

[Meet us on Youtube \(Apna College\)](#)

Easy	Ideal Time : 5-10 mins
Medium	Ideal Time : 15-20 mins
Hard	Ideal Time : 40-60 mins (based on Qs) 88 Qs

Topics	Question (375)
Arrays	Maximum and Minimum Element in an Array
Arrays	Reverse the Array
Arrays	Maximum-Subarray
Arrays	Contains Duplicate
Arrays	Chocolate Distribution Problem
Arrays	Search in Rotated Sorted Array
Arrays	Next Permutation
Arrays	Best time to Buy and Sell Stock
Arrays	Repeat and Missing Number Array
Arrays	Kth-Largest Element in an Array
Arrays	Trapping Rain Water
Arrays	Product of Array Except Self
Arrays	Maximum Product Subarray
Arrays	Find Minimum in Rotated Sorted Array
Arrays	Find Pair with Sum in Sorted & Rotated Array
Arrays	3Sum
Arrays	Container With Most Water
Arrays	Given Sum Pair
Arrays	Kth - Smallest Element
Arrays	Merge Overlapping Intervals
Arrays	Find Minimum Number of Merge Operations to Make an Array Palindrome
Arrays	Given an Array of Numbers Arrange the Numbers to Form the Biggest Number
Arrays	Space Optimization Using Bit Manipulations
Arrays	Subarray Sum Divisible K
Arrays	Print all Possible Combinations of r Elements in a Given Array of Size n
Arrays	Mo's Algorithm

Strings	Valid Palindrome
Strings	Valid Anagram
Strings	Valid parentheses
Strings	Remove Consecutive Characters
Strings	Longest Common Prefix
Strings	Convert a Sentence into its Equivalent Mobile Numeric Keypad Sequence
Strings	Print all the Duplicates in the Input String
Strings	Longest Substring without Repeating Characters
Strings	Longest Repeating Character Replacement
Strings	Group Anagrams
Strings	Longest Palindromic Substring
Strings	Palindromic Substrings
Strings	Next Permutation
Strings	Count Palindromic Subsequences
Strings	Smallest Window in a String Containing all the Characters of Another String
Strings	Wildcard String Matching
Strings	Longest Prefix Suffix
Strings	Rabin-Karp Algorithm for Pattern Searching
Strings	Transform One String to Another using Minimum Number of Given Operation

Strings	Minimum Window Substring
Strings	Boyer Moore Algorithm for Pattern Searching
Strings	Word Wrap
2D Arrays	Zigzag (or diagonal) Traversal of Matrix
2D Arrays	Set Matrix Zeroes
2D Arrays	Spiral Matrix
2D Arrays	Rotate Image
2D Arrays	Word Search
2D Arrays	Find the Number of Islands Set 1 (Using DFS)
2D Arrays	Given a Matrix of 'O' and 'X', Replace 'O' with 'X' if Surrounded by 'X'
2D Arrays	Find a Common Element in all Rows of a Given Row-Wise Sorted Matrix
2D Arrays	Create a Matrix with Alternating Rectangles of O and X
2D Arrays	Maximum Size Rectangle of all 1s
Searching & Sorting	Permute Two Arrays such that Sum of Every Pair is Greater or Equal to K
Searching & Sorting	counting sort
Searching & Sorting	find common elements three sorted arrays
Searching & Sorting	Searching in an array where adjacent differ by at most k
Searching & Sorting	ceiling in a sorted array
Searching & Sorting	Pair with given difference
Searching & Sorting	majority element
Searching & Sorting	count triplets with sum smaller than a given value
Searching & Sorting	Maximum Sum Subsequence with no adjacent elements
Searching & Sorting	Merge Sorted Arrays using O(1) Space
Searching & Sorting	Inversion of Array
Searching & Sorting	Find Duplicates in O(n) Time and O(1) Extra Space
Searching & Sorting	Radix Sort
Searching & Sorting	Product of Array except itself
Searching & Sorting	Make all Array Elements Equal
Searching & Sorting	Check if Reversing a Sub Array Make the Array Sorted
Searching & Sorting	Find Four Elements that Sum to a Given Value
Searching & Sorting	Median of Two Sorted Array with Different Size
Searching & Sorting	Median of Stream of Integers Running Integers
Searching & Sorting	Print Subarrays with 0 Sum
Searching & Sorting	Aggressive Cows
Searching & Sorting	Allocate Minimum number of Pages
Searching & Sorting	Minimum Swaps to Sort
Backtracking	Backtracking Set 2 Rat in a Maze
Backtracking	Combinational Sum
Backtracking	Crossword-Puzzle
Backtracking	Longest Possible Route in a Matrix with Hurdles
Backtracking	Printing all solutions in N-Queen Problem
Backtracking	Solve the Sudoku
Backtracking	Partition Equal Subset Sum
Backtracking	M Coloring Problem
Backtracking	Knight Tour
Backtracking	Sudoku
Backtracking	Remove Invalid Parentheses
Backtracking	Word Break Problem using Backtracking
Backtracking	Print all Palindromic Partitions of a String
Backtracking	Find Shortest Safe Route in a Path with Landmines
Backtracking	Partition of Set into K Subsets with Equal Sum
Backtracking	Backtracking set-7 hamiltonian cycle
Backtracking	tug-of-war

