Array:

Find pair with given sum in the array
Check if subarray with 0 sum is exists or not
Print all sub-arrays with 0 sum
Sort binary array in linear time
Find a duplicate element in a limited range array
Find largest sub-array formed by consecutive integers
Find maximum length sub-array having given sum
Find maximum length sub-array having equal number of 0's and 1's
Sort an array containing 0's, 1's and 2's (Dutch national flag problem)
Inplace merge two sorted arrays
Merge two arrays by satisfying given constraints
Find index of 0 to replaced to get maximum length sequence of continuous ones
Find maximum product of two integers in an array
Shuffle a given array of elements (Fisher–Yates shuffle)
Rearrange the array with alternate high and low elements
Find equilibrium index of an array
Find majority element in an array (Boyer–Moore majority vote algorithm)
Move all zeros present in the array to the end
Replace each element of array with product of every other element without using / operator
Find Longest Bitonic Subarray in an array
Find maximum difference between two elements in the array by satisfying given constraints
Maximum subarray problem (Kadane's algorithm)
Print continuous subarray with maximum sum
Maximum Sum Circular Subarray
Find all distinct combinations of given length
Find all distinct combinations of given length with repetition allowed
Find maximum sequence of continuous 1's formed by replacing at-most k zeroes by ones
Find minimum sum subarray of given size k
Find subarray having given sum in given array of integers
Find the length of smallest subarray whose sum of elements is greater than the given number
Find largest number possible from set of given numbers
Find the smallest window in array sorting which will make the entire array sorted
Find maximum sum path involving elements of given arrays
Maximum profit earned by buying and selling shares any number of times
Trapping Rain Water within given set of bars
Longest Increasing Subsequence
Longest Decreasing Subsequence Problem
Find maximum product subarray in a given array
Find maximum sum of subsequence with no adjacent elements

Find minimum platforms needed in the station so to avoid any delay in arrival of any train
Decode the array constructed from another array
Sort an array using one swap
Find Triplet with given sum in an array
Length of longest continuous sequence with same sum in given binary arrays
Rearrange array such that A[A[i]] is set to i for every element A[i]
Reverse every consecutive m elements of the given subarray
Maximum Product Subset Problem
Find pairs with given difference k in the array
Find pairs with given difference k in the array | Constant space solution
4 sum problem | Quadruplets with given sum
Print all quadruplets with given sum | 4-sum problem extended
Find odd occurring element in an array in single traversal
Find two odd occurring element in an array without using any extra space
Quickselect Algorithm
Print all Triplets that forms Arithmetic Progression
Print all triplets that forms Geometric Progression
Print all combination of numbers from 1 to n having sum n
Replace each element of the array by its corresponding rank in the array
Print all Triplets in an array with sum less than or equal to given number
Group elements of an array based on their first occurrence
Find minimum difference between index of two given elements present in the array
Find maximum absolute difference between sum of two non-overlapping sub-arrays
Find all Symmetric Pairs in an Array of Pairs
Partition an array into two sub-arrays with the same sum
Find count of distinct elements in every sub-array of size k
Find two numbers with maximum sum formed by array digits
Print all sub-arrays of an array having distinct elements
Find a Triplet having Maximum Product in an Array
Find ways to calculate a target from elements of specified array
Find Minimum Index of Repeating Element in an Array
Generate Random Input from an Array according to given Probabilities
Find pair in an array having minimum absolute sum
Find Index of Maximum Occurring Element with Equal Probability
Check if an Array is Formed by Consecutive Integers
Find two non-overlapping pairs having same sum in an array
Find Minimum Product among all Combinations of Triplets in an Array
Replace every element of an array with the least greater element on its right
Find all odd occurring elements in an array having limited range of elements
Add elements of two arrays into a new array
Count the distinct absolute values in the sorted array
Print all combinations of positive integers in increasing order that sum to a given number

