TCS NQT Coding Ques Revision

Sorting Algorithms

- Bubble Sort Algorithm
- Selection Sort Algorithm
- Insertion Sort Algorithm
- Quick Sort Algorithm
- Merge sort algorithm

Searching Alrogithms

- Linear Search
- Binary Search

Array Problems

- Find the smallest number in an array
- Find the largest number in an array
- Second Smallest and Second Largest element in an array
- Reverse a given array
- Count frequency of each element in an array
- Rearrange array in increasing-decreasing order
- Calculate sum of the elements of the array
- Rotate array by K elements - Block Swap Algorithm
- Average of all elements in an array
- Find the median of the given array
- Remove duplicates from a sorted array
- Remove duplicates from unsorted array
- Adding Element in an array
- Find all repeating elements in an array
- Find all non-repeating elements in an array
- Find all symmetric pairs in array
- Maximum sum in a subarray
- Maximum product subarray in an array
- Replace each element of the array by its rank in the array

- Sorting elements of an array by frequency
- Rotation of elements of array- left and right
- Finding equilibrium index of an array
- Finding Circular rotation of an array by K positions
- Sort an array according to the order defined by another array
- Search an element in an array
- Check if Array is a subset of another array or not

Problems on Numbers

- Check if a number is palindrome or not
- Find all Palindrome numbers in a given range
- Check if a number is prime or not
- Prime numbers in a given range
- Check if a number is armstrong number of not
- Check if a number is perfect number
- Even or Odd
- Check weather a given number is positive or negative
- Sum of first N natural numbers
- Find Sum of AP Series
- Program to find sum of GP Series
- Greatest of two numbers
- Greatest of three numbers
- Leap Year or not
- Reverse digits of a number
- Maximum and Minimum digit in a number
- Print Fibonacci upto Nth Term
- Factorial of a number
- Power of a number
- Factors of a given number
- Print all prime factors of the given number
- Check if a number is a strong number or not
- Check if a Number is Automorphic
- GCD of two numbers
- LCM of two numbers
- Check if a number is Harshad number
- Check if the number is abundant number or not
- Sum of digits of a number
- Sum of numbers in the given range
- Permutations in which N people can occupy R seats in a classroom
- Program to add two fractions
- Replace all 0s with 1s in a given integer
- Program to find roots of a Quadratic Equation

Problems on Number System

- Convert Binary to Decimal
- Convert binary to octal
- Decimal to Binary conversion
- Convert decimal to octal
- Convert octal to binary
- Convert octal to decimal
- Convert digits/numbers to words

Problems on String

- Check if a given string is palindrome or not
- Count number of vowels, consonants, spaces in String
- Find the ASCII value of a character
- Remove all vowels from the string
- Remove spaces from a string
- Remove characters from a string except alphabets
- Reverse a String
- Remove brackets from an algebraic expression
- Sum of the numbers in a String
- Capitalize first and last character of each word
- Calculate frequency of characters in a string
- Find Non-repeating characters of a String
- Check if two strings are anagram of each other
- Count common sub-sequence in two strings
- Check if two strings match where one string contains wildcard characters
- Return maximum occurring character in the input string
- Remove all duplicates from the input string.
- Print all the duplicates in the input string.
- Remove characters from first string present in the second string
- Change every letter with the next lexicographic alphabet in the given string
- Write a program to find the largest word in a given string.
- Write a program to sort characters in a string
- Count number of words in a given string
- Write a program to find a word in a given string which has the highest number of repeated letters
- Change case of each character in a string
- Concatenate one string to another
- Write a program to find a substring within a string. If found display its starting position
- Reverse words in a string

Note: Google search this problem, you can get the link in geeksforgeeks and leetcode.