Backtracking	Maximum Possible Number by doing at most K swaps
Backtracking	Backtracking set-8 solving cryptarithmic puzzles
Backtracking	Find paths from corner cell to middle cell in maze
Backtracking	Arithmetic Expressions
Linked List	Reverse Linked List
Linked List	Linked List Cycle
Linked List	Merge Two Sorted Lists
Linked List	Delete without Head node
Linked List	Remove duplicates from an unsorted linked list
Linked List	Sort a linked list of 0s-1s-or-2s
Linked List	Multiply two numbers represented linked lists
Linked List	Remove nth node from end of list
Linked List	Reorder List
Linked List	Detect and remove loop in a linked list
Linked List	Write a Function to get the Intersection Point of two Linked Lists
Linked List	Flatten a linked list with next and child pointers
Linked List	Linked list in zig-zag fashion
Linked List	Reverse a doubly linked list
Linked List	Delete nodes which have a greater value on right side
Linked List	Segregate even and odd Elements in a Linked List
Linked List	Point to next higher value node in a linked list with an Arbitrary Pointer
Linked List	Rearrange a given linked list in place
Linked List	Sort Biotonic Doubly Linked Lists
Linked List	Merge K Sorted Lists
Linked List	Merge sort for linked list
Linked List	Quicksort on singly-linked list
Linked List	Sum of two linked lists
Linked List	Flattening a linked list
Linked List	Clone a linked list with next and random Pointer
Linked List	Subtract two numbers represented as linked lists
Stacks & Queues	Implement two stacks in an Array
Stacks & Queues	Evaluation of Postfix Expression
Stacks & Queues	Implement Stack using Queues
Stacks & Queues	Queue Reversal
Stacks & Queues	Implement Stack Queue using Deque
Stacks & Queues	Reverse first k elements of queue
Stacks & Queues	Design Stack with Middle Operation
Stacks & Queues	Infix to Postfix
Stacks & Queues	Design and Implement Special stack
Stacks & Queues	Longest Valid String
Stacks & Queues	Find if an expression has duplicate parenthesis or not
Stacks & Queues	Stack permutations check if an array is stack permutation of other
Stacks & Queues	Count natural numbers whose permutation greater number
Stacks & Queues	Sort a stack using Recursion
Stacks & Queues	Queue based approach for first non repeating character in a stream
Stacks & Queues	The Celebrity Problem
Stacks & Queues	Next larger Element
Stacks & Queues	Distance of nearest cell
Stacks & Queues	Rotten-oranges
Stacks & Queues	Next smaller element
Stacks & Queues	Circular-tour
Stacks & Queues	Efficiently implement k-stacks single array
Stacks & Queues	The celebrity problem
Stacks & Queues	Iterative tower of hanoi