Find all distinct combinations of given length - Part 2
Find subarrays with given sum in an array
Find the surpasser count for each element of an array
Find maximum length sequence of continuous ones (Using Sliding Window)
Find maximum length sequence of continuous ones
Merging Overlapping Intervals
Activity Selection Problem
Job Sequencing Problem with Deadlines
Introduction to Priority Queues using Binary Heaps
Min Heap and Max Heap Implementation in C++
Min Heap and Max Heap Implementation in Java
Heap Sort (Out-of-place and In-place implementation in C++ and C)
Check if given array represents min heap or not
Convert Max Heap to Min Heap in linear time
Find K'th largest element in an array
Sort a K-Sorted Array
Merge M sorted lists of variable length
Find K'th smallest element in an array
Find smallest range with at-least one element from each of the given lists
Merge M sorted lists each containing N elements
Insertion sort | Iterative & Recursive
Selection sort | Iterative & Recursive
Bubble sort | Iterative & Recursive
Merge Sort
Quicksort
Iterative Implementation of Quicksort
Hybrid QuickSort
Quicksort using Dutch National Flag Algorithm
Quick Sort using Hoare's Partitioning scheme
External merge sort
Custom Sort | Sort elements by their frequency and Index
Custom Sort | Sort elements of the array by order of elements defined by the second array
Inversion Count of an array
Segregate positive and negative integers in linear time
Binary Search
Ternary Search vs Binary search
Interpolation search
Exponential search
Find number of rotations in a circularly sorted array
Search an element in a circular sorted array
Find first or last occurrence of a given number in a sorted array
Count occurrences of a number in a sorted array with duplicates

Find smallest missing element from a sorted array
Find Floor and Ceil of a number in a sorted array
Search in a nearly sorted array in O(logn) time
Find number of 1's in a sorted binary array
Find the peak element in an array
Maximum Sum Subarray using Divide & Conquer
Find Minimum and Maximum element in an array using minimum comparisons
Matrix Chain Multiplication
0-1 Knapsack problem
Maximize value of the expression
Partition problem
Subset sum problem
Minimum Sum Partition problem
Rod Cutting
Coin change-making problem (unlimited supply of coins)
Coin Change Problem (Total number of ways to get the denomination of coins)
Longest alternating subsequence
Combinations of words formed by replacing given numbers with corresponding alphabets
Decode the given sequence to construct minimum number without repeated digits
All combinations of elements satisfying given constraints
Find Missing Term in a Sequence in log(n) time
Print all distinct Subsets of a given Set
Find Floor and Ceil of a number in a sorted array (Recursive solution)
Set both elements of a binary array to 0 in single line
K-Partition Problem | Printing all Partitions
3 Partition Problem
3-partition problem extended | Print all partitions
Iterative Merge Sort Algorithm (Bottom-up Merge Sort)
Find two duplicate elements in an limited range array (using XOR)
Find missing number and duplicate elements in an array
Find Minimum and Maximum element in an array by doing minimum comparisons
Find Frequency of each element in a sorted array containing duplicates
Difference between Subarray, Subsequence and Subset

Backtracking:

Print all possible solutions to N Queens problem
Print all Possible Knight's Tours in a chessboard
Find Shortest Path in Maze
Find Longest Possible Route in a Matrix
Find path from source to destination in a matrix that satisfies given constraints
Find total number of unique paths in a maze from source to destination

Print All Hamiltonian Path present in a graph
Print all k-colorable configurations of the graph (Vertex coloring of graph)
Find all Permutations of a given string
All combinations of elements satisfying given constraints
Find all binary strings that can be formed from given wildcard pattern
K-Partition Problem | Printing all Partitions
Magnet Puzzle
Find ways to calculate a target from elements of specified array
Find minimum number possible by doing at-most K swaps
Determine if a pattern matches with a string or not

Binary:

