



CODESHOWS MODULE - 4



C++ functions

1

- ❑ <strings> library in C++ STL
- ❑ to_string
- ❑ stoi

Rabin-Karp Algorithm for Pattern Searching

2

- [Article](#)
- [Video](#)
- Questions
 - ❑ [SPOJ - Pattern Find](#)
 - ❑ [Codeforces - Good Substrings](#)
 - ❑ [Codeforces - Palindromic characteristics](#)

KMP Algorithm / Z Function

3

➤ Theory

- ❑ [Topcoder](#)
- ❑ [GFG](#)
- ❑ [Codeforces](#)
- ❑ [Video Tutorial](#)

➤ Problems

- ❑ [Codeforces 1326-D2](#)
- ❑ [Codeforces 126-B](#)
- ❑ [More Problems](#)

Anagrams

4

- ❑ Check whether two strings are anagram of each other
- ❑ Group Anagrams
- ❑ Find All Anagrams in a String

Palindrome

5

- ❑ Valid Palindrome
- ❑ Valid Palindrome II
- ❑ Minimum characters needed to be inserted in the beginning to make it palindromic

Subsequences and Substrings

6

- ❑ Longest Substring Without Repeating Characters
- ❑ Reverse words in a given string
- ❑ Substring with Concatenation of All Words
- ❑ Substring and Subsequence

Conversion

7

- ❑ String to Integer (atoi)
- ❑ Integer to Roman conversion

Binary Strings

8

- ❑ Count Binary Substrings
- ❑ Binary Strings
- ❑ Special Binary String

Lexicographic Pattern

9

- ❑ Rank The Permutations
- ❑ Codeforces 1328B

Reverse and Rotation

10

➤ Theory

- ❑ Check if strings are rotations of each other
- ❑ Check if strings are rotations of each other(KMP)

➤ Questions

- ❑ Rotate Array
- ❑ Reverse a string in place

Manacher's Algorithm(Optional)

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- ❑ Theory and Questions
- ❑ Video



Miscellaneous

12

- ❑ Count and Say
- ❑ String Compression
- ❑ Longest Common Prefix
- ❑ Compare Version Numbers
- ❑ Smallest Window containing another string
- ❑ Multiply Strings

Miscellaneous

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- ❑ Rearrange characters in a string such that no two adjacent are same
- ❑ Add Binary Strings
- ❑ Decoded String at Index
- ❑ ZigZag Conversion
- ❑ Minimum Window Substring
- ❑ Permutation in String



KEEP
CALM
AND
KEEP
CODING

Credits

Special thanks to all the people who made and released these awesome resources for free:

- ◇ Presentation template by [SlidesCarnival](#)
- ◇ Photographs by [Unsplash](#)