Stacks & Queues	Find the maximum of minimums for every window size in a given array
Stacks & Queues	lru cache implementation
Stacks & Queues	Find a tour that visits all stations
Greedy	Activity selection problem greedy algo
Greedy	Greedy algorithm to find minimum number of coins
Greedy	Minimum sum two numbers formed digits array-2
Greedy	Minimum sum absolute difference pairs two arrays
Greedy	Find maximum height pyramid from the given array of objects
Greedy	Minimum cost for acquiring all coins with k extra coins allowed with every coin
Greedy	Find maximum equal sum of every three stacks
Greedy	Job sequencing problem
Greedy	Greedy algorithm egyptian fraction
Greedy	Fractional knapsack problem
Greedy	Maximum length chain of pairs
Greedy	Find smallest number with given number of digits and digit sum
Greedy	Maximize sum of consecutive differences circular-array
Greedy	paper-cut minimum number squares
Greedy	Lexicographically smallest array-k consecutive swaps
Greedy	Problems-CHOCOLA
Greedy	Find minimum time to finish all jobs with given constraints
Greedy	Job sequencing using disjoint set union
Greedy	Rearrange characters string such that no two adjacent are same
Greedy	Minimum edges to reverse to make path from a source to a destination
Greedy	Minimize Cash Flow among a given set of friends who have borrowed money from each other
Greedy	Minimum Cost to cut a board into squares
Binary Trees	Maximum Depth of Binary Tree
Binary Trees	Reverse Level Order Traversal
Binary Trees	Subtree of Another Tree
Binary Trees	Invert Binary Tree
Binary Trees	Binary Tree Level Order Traversal
Binary Trees	Left View of Binary Tree
Binary Trees	Right View of Binary Tree
Binary Trees	ZigZag Tree Traversal
Binary Trees	Create a mirror tree from the given binary tree
Binary Trees	Leaf at same level
Binary Trees	Check for Balanced Tree
Binary Trees	Transform to Sum Tree
Binary Trees	Check if Tree is Isomorphic
Binary Trees	Same Tree
Binary Trees	Construct Binary Tree from Preorder and Inorder Traversal
Binary Trees	Height of Binary Tree
Binary Trees	Diameter of a Binary Tree
Binary Trees	Top View of Binary Tree
Binary Trees	Bottom View of Binary Tree
Binary Trees	Diagonal Traversal of Binary Tree
Binary Trees	Boundary Traversal of binary tree
Binary Trees	Construct Binary Tree from String with Brackets
Binary Trees	Minimum swap required to convert binary tree to binary search tree
Binary Trees	Duplicate subtree in Binary Tree
Binary Trees	Check if a given graph is tree or not
Binary Trees	Lowest Common Ancestor in a Binary Tree
Binary Trees	Min distance between two given nodes of a Binary Tree
Binary Trees	Duplicate Subtrees
Binary Trees	Kth ancestor of a node in binary tree
Binary Trees	Binary Tree Maximum Path Sum

Binary Trees	Serialize and Deserialize Binary Tree
Binary Trees	Binary Tree to DLL
Binary Trees	Print all k-sum paths in a binary tree

Binary Search Tree	Lowest Common Ancestor of a Binary Search Tree
Binary Search Tree	Binary Search Tree Set 1 (Search and Insertion)
Binary Search Tree	Minimum element in BST
Binary Search Tree	Predecessor and Successor
Binary Search Tree	Check whether BST contains Dead End
Binary Search Tree	Binary Tree to BST
Binary Search Tree	Kth largest element in BST
Binary Search Tree	Validate Binary Search Tree
Binary Search Tree	Kth Smallest Element in a BST
Binary Search Tree	Delete Node in a BST
Binary Search Tree	Flatten BST to sorted list
Binary Search Tree	Preorder to Postorder
Binary Search Tree	Count BST nodes that lie in a given range
Binary Search Tree	Populate Inorder Successor for all Nodes
Binary Search Tree	Convert Normal BST to Balanced BST
Binary Search Tree	Merge two BSTs
Binary Search Tree	Given n appointments, find all conflicting appointments
Binary Search Tree	Replace every element
Binary Search Tree	Construct BST from given preorder traversal
Binary Search Tree	Find median of BST in O(n) time and O(1) space
Binary Search Tree	Largest BST in a Binary Tree

Heaps & Hashing	Choose k array elements such that difference of maximum and minimum is minimized
Heaps & Hashing	Heap Sort
Heaps & Hashing	Top K Frequent Elements
Heaps & Hashing	k largest elements in an array
Heaps & Hashing	Next Greater Element
Heaps & Hashing	K'th Smallest/Largest Element in Unsorted Array
Heaps & Hashing	Find the maximum repeating number in O(n) time and O(1) extra space
Heaps & Hashing	K-th smallest element after removing some integers from natural numbers
Heaps & Hashing	Find k closest elements to a given value
Heaps & Hashing	K'th largest element in a stream
Heaps & Hashing	Connect Ropes
Heaps & Hashing	Cuckoo Hashing
Heaps & Hashing	Itinerary from a List of Tickets
Heaps & Hashing	Largest Subarray with 0 Sum
Heaps & Hashing	Count distinct elements in every window of size k
Heaps & Hashing	Group Shifted Strings
Heaps & Hashing	Merge K Sorted lists
Heaps & Hashing	Find Median from Data Stream
Heaps & Hashing	Sliding Window Maximum
Heaps & Hashing	Find the smallest positive number
Heaps & Hashing	Find Surpasser Count of each element in array
Heaps & Hashing	Tournament Tree and Binary Heap
Heaps & Hashing	Check for palindrome
Heaps & Hashing	Length of the largest subarray with contiguous elements
Heaps & Hashing	Palindrome Substring Queries
Heaps & Hashing	Subarray distinct elements
Heaps & Hashing	Find the recurring function
Heaps & Hashing	K maximum sum combinations from two arrays