Bit Hacks – Part 1 (Basic)
Bit Hacks – Part 2 (Playing with k'th bit)
Bit Hacks – Part 3 (Playing with rightmost set bit of a number)
Bit Hacks – Part 4 (Playing with letters of English alphabet)
Bit Hacks – Part 5 (Find absolute value of an integer without branching)
Bit Hacks – Part 6 (Random Problems)
Brian Kernighan's Algorithm to count set bits in an integer
Compute parity of a number using lookup table
Count set bits using lookup table
Find the minimum or maximum of two integers without using branching
Multiply 16-bit integers using 8-bit multiplier
Round up to the next highest power of 2
Round up to the previous power of 2
Swap individual bits at given position in an integer
Check if given number is power of 4 or not
Reverse Bits of a given Integer
Find odd occurring element in an array in single traversal
Find two odd occurring element in an array without using any extra space
Swap two bits at given position in an integer
Add binary representation of two integers
Swap Adjacent Bits of a Number
Print all distinct Subsets of a given Set
Perform Division of two numbers without using division operator (/)
Check if adjacent bits are set in binary representation of a given number
Conditionally negate a value without branching
Find two duplicate elements in an limited range array (using XOR)
Find missing number and duplicate elements in an array
Check if given number is power of 8 or not
Circular shift on binary representation of an integer by k positions

Solve given set of problems without using multiplication or division operators
Reverse Bits of an integer using lookup table
Generate binary numbers between 1 to N
Efficiently implement power function | Recursive and Iterative
Find square of a number without using multiplication and division operator | 3 methods
Generate power set of a given set
Huffman Coding
Find all odd occurring elements in an array having limited range of elements

Binary Tree:

Check if two given binary trees are identical or not | Iterative & Recursive
Calculate height of a binary tree | Iterative & Recursive
Delete given Binary Tree | Iterative & Recursive
Inorder Tree Traversal | Iterative & Recursive
Preorder Tree Traversal | Iterative & Recursive
Postorder Tree Traversal | Iterative & Recursive
Level Order Traversal of Binary Tree
Spiral Order Traversal of Binary Tree
Reverse Level Order Traversal of Binary Tree
Print all nodes of a given binary tree in specific order
Print left view of binary tree
Print Bottom View of Binary Tree
Print Top View of Binary Tree
Find next node in same level for given node in a binary tree
Check if given binary tree is complete binary tree or not
Determine if given two nodes are cousins of each other
Print cousins of given node in a binary tree
In-place convert given binary tree to its sum tree
Check if given binary tree is a sum tree or not
Combinations of words formed by replacing given numbers with corresponding alphabets
Determine if given binary tree is a subtree of another binary tree or not
Find diameter of a binary tree
Check if given binary Tree has symmetric structure or not
Convert binary tree to its mirror
Check if binary tree can be converted to another by doing any no. of swaps of left & right child
Find Lowest Common Ancestor (LCA) of two nodes in a binary tree
Print all paths from root to leaf nodes in given binary tree
Find ancestors of given node in a Binary Tree
Find the distance between given pairs of nodes in a binary tree
Find Vertical Sum in a given Binary Tree

Print nodes in vertical order of a given Binary Tree (Vertical Traversal)
Find the diagonal sum of given binary tree
Print Diagonal Traversal of Binary Tree
Print corner nodes of every level in binary tree
In-place convert convert given Binary Tree to Doubly Linked List
Sink nodes containing zero to the bottom of the binary tree
Convert given binary tree to full tree by removing half nodes
Truncate given binary tree to remove nodes which lie on a path having sum less than K
Find maximum sum root-to-leaf path in a binary tree
Check if given binary tree is height balanced or not
Convert normal binary tree to Left-child right-sibling binary tree
Determine if given Binary Tree is a BST or not
Convert a Binary Tree to BST by maintaining its original structure
Invert given Binary Tree | Recursive and Iterative solution
Print Right View of a Binary Tree
Print leaf to root path for every leaf node in a binary tree
Find maximum width of given binary tree
Build Binary Tree from given Parent array
C++ Program to Print Binary Tree Structure
Find all nodes at given distance from leaf nodes in a binary tree
Count all subtrees having same value of nodes in a binary tree
Find Maximum Difference Between a Node and its Descendants in a Binary Tree
Construct a Binary Tree from Ancestor Matrix
Calculate height of a binary tree with leaf nodes forming a circular doubly linked list

BST:

