

## **Problems on Arrays**

1. [Find the smallest number in an array](#)
2. [Find the largest number in an array](#)
3. [Second Smallest and Second Largest element in an array](#)
4. [Reverse a given array](#)
5. [Count frequency of each element in an array](#)
6. [Rearrange array in increasing-decreasing order](#)
7. [Calculate sum of the elements of the array](#)
8. [Rotate array by K elements – Block Swap Algorithm](#)
9. [Average of all elements in an array](#)
10. [Find the median of the given array](#)
11. [Remove duplicates from a sorted array](#)
12. [Remove duplicates from unsorted array](#)
13. [Adding Element in an array](#)
14. [Find all repeating elements in an array](#)
15. [Find all non-repeating elements in an array](#)
16. [Find all symmetric pairs in array](#)
17. [Maximum product subarray in an array](#)
18. [Replace each element of the array by its rank in the array](#)
19. [Sorting elements of an array by frequency](#)
20. [Rotation of elements of array- left and right](#)
21. [Finding equilibrium index of an array](#)
22. [Finding Circular rotation of an array by K positions](#)
23. [Sort an array according to the order defined by another array](#)
24. [Search an element in an array](#)
25. [Check if Array is a subset of another array or not](#)

## **Problems on Number System**

1. [Convert Binary to Decimal](#)
2. [Convert binary to octal](#)
3. [Decimal to Binary conversion](#)
4. [Convert decimal to octal](#)
5. [Convert octal to binary](#)
6. [Convert octal to decimal](#)
7. [Convert digits/numbers to words](#)

## Problems on Numbers

1. [Check if a number is palindrome or not](#)
2. [Find all Palindrome numbers in a given range](#)
3. [Check if a number is prime or not](#)
4. [Prime numbers in a given range](#)
5. [Check if a number is armstrong number or not](#)
6. [Check if a number is perfect number](#)
7. [Even or Odd](#)
8. [Check weather a given number is positive or negative](#)
9. [Sum of first N natural numbers](#)
10. [Find Sum of AP Series](#)
11. [Program to find sum of GP Series](#)
12. [Greatest of two numbers](#)
13. [Greatest of three numbers](#)
14. [Leap Year or not](#)
15. [Reverse digits of a number](#)
16. [Maximum and Minimum digit in a number](#)
17. [Print Fibonacci upto Nth Term](#)
18. [Factorial of a number](#)
19. [Power of a number](#)
20. [Factors of a given number](#)
21. [Print all prime factors of the given number](#)
22. [Check if a number is a strong number or not](#)
23. [Check if a Number is Automorphic](#)
24. [GCD of two numbers](#)
25. [LCM of two numbers](#)
26. [Check if a number is Harshad number](#)
27. [Check if the number is abundant number or not](#)
28. [Sum of digits of a number](#)
29. [Sum of numbers in the given range](#)
30. [Permutations in which N people can occupy R seats in a classroom](#)
31. [Program to add two fractions](#)
32. [Replace all 0s with 1s in a given integer](#)
33. [Can a number be expressed as a sum of two prime numbers](#)
34. [Calculate the area of circle](#)
35. [Program to find roots of a Quadratic Equation](#)

## **Problems on String**

1. [Check if a given string is palindrome or not](#)
2. [Count number of vowels, consonants, spaces in String](#)
3. [Find the ASCII value of a character](#)
4. [Remove all vowels from the string](#)
5. [Remove spaces from a string](#)
6. [Remove characters from a string except alphabets](#)
7. [Reverse a String](#)
8. [Remove brackets from an algebraic expression](#)
9. [Sum of the numbers in a String](#)
10. [Capitalize first and last character of each word](#)
11. [Calculate frequency of characters in a string](#)
12. [Find Non-repeating characters of a String](#)
13. [Check if two strings are anagram of each other](#)
14. [Count common sub-sequence in two strings](#)
15. [Check if two strings match where one string contains wildcard characters](#)
16. [Return maximum occurring character in the input string](#)
17. [Remove all duplicates from the input string.](#)
18. [Print all the duplicates in the input string.](#)
19. [Remove characters from first string present in the second string](#)
20. [Change every letter with the next lexicographic alphabet in the given string](#)
21. [Write a program to find the largest word in a given string.](#)
22. [Write a program to sort characters in a string](#)
23. [Count number of words in a given string](#)
24. [Write a program to find a word in a given string which has the highest number of repeated letters](#)
25. [Change case of each character in a string](#)
26. [Concatenate one string to another](#)
27. [Write a program to find a substring within a string. If found display its starting position](#)
28. [Reverse words in a string](#)

## **Problems on Sorting**

1. [Bubble Sort Algorithm](#)
2. [Selection Sort Algorithm](#)
3. [Insertion Sort Algorithm](#)
4. [Quick Sort Algorithm](#)
5. [Merge sort algorithm](#)