***Data Structures Questions***

***Stack:***

1. Array Implementation of Stack (Implement all the operations).
2. Linked List implementation of Stack.
3. Array Implementation of stack without using top pointer.
4. Design a stack that returns the minimum element in constant time.
5. Implement two stacks in a single array.
6. Reverse a stack using recursion.
7. Reverse a string using stack.
8. Implement a max stack.

***Coding Questions:***

1. Given an integer array “nums” and an integer “K”, return the length of the shortest non-empty subarray of “nums” with a sum of at least “K”.
2. Given a string of round, curly and square opening and closing brackets. Return whether the brackets are balanced.
3. Given an array, print the Next Greater Element (NGE) for every element. The Next greater Element for an element x is the first greater element on the right side of x in array. Elements for which no greater element exist, consider next greater element as -1.
4. Implement a max stack.
5. Nearest greater to left/right problem.
6. Nearest smaller to left/right problem.
7. Largest Rectangle area in Histogram problem.
8. Given array of integers & reverse this array without allocating extra space.
9. Given an array of integers, find the sum of all subarrays of length K. (Sliding window problem)