Insertion in BST
Search given key in BST
Deletion from BST
Construct balanced BST from given keys
Determine if given Binary Tree is a BST or not
Check if given keys represents same BSTs or not without building the BST
Find inorder predecessor for given key in a BST
Find Lowest Common Ancestor (LCA) of two nodes in a Binary Search Tree
Find K'th smallest and K'th largest element in BST
Floor and Ceil in a Binary Search Tree
Find optimal cost to construct binary search tree
Convert a Binary Tree to BST by maintaining its original structure
Remove nodes from BST that have keys outside the valid range
Find a pair with given sum in a BST

Find inorder successor for given key in a BST
Replace every element of an array with the least greater element on its right

Divide & Conquer:

Binary Search
Find number of rotations in a circularly sorted array
Search an element in a circular sorted array
Find first or last occurrence of a given number in a sorted array
Count occurrences of a number in a sorted array with duplicates
Find smallest missing element from a sorted array
Find Floor and Ceil of a number in a sorted array
Search in a nearly sorted array in O(logn) time
Find number of 1's in a sorted binary array
Find the peak element in an array
Maximum Sum Subarray using Divide & Conquer
Find Minimum and Maximum element in an array using minimum comparisons
Efficiently implement power function | Recursive and Iterative
Find Missing Term in a Sequence in log(n) time
Division of Two Numbers using Binary Search Algorithm
Find Floor and Ceil of a number in a sorted array (Recursive solution)
Find Minimum and Maximum element in an array by doing minimum comparisons
Find Frequency of each element in a sorted array containing duplicates
Ternary Search vs Binary search
Exponential search
Interpolation search
Merge Sort Algorithm
Iterative Merge Sort Algorithm (Bottom-up Merge Sort)
Merge Sort Algorithm for Singly Linked List
Inversion Count of an array
Quicksort Algorithm
Iterative Implementation of Quicksort
Hybrid QuickSort
Quicksort using Dutch National Flag Algorithm
Quick Sort using Hoare's Partitioning scheme

Dynamic Programming:

Introduction to Dynamic Programming
Longest Common Subsequence | Introduction & LCS Length
Longest Common Subsequence | Space optimized version
Longest Common Subsequence of K-sequences
Longest Common Subsequence | Finding all LCS

Longest Common Substring problem
Longest Palindromic Subsequence using Dynamic Programming
Longest Repeated Subsequence problem
Implement Diff Utility
Shortest Common Supersequence | Introduction & SCS Length
Shortest Common Supersequence | Finding all SCS
Shortest Common Supersequence | Using LCS
Longest Increasing Subsequence using Dynamic Programming
Longest Bitonic Subsequence
Increasing Subsequence with Maximum Sum
The Levenshtein distance (Edit distance) problem
Find size of largest square sub-matrix of 1's present in given binary matrix
Matrix Chain Multiplication
Find the minimum cost to reach last cell of the matrix from its first cell
Find longest sequence formed by adjacent numbers in the matrix
Count number of paths in a matrix with given cost to reach destination cell
0-1 Knapsack problem
Maximize value of the expression
Partition problem
Subset sum problem
Minimum Sum Partition problem
Find all N-digit binary strings without any consecutive 1's
Rod Cutting
Maximum Product Rod Cutting
Coin change-making problem (unlimited supply of coins)
Coin Change Problem – Find total number of ways to get the denomination of coins
Total possible solutions to linear equation of k variables
Longest alternating subsequence
Count number of times a pattern appears in given string as a subsequence
Collect maximum points in a matrix by satisfying given constraints
Count total possible combinations of N-digit numbers in a mobile keypad
Find optimal cost to construct binary search tree
Word Break Problem
Word Break Problem | Using Trie Data Structure
Determine Minimal Adjustment Cost of an Array
Check if a string is K-Palindrome or not
Wildcard Pattern Matching
Find probability that a person is alive after taking N steps on the island
Calculate sum of all elements in a sub-matrix in constant time
Find maximum sum K x K sub-matrix in a given M x N matrix
Find maximum sum submatrix present in a given matrix
Find maximum sum of subsequence with no adjacent elements

