Best Leetcode String Questions

Type I:

When it is required to validate the string or to find something in the string. In such questions, it is required to traverse the string like an array whilst validating or finding something.

Problems of this type:

Valid Parentheses

Valid Number

Compare Version Numbers

Type II

When you need to search a substring/another string. Most of such questions can be solved using pointer based approach. One/more pointer approach.

Problems of this type:

Longest Substring Without Repeating Characters

Implement strStr()

Substring with Concatenation of All Words

Valid Palindrome

Replace the Substring for Balanced String

Type III

When you need to find the smallest/largest/ conditional substring from the given string, sliding window approach is the way to go. An example of such question would be: find the longest substring without repeating character.

Problems on this type:

Minimum Window Substring

Maximum Number of Vowels in a Substring of Given Length

Longest Substring with At Most Two Distinct Characters (LC Premium)

Longest Substring with At Most K Distinct Characters (LC Premium)

Type IV

When the problem needs you to find all the permutations of a string, backtracking is the most common approach for such problems.

Problems on this type:

Split Array into Fibonacci Sequence

Regular Expression Matching

Letter Combinations of a Phone Number

Restore IP Addresses

Type V

Whenever the above approches do not fit, its most likely a question on Dynamic Programming. Try to identify the subproblem and solve using DP.

Problems on this type:
Longest Palindromic Substring
Longest Valid Parentheses
Wildcard Matching   Edit Distance

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