#### **Basic Que on Character-Array [See Notes]**

- 1. Char Array Understanding
- 2. Iterating in Char Array
- 3. CharArray UserInput [cingetline]
- 4. Find Length
- 5. Check Palindromic String
- 6. Handling Numbers and Strng
- 7. Largest N string
- 8. Remove Consecutive duplicates
- 9. Rotate string by D places
- 10. Count Frequency
- 11. Longest Substring with K- Unique Characters
- 12. Concatenate and Compare in Char-Array

#### **Basic Que on String [See Notes]**

- 1. String Stl Intro
- 2. Compare String with Char-Array and Int-Array
- 3. UserInput
- 4. Compare Strings
- 5. Array of String
- 6. Sort in array
- 7. Understand function and string
- 8. Ternary Operator
- 9. Truncate String

#### **Palindrome**

Similar Questions	Difficulty Level
1.Valid Palindrome	Easy
2.Valid Palindrome II	Easy
3.Longest Palindromic Substring	Medium

# **Isomerphic : Common Prefix**

Similar Questions	Difficulty Level
1.Longest Common Prefix	Easy
2.Isomorphic Strings	Easy
3.Word Pattern	Easy

### **Reverse String**

Similar Questions	Difficulty Level
1.Reverse Words in a String	Medium

## **Rotate String**

Similar Questions	Difficulty Level
1.Rotate String	Easy
2.Left and Right Rotation of string.	Easy

### **String To Integer and Vice Versa**

Similar Questions	Difficulty Level
1.Roman to integer	Easy
2.Integer to Roman	Medium
3.String to Integer (atoi)	Medium
4.Integer to English Words	Hard

### **Arithmetics On String**

Similar Questions	Difficulty Level
1.Largest Odd Number in String	Easy
2.Largest 3-Same-Digit Number in String [+Fixed-Sized-Sliding-Win]	Easy
3.Add String	Easy
4.Sum of Beauty of All Substring	Medium
5.Multiply Strings	Medium
6.Basic Calculator [+stack,+recursion]	Hard
7.Basic Calculator II [+stack]	Medium

.

# String: Anagram

Similar Questions	Difficulty Level
1.Valid Anagram	Easy
2.Find All Anagrams in a String	Medium
3.Permutation in String	Medium
4.Find Resultant Array After Removing Anagrams	Easy
5.Group Anagrams	Medium
6.Count Anagrams	Hard

# **Remaining Question**

Similar Questions	Difficulty Level
1.Find the Index of the First Occurrence in a String	Easy
2.Simplify Path	Medium
3.Zigzag Conversion	Medium
4.Sort Character BY Frequency	Medium
5.Text Justification	Hard

#### String Searching/Matching Using Trie

\_\_\_\_\_

#### Application

- -Text Search:
- -Plagiarism Detection:
- -Spell Checkers:
- -Finding occurrences of a pattern (substring).

-----

Belows algorithms are primarily used for string matching and string searching. It is a popular algorithm for finding occurrences of a pattern (substring) within a text (string) efficiently.

#### Algorithms:

- 1. Rabin-Karp Algorithm (Rolling Hash)
- 2.KNuth-Morris-Pratt (Prefix-Function)
- 3.Z-Function (Alternate to KMP algo.)
- 4. Manachar's Algorithm (Palindrome-Searching-Algo)
- =>To find the longest palindromic substring within a given text or string.

\_\_\_\_\_\_