Maximum subarray problem (Kadane's algorithm)
Single-Source Shortest Paths – Bellman Ford Algorithm
All-Pairs Shortest Paths – Floyd Warshall Algorithm
Longest Decreasing Subsequence Problem
Pots of Gold Game using Dynamic Programming
Find minimum cuts needed for palindromic partition of a string
Maximum Length Snake Sequence
3 Partition Problem
Calculate size of the largest plus of 1's in binary matrix
Check if given string is interleaving of two other given strings
Longest Increasing Subsequence using LCS
Determine negative-weight cycle in a graph

Graphs:

Terminology and Representations of Graphs
Graph Implementation using STL
Graph Implementation in C++ without using STL
Implement Graph Data Structure in C
Graph Implementation in Java using Collections
Breadth First Search (BFS) | Iterative & Recursive Implementation
Depth First Search (DFS) | Iterative & Recursive Implementation
Arrival and Departure Time of Vertices in DFS
Types of edges involved in DFS and relation between them
Bipartite Graph
Determine if a given graph is Bipartite Graph using DFS
Minimum number of throws required to win Snake and Ladder game
Topological Sorting in a DAG
Kahn's Topological Sort Algorithm
Transitive Closure of a Graph
Check if an undirected graph contains cycle or not
Total paths in given digraph from given source to destination having exactly m edges
Determine if an undirected graph is a Tree (Acyclic Connected Graph)
2-Edge Connectivity in the graph
2-Vertex Connectivity in the graph
Check if given digraph is a DAG (Directed Acyclic Graph) or not
Disjoint-Set Data Structure (Union-Find Algorithm)
Chess Knight Problem – Find Shortest path from source to destination
Check if given Graph is Strongly Connected or not
Check if given Graph is Strongly Connected or not using one DFS Traversal
Union-Find Algorithm for Cycle Detection in undirected graph
Kruskal's Algorithm for finding Minimum Spanning Tree

Single-Source Shortest Paths – Dijkstra's Algorithm
Single-Source Shortest Paths – Bellman Ford Algorithm
All-Pairs Shortest Paths – Floyd Warshall Algorithm
Find Cost of Shortest Path in DAG using one pass of Bellman-Ford
Least Cost Path in Weighted Digraph using BFS
Find maximum cost path in graph from given source to destination
Determine negative-weight cycle in a graph
Print all k-colorable configurations of the graph (Vertex coloring of graph)
Print All Hamiltonian Path present in a graph
Greedy coloring of graph

Heap:

Introduction to Priority Queues using Binary Heaps
Min Heap and Max Heap Implementation in C++
Min Heap and Max Heap Implementation in Java
Heap Sort
Check if given array represents min heap or not
Convert Max Heap to Min Heap in linear time
Find K'th largest element in an array
Sort a K-Sorted Array
Merge M sorted lists of variable length
Find K'th smallest element in an array
Find smallest range with at-least one element from each of the given lists
Merge M sorted lists each containing N elements
External merge sort
Huffman Coding
Find first k maximum occurring words in given set of strings
Find first k non-repeating characters in a string in single traversal

Linked List:

Introduction to Linked Lists
Linked List Implementation | Part 1
Linked List Implementation | Part 2
Static Linked List in C
Clone given Linked List
Delete Linked List
Pop operation in linked list
Insert given node into the correct sorted position in the given sorted linked list
Given a linked list, change it to be in sorted order
Split the nodes of the given linked list into front and back halves
Remove duplicates from a sorted linked list

Move front node of the given list to the front of the another list
Move even nodes to the end of the list in reverse order
Split given linked list into two lists where each list containing alternating elements from it
Construct a linked list by merging alternate nodes of two given lists
Merge given sorted linked lists into one
Merge Sort Algorithm for Singly Linked List
Intersection of two given sorted linked lists
Reverse linked list | Part 1 (Iterative Solution)
Reverse linked list | Part 2 (Recursive Solution)
Reverse every group of k nodes in given linked list
Find K'th node from the end in a linked list
Merge alternate nodes of two linked lists into the first list
Merge two sorted linked lists from their end
Delete every N nodes in a linked list after skipping M nodes
Rearrange linked list in specific manner in linear time
Check if linked list is palindrome or not
Move last node to front in a given Linked List
Rearrange the linked list in specific manner
Detect Cycle in a linked list (Floyd's Cycle Detection Algorithm)
Sort linked list containing 0's, 1's and 2's
Stack Implementation using Linked List
Queue Implementation using Linked List
Remove duplicates from a linked list
Rearrange the linked list so that it has alternating high, low values
Rearrange a Linked List by Separating Odd Nodes from the Even Ones
Calculate height of a binary tree with leaf nodes forming a circular doubly linked list

