### Arrays

Print Left Rotation of array in O(n) time O(1) space -

<https://www.geeksforgeeks.org/print-left-rotation-array/>

Right rotate array by distance d in O(1) space -

<https://www.geeksforgeeks.org/reversal-algorithm-right-rotation-array/>

Rearrange array such that arr[i]=i

<https://www.geeksforgeeks.org/rearrange-array-arri/>

Binary search on rotated array - <https://www.geeksforgeeks.org/search-an-element-in-a-sorted-and-pivoted-array/>

Find a pair with a given sum in a sorted rotated array -

<https://www.geeksforgeeks.org/given-a-sorted-and-rotated-array-find-if-there-is-a-pair-with-a-given-sum/>

Rotation Count in sorted rotated array -

<https://www.geeksforgeeks.org/find-rotation-count-rotated-sorted-array/>

Rearrange arr such that even positions are greater than all elements before it and elements at odd positions are less than all elements before it.

<https://www.geeksforgeeks.org/rearrange-array-arri-arrj-even-arri/>

Rearrange positive and negative arr elements in O(n) time and O(1) space-

<https://www.geeksforgeeks.org/rearrange-positive-and-negative-numbers-publish/>

Move all zeros to end of arr in single traversal-

<https://www.geeksforgeeks.org/move-zeroes-end-array-set-2-using-single-traversal/>

Find kth smallest element in the given 2D array sorted rowise-

<https://www.geeksforgeeks.org/kth-smallest-element-in-a-row-wise-and-column-wise-sorted-2d-array-set-1/>

Median of running integer stream using stl-

<https://www.geeksforgeeks.org/median-of-stream-of-running-integers-using-stl/>

Bitwise xor

<https://www.geeksforgeeks.org/find-the-number-occurring-odd-number-of-times/>

### <https://practice.geeksforgeeks.org/problems/nth-node-from-end-of-linked-list/1>

[3/22, 11:49] Vivek Chauhan: <https://practice.geeksforgeeks.org/problems/merge-two-sorted-linked-lists/1>

[3/22, 11:50] Vivek Chauhan: <https://practice.geeksforgeeks.org/problems/diameter-of-binary-tree/1>

[3/22, 11:50] Vivek Chauhan: <https://practice.geeksforgeeks.org/problems/find-the-number-of-islands/1>

[3/22, 11:51] Vivek Chauhan: <https://practice.geeksforgeeks.org/problems/0-1-knapsack-problem/0>

[3/22, 11:51] Vivek Chauhan: <https://practice.geeksforgeeks.org/problems/count-total-set-bits/0>

[3/22, 11:52] Vivek Chauhan: <https://practice.geeksforgeeks.org/problems/find-all-four-sum-numbers/0>

[3/22, 11:54] Vivek Chauhan: And ek aur tha jo bhot jagah dikha..

Find first occurence of 1 in 0-1 array..(0's first den 1's)

[3/22, 11:54] Vivek Chauhan: <https://practice.geeksforgeeks.org/problems/implementing-floyd-warshall/0>

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### Binary Trees/BST

Print postorder traversal from given inorder and preorder traversals- <https://www.geeksforgeeks.org/print-postorder-from-given-inorder-and-preorder-traversals/>

Replace each node in binary tree with inorder predecessor and successor -

<https://www.geeksforgeeks.org/replace-node-binary-tree-sum-inorder-predecessor-successor/>

Reverse Level Order Traversal -

<https://www.geeksforgeeks.org/reverse-level-order-traversal/>

Construct binary tree from its bracket representation -

<https://www.geeksforgeeks.org/construct-binary-tree-string-bracket-representation/>

Max sum path in binary tree -

<https://practice.geeksforgeeks.org/problems/maximum-path-sum/1>

Checking similarity of binary trees -

<https://practice.geeksforgeeks.org/problems/determine-if-two-trees-are-identical/1>

Serialize and deserialize binary tree-

<https://www.geeksforgeeks.org/serialize-deserialize-binary-tree/>

LCA

<https://practice.geeksforgeeks.org/problems/lowest-common-ancestor-in-a-bst/1>

### Graphs -

Finding the no. of nodes at a given level for a given graph-

<https://www.geeksforgeeks.org/count-number-nodes-given-level-using-bfs/>

Detect cycle in undirected graph -

<https://www.geeksforgeeks.org/detect-cycle-undirected-graph/>

Find Mother vertex in a (directed or unidirected)graph -

<https://www.geeksforgeeks.org/find-a-mother-vertex-in-a-graph/>

Longest leaf to leaf path in binary tree -

<https://www.geeksforgeeks.org/print-longest-leaf-leaf-path-binary-tree/>

<https://www.geeksforgeeks.org/find-median-bst-time-o1-space/>

Diameter of tree :-

<https://www.geeksforgeeks.org/diameter-of-a-binary-tree/>

Hash:

<https://www.geeksforgeeks.org/find-cube-pairs-set-1-n23-solution/>

<https://www.geeksforgeeks.org/count-number-triplets-product-equal-given-number/>

Linked list:

<https://codingfreak.blogspot.com/2012/09/detecting-loop-in-singly-linked-list_22.html>

Recursively Reversing a linked list :-

<https://www.geeksforgeeks.org/recursively-reversing-a-linked-list-a-simple-implementation/>

Remove node

<https://practice.geeksforgeeks.org/problems/delete-without-head-pointer/1>

Merge two sorted Linked lists(Recursive and Iterative):-

<https://www.geeksforgeeks.org/merge-two-sorted-linked-lists/>

Pairwise swap nodes in a Linked List:-

<https://www.geeksforgeeks.org/pairwise-swap-elements-of-a-given-linked-list/>

Clone a linked List with random pointers :-

<https://www.geeksforgeeks.org/clone-linked-list-next-random-pointer-o1-space/>

Reverse a linked list in group of size k

<https://www.geeksforgeeks.org/reverse-linked-list-groups-given-size-set-2/>

## Algorithms

bfs

## <https://www.geeksforgeeks.org/minimum-time-required-so-that-all-oranges-become-rotten/>

Max area under histogram

<https://practice.geeksforgeeks.org/problems/maximum-rectangular-area-in-a-histogram/0>

Doubly linked list with single pointer

<https://www.geeksforgeeks.org/xor-linked-list-a-memory-efficient-doubly-linked-list-set-1/>

Basic DP

<https://www.geeksforgeeks.org/optimal-strategy-for-a-game-dp-31/>

A boolean matrix question

<https://www.geeksforgeeks.org/a-boolean-matrix-question/>

\*\* **These cover all dp questions which are frequently asked more or less** \*\*:-

<https://www.geeksforgeeks.org/top-20-dynamic-programming-interview-questions/>

Process sequence (stacks and linked list)

<http://p.ip.fi/y96o>

Trie:

<https://www.geeksforgeeks.org/implement-a-phone-directory/>

Simple combinatorics( note: n,m>1e6 and find ans%1e9+7)(agar nCr ke terms mei ans bola toh best)

<https://www.geeksforgeeks.org/count-possible-paths-top-left-bottom-right-nxm-matrix/>

### String

Split numeric string

<https://www.geeksforgeeks.org/splitting-numeric-string/>

Max length prefix of one string, substring of another

<https://www.geeksforgeeks.org/maximum-length-prefix-one-string-occurs-subsequence-another/>

\*\*\*\*LONG QUESTION, CAN SELECT FROM THIS, OR THE EASIER SOLUTION (LINK IN THIS PAGE)\*\*\*\*

Wildcard pattern matching

<https://www.geeksforgeeks.org/dynamic-programming-wildcard-pattern-matching-linear-time-constant-space/>