic Expression Evaluation.
5) Reverse Stack using recursion.

Queue

1) Implement Queue using Scratch.
2) Find the next greater element.
3) Implement Stack using Queue
4) Implement Queue using stack.
5) Implement Circular Queue.

Tree

1) Implementation of Binary Tree.
2) Preorder, Inorder and Postorder Traversal.
3) Level Order Traversal.
4) Height of the tree.
5) Check if a tree is balanced or not.
6) Implement BST.
7) Find a value in BST.
8) Find min and max value in tree.