Matrix:

Print Matrix in Spiral Order
Create Spiral Matrix from given array
Shift all matrix elements by 1 in Spiral Order
Find Shortest path from source to destination in a matrix that satisfies given constraints
Change all elements of row i and column j in a matrix to 0 if cell (i, j) has value 0
Print diagonal elements of the matrix having positive slope
Find all paths from first cell to last cell of a matrix
Replace all occurrences of 0 that are not surrounded by 1 in a binary matrix
In-place rotate the matrix by 90 degrees in clock-wise direction
Count negative elements present in sorted matrix in linear time
Report all occurrences of an element in row wise and column wise sorted matrix in linear time
Calculate sum of all elements in a sub-matrix in constant time

Find maximum sum K x K sub-matrix in a given M x N matrix
Find maximum sum submatrix present in a given matrix
Find probability that a person is alive after taking N steps on the island
Count the number of islands
Flood fill Algorithm
Find shortest safe route in a field with sensors present
Find all occurrences of given string in a character matrix
Shortest path in a Maze | Lee algorithm
Check if given matrix is Toeplitz matrix or not
In-place rotate the matrix by 180 degrees
Fill Binary Matrix with Alternating Rectangles of 0 and 1
Find all common elements present in every row of given matrix
Construct a Binary Tree from Ancestor Matrix
Find common elements present in all rows of a matrix
Travelling Salesman Problem using Branch and Bound
Collect maximum points in a matrix by satisfying given constraints
Count number of paths in a matrix with given cost to reach destination cell
Find longest sequence formed by adjacent numbers in the matrix
Find the minimum cost to reach last cell of the matrix from its first cell
Matrix Chain Multiplication
Find size of largest square sub-matrix of 1's present in given binary matrix
Chess Knight Problem – Find Shortest path from source to destination
Find Duplicate rows in a binary matrix
Print all possible solutions to N Queens problem
Print all Possible Knight's Tours in a chessboard
Find Shortest Path in Maze
Find Longest Possible Route in a Matrix
Calculate size of the largest plus of 1's in binary matrix
Find the maximum value of M[c][d] – M[a][b] over all choices of indexes
Find shortest distance of every cell from landmine in a Maze
Find shortest route in a device to construct the given string

Queue:

Queue Implementation
Queue Implementation using Linked List
Chess Knight Problem – Find Shortest path from source to destination
Shortest path in a Maze | Lee algorithm
Find shortest safe route in a field with sensors present
Flood fill Algorithm
Count the number of islands
Find Shortest path from source to destination in a matrix that satisfies given constraints

Generate binary numbers between 1 to N
Calculate height of a binary tree | Iterative & Recursive
Delete given Binary Tree | Iterative & Recursive
Level Order Traversal of Binary Tree
Spiral Order Traversal of Binary Tree
Reverse Level Order Traversal of Binary Tree
Print all nodes of a given binary tree in specific order
Print left view of binary tree
Find next node in same level for given node in a binary tree
Check if given binary tree is complete binary tree or not
Print Diagonal Traversal of Binary Tree
Print corner nodes of every level in binary tree
Breadth First Search (BFS) | Iterative & Recursive Implementation
Minimum number of throws required to win Snake and Ladder game
Check if an undirected graph contains cycle or not
Invert given Binary Tree | Recursive and Iterative solution
Find maximum cost path in graph from given source to destination
Find shortest distance of every cell from landmine in a Maze

Sorting:

Insertion sort | Iterative & Recursive
Selection sort | Iterative & Recursive
Bubble sort | Iterative & Recursive
Merge Sort Algorithm
Iterative Merge Sort Algorithm (Bottom-up Merge Sort)
Quicksort Algorithm
Iterative Implementation of Quicksort
Hybrid QuickSort
Quicksort using Dutch National Flag Algorithm
Quick Sort using Hoare's Partitioning scheme
External merge sort
Counting Sort Algorithm
Custom Sort | Sort elements by their frequency and Index
Custom Sort | Sort elements of the array by order of elements defined by the second array
Inversion Count of an array
Segregate positive and negative integers in linear time
Efficiently Sort an Array with many Duplicated Values
Find the smallest window in array sorting which will make the entire array sorted
Find largest number possible from set of given numbers
Move all zeros present in the array to the end
Sort binary array in linear time

Sort linked list containing 0's, 1's and 2's
Merge Sort Algorithm for Singly Linked List
Group anagrams together from given list of words
Activity Selection Problem
Lexicographic sorting of given set of keys
Heap Sort
Merge M sorted lists of variable length
Merge M sorted lists each containing N elements
Find all palindromic permutations of a string
Find all lexicographically next permutations of a string sorted in ascending order
Merge two sorted linked lists from their end
Sort an array containing 0's, 1's and 2's (Dutch national flag problem)
Find pair with given sum in the array
Inplace merge two sorted arrays
Merge two arrays by satisfying given constraints
Find maximum product of two integers in an array
Find all distinct combinations of given length
Find all distinct combinations of given length with repetition allowed
Merging Overlapping Intervals
Print all quadruplets with given sum | 4-sum problem extended
4 sum problem | Quadruplets with given sum
Find two numbers with maximum sum formed by array digits
Find a Triplet having Maximum Product in an Array
Find Minimum Product among all Combinations of Triplets in an Array
Find all distinct combinations of given length - Part 2
Find the surpasser count for each element of an array

Stack:

Stack Implementation
Stack Implementation using Linked List
Check if given expression is balanced expression or not
Find duplicate parenthesis in an expression
Evaluate given postfix expression
Decode the given sequence to construct minimum number without repeated digits
Inorder Tree Traversal | Iterative & Recursive
Preorder Tree Traversal | Iterative & Recursive
Postorder Tree Traversal | Iterative & Recursive
Find ancestors of given node in a Binary Tree
Check if two given binary trees are identical or not | Iterative & Recursive
Reverse given text without reversing the individual words
Find all binary strings that can be formed from given wildcard pattern

Iterative Implementation of Quicksort
Depth First Search (DFS) | Iterative & Recursive Implementation
Invert given Binary Tree | Recursive and Iterative solution
Print leaf to root path for every leaf node in a binary tree

String:

Check if given string is a rotated palindrome or not
Longest Palindromic Substring (Non-DP Space Optimized Solution)
Check if repeated subsequence is present in the string or not
Check if strings can be derived from each other by circularly rotating them
Check if given set of moves is circular or not
Convert given number into corresponding excel column name
Determine if two strings are anagram or not
Find all binary strings that can be formed from given wildcard pattern
Find all interleavings of given strings
Isomorphic Strings
Find all possible palindromic substrings in a string
Find all possible combinations of words formed from mobile keypad
Find all possible combinations by replacing given digits with characters of the corresponding list
Find all words from given list that follows same order of characters as given pattern
Find first k non-repeating characters in a string in single traversal
Group anagrams together from given list of words
Introduction to Pattern Matching
Inplace remove all occurrences of 'AB' and 'C' from the string
Longest even length palidromic sum substring
Print string in zig-zag form in k rows
Reverse given text without reversing the individual words
Run Length Encoding (RLE) data compression algorithm
Validate an IP address
Find the longest substring of given string containing k distinct characters
Find all palindromic permutations of a string
Find all substrings of a string that are permutation of a given string
Find the longest substring of given string containing all distinct characters
Find all Permutations of a given string
Iterative Approach to find Permutations of a String in C++ and Java
Generate all Permutations of a String in Java | Recursive & Iterative
Find all lexicographically next permutations of a string sorted in ascending order
Find Lexicographically minimal string rotation
Find all strings of given length containing balanced parentheses
Find all N-digit strictly increasing numbers (Bottom-Up and Top-Down Approach)