Graphs	BFS
--------	---------------------

Graphs	DFS
Graphs	Flood Fill Algorithm
Graphs	Number of Triangles
Graphs	Detect cycle in a graph
Graphs	Detect cycle in an undirected graph
Graphs	Rat in a Maze Problem
Graphs	Steps by Knight
Graphs	Clone graph
Graphs	Number of Operations to Make Network Connected
Graphs	Dijkstra's shortest path algorithm
Graphs	Topological Sort
Graphs	Oliver and the Game
Graphs	Minimum time taken by each job to be completed given by a Directed Acyclic Graph
Graphs	Find whether it is possible to finish all tasks or not from given dependencies
Graphs	Find the number of islands
Graphs	Prim's Algo
Graphs	Negative Weighted Cycle
Graphs	Floyd Warshall
Graphs	Graph Coloring
Graphs	Snakes and Ladders
Graphs	Kosaraju's Theorem
Graphs	Journey to moon
Graphs	Vertex Cover
Graphs	M Coloring Problem
Graphs	Cheapest Flights Within K Stops
Graphs	Find if there is a path of more than k length from a source
Graphs	Bellman Ford
Graphs	Bipartite Graph
Graphs	Word-Ladder
Graphs	Allen Dictionary
Graphs	Kruskals MST
Graphs	Total number spanning trees graph
Graphs	Travelling Salesman
Graphs	Find longest path directed acyclic graph
Graphs	Two Clique Problem
Graphs	Minimise the cash flow
Graphs	Chinese postman
Graphs	Water Jug
Graphs	Water Jug 2

Tries	Construct a trie from scratch
Tries	Print unique rows in a given boolean matrix
Tries	Word Break Problem (Trie solution)
Tries	Given a sequence of words, print all anagrams together
Tries	Find shortest unique prefix for every word in a given list
Tries	Implement a Phone Directory

DP	Knapsack with Duplicate Items
DP	BBT counter
DP	Reach a given score
DP	Maximum difference of zeros and ones in binary string
DP	Climbing Stairs
DP	Permutation Coefficient
DP	Longest Repeating Subsequence
DP	Pairs with specific difference
DP	Longest subsequence-1
DP	Coin Change

DP	LIS
DP	Longest Common Subsequence
DP	Word Break
DP	Combination Sum IV
DP	House Robber
DP	House Robber 2
DP	Decode Ways
DP	Unique Paths
DP	Jumps Game
DP	Knapsack Problem
DP	nC_r
DP	Catalan Number
DP	Edit Distance
DP	Subset Sum
DP	Gold mine
DP	Assembly Line Scheduling
DP	Maximize The Cut Segments
DP	Maximum sum increasing subsequence
DP	Count all subsequences having product less than K
DP	Maximum sum increasing subsequence
DP	Egg dropping puzzle
DP	Max length chain
DP	Largest Square in Matrix
DP	Maximum Path Sum
DP	Minimum Number of Jumps
DP	Minimum removals from array to make max - min <= K
DP	Longest Common Substring
DP	Partition Equal Subset Sum
DP	Longest Palindromic Subsequence
DP	Count Palindromic Subsequences
DP	Longest Palindromic Substring
DP	Longest Alternating Sequence
DP	Weighted Job Scheduling
DP	Coin Game
DP	Coin Game Winner
DP	Optimal Strategy for a game
DP	Word Wrap
DP	Mobile numeric keypad
DP	Maximum Length of Pair Chain
DP	Matrix Chain Multiplication
DP	Maximum profit by buying and selling a share at most twice
DP	Optimal BST
DP	Largest Submatrix with sum 0
DP	Largest area rectangular sub-matrix with equal number of 1's and 0's

Bit Manipulation	Count set bits in an integer
Bit Manipulation	Find the two non-repeating elements in an array of repeating elements
Bit Manipulation	Program to find whether a no is power of two
Bit Manipulation	Find position of the only set bit
Bit Manipulation	Count number of bits to be flipped to convert A to B
Bit Manipulation	Count total set bits in all numbers from 1 to n
Bit Manipulation	Copy set bits in a range
Bit Manipulation	Calculate square of a number without using *, / and pow()
Bit Manipulation	Divide two integers without using multiplication, division and mod operator
Bit Manipulation	Power Set

Segment Trees	Range Sum Query - Immutable
---------------	---

Segment Trees	Range Minimum Query
Segment Trees	Range Sum Query - Mutable
Segment Trees	Create Sorted Array through Instructions
Segment Trees	Count of Range Sum
Segment Trees	Count of Smaller Numbers After Self