

## CATEGORY ARCHIVES: STRINGS

Questions related to strings

### Transform One String to Another using Minimum Number of Given Operation

Given two strings A and B, the task is to convert A to B if possible. The only operation allowed is to put any character from A and insert it at front. August 19, 2015

[37 Comments](#) Category: [Strings](#)

### Z algorithm (Linear time pattern searching Algorithm)

July 26, 2015

This algorithm finds all occurrences of a pattern in a text in linear time. Let length of text be  $n$  and of pattern be  $m$ , then total time taken is  $O(m + n)$  with linear space complexity.

[7 Comments](#) Category: [Strings](#) Tags: [Pattern Searching](#)

### Shortest Superstring Problem

July 4, 2015

Given a set of  $n$  strings `arr[]`, find the smallest string that contains each string in the given set as substring. We may assume that no string in `arr[]` is substring of another string.

[3 Comments](#) Category: [Strings](#) Tags: [Greedy Algorithm](#), [NPHard](#)

### Shortest Common Supersequence

Given two strings `str1` and `str2`, find the shortest string that has both `str1` and `str2` as subsequences.

[19 Comments](#) Category: [Strings](#) Tags: [Dynamic Programming](#)

### How to design a tiny URL or URL shortener?

June 27, 2015

How to design a system that takes big URLs like "http://www.geeksforgeeks.org/count-sum-of-digits-in-numbers-from-1-to-n/" and converts them into a short 6 character URL.

[22 Comments](#) Category: [Strings](#)

## Remove spaces from a given string

June 18, 2015

Given a string, remove all spaces from the string and return it. Input: "g eeks for ge eeks " Output: "geeksforgeeks"

[20 Comments](#) Category: [Strings](#)

## Online algorithm for checking palindrome in a stream

May 14, 2015

Given a stream of characters (characters are received one by one), write a function that prints 'Yes' if a character makes the complete string palindrome, else prints 'No'.

[36 Comments](#) Category: [Strings](#) Tags: [Pattern Searching](#)

## Recursively print all sentences that can be formed from list of word lists

April 12, 2015

Given a list of word lists How to print all sentences possible taking one word from a list at a time via recursion?

[28 Comments](#) Category: [Strings](#)

## Check if a given sequence of moves for a robot is circular or not

March 25, 2015

Given a sequence of moves for a robot, check if the sequence is circular or not. A sequence of moves is circular if first and last positions of robot are same. A move can be one of the following. G – Go one unit L – Turn left R – Turn right

[26 Comments](#) Category: [Strings](#)

## Find the longest substring with k unique characters in a given string

March 18, 2015

Given a string you need to print longest possible substring that has exactly M unique characters. If there are more than one substring of longest possible length, then print any one of them.

[33 Comments](#) Category: [Strings](#)

## Function to find Number of customers who could not get a computer

March 3, 2015

Write a function "runCustomerSimulation" that takes following two inputs a) An integer 'n': total number of computers in a cafe and a string: b) A sequence of uppercase letters 'seq': Letters in the sequence occur in pairs.

[34 Comments](#) Category: [Strings](#)

## Find maximum depth of nested parenthesis in a string

February 26, 2015

We are given a string having parenthesis like below “((X))(((Y)))” We need to find the maximum depth of balanced parenthesis, like 4 in above example. Since ‘Y’ is surrounded by 4 balanced parenthesis.

8 Comments Category: [Strings](#) Tags: [stack](#), [Stack-Queue](#), [StackAndQueue](#)

## Find all distinct palindromic sub-strings of a given string

February 12, 2015

Given a string of lowercase ASCII characters, find all distinct continuous palindromic sub-strings of it.

30 Comments Category: [Strings](#)

## Find if a given string can be represented from a substring by iterating the substring “n” times

January 12, 2015

Given a string ‘str’, check if it can be constructed by taking a substring of it and appending multiple copies of the substring together.

33 Comments Category: [Strings](#)

## Suffix Tree Application 6 – Longest Palindromic Substring

December 28, 2014

Given a string, find the longest substring which is palindrome. We have already discussed Naïve [ $O(n^3)$ ], quadratic [ $O(n^2)$ ] and linear [ $O(n)$ ] approaches in Set 1, Set 2 and Manacher’s Algorithm. In this article, we will discuss another linear time approach based on suffix tree. If given string is S, then approach is following:

Reverse the... [Read More »](#)

2 Comments Category: [Strings](#)

## Print all possible strings that can be made by placing spaces

December 21, 2014

Given a string you need to print all possible strings that can be made by placing spaces (zero or one) in between them.

26 Comments Category: [Strings](#)

## Manacher’s Algorithm – Linear Time Longest Palindromic Substring – Part 4

In Manacher’s Algorithm Part 1 and Part 2, we gone through some of the basics, understood

LPS length array and how to calculate it efficiently based on four cases.

December 20, 2014

4 Comments Category: [Strings](#)

## Longest Even Length Substring such that Sum of First and Second Half is same

Given a string 'str' of digits, find length of the longest substring of 'str', such that the length of the substring is 2k digits and sum of left k digits is equal to the sum of right k digits. December 19, 2014

28 Comments Category: [Strings](#) Tags: [Dynamic Programming](#)

## Manacher's Algorithm – Linear Time Longest Palindromic Substring – Part 3

In Manacher's Algorithm Part 1 and Part 2, we gone through some of the basics, understood LPS length array and how to calculate it efficiently based on four cases. Here we will implement the same. December 17, 2014

6 Comments Category: [Strings](#)

## Manacher's Algorithm – Linear Time Longest Palindromic Substring – Part 2

In Manacher's Algorithm – Part 1, we gone through some of the basics and LPS length array. Here we will see how to calculate LPS length array efficiently. December 16, 2014

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