Find all N-digit binary numbers having more 1's than 0's for any prefix
Find all N-digit numbers with given sum of digits
Find all N-digit binary numbers with k-bits set where k ranges from 1 to N
Generate binary numbers between 1 to N
Find all combinations of non-overlapping substrings of a string
Check if given sentence is syntactically correct or not
Calculate rank of given string among all its lexicographically sorted permutations
Find all Lexicographic Permutations of a String
Find all N-digit binary numbers with equal sum of bits in its two halves
Check if given string is interleaving of two other given strings
Difference between Subarray, Subsequence and Subset
std::next_permutation | Overview & Implementation in C++
std::prev_permutation | Overview & Implementation in C++
Implementation of KMP Algorithm in C, C++ and Java
Reverse String without using Recursion
Reverse given string using Recursion
Reverse a String in Java in 10 different ways
Determine if a given string is palindrome or not
In-place remove all adjacent duplicates from the given string
Find the minimum number of inversions needed to make the given expression balanced
Replace all non-overlapping occurrences of the pattern
Construct the longest palindrome by shuffling or deleting characters from a string
Determine if characters of a String follows a specified order or not
Print all combinations of phrases that can be formed by picking words from each of the given lists
Remove all extra spaces from a string
Break a string into all possible combinations of non-overlapping substrings
Remove adjacent duplicate characters from a string
Combinations of words formed by replacing given numbers with corresponding alphabets
Word Break Problem
Wildcard Pattern Matching
Count number of times a pattern appears in given string as a subsequence
The Levenshtein distance (Edit distance) problem
Longest Common Subsequence | Introduction & LCS Length
Longest Common Subsequence | Space optimized version
Longest Common Subsequence of K-sequences
Longest Common Subsequence | Finding all LCS
Longest Repeated Subsequence problem
Longest Palindromic Subsequence using Dynamic Programming
Longest Common Substring problem
Shortest Common Supersequence | Introduction & SCS Length
Shortest Common Supersequence | Finding all SCS

Shortest Common Supersequence | Using LCS
Implement Diff Utility
Word Break Problem | Using Trie Data Structure
Find minimum cuts needed for palindromic partition of a string
Check if a string is K-Palindrome or not
Find shortest route in a device to construct the given string
Find minimum number possible by doing at-most K swaps
Determine if a pattern matches with a string or not

Trie:

Trie Implementation | Insert, Search and Delete
Memory efficient Trie Implementation using Map | Insert, Search and Delete
C++ Implementation of Trie Data Structure
Longest Common Prefix in given set of strings (using Trie)
Lexicographic sorting of given set of keys
Find maximum occurring word in given set of strings
Find first k maximum occurring words in given set of strings
Find Duplicate rows in a binary matrix
Word Break Problem | Using Trie Data Structure

Greedy:

Activity Selection Problem
Huffman Coding
Shortest Superstring Problem
Job Sequencing Problem with Deadlines
Greedy coloring of graph
Kruskal's Algorithm for finding Minimum Spanning Tree
Single-Source Shortest Paths – Dijkstra's Algorithm

Puzzles:

Clock angle problem – Find angle between hour and minute hand
Add two numbers without using addition operator | 4 methods
Generate power set of a given set
Implement power function without using multiplication and division operators
Print all numbers between 1 to N without using semicolon
Swap two numbers without using third variable | 5 methods
Determine the if condition to print specific output
Find maximum, minimum of three numbers without using conditional statement and ternary operator | 4 methods
Find numbers represented as sum of two cubes for two different pairs

Print “Hello World” with empty main() function | 3 methods
Tower of Hanoi Problem
Print all numbers between 1 to N without using any loop | 4 methods
Print a semicolon without using semicolon anywhere in the program
Multiply two numbers without using multiplication operator or loops
Find square of a number without using multiplication and division operator | 3 methods
Find if a number is even or odd without using any conditional statement
Set both elements of a binary array to 0 in single line
Find minimum number without using conditional statement or ternary operator
Perform Division of two numbers without using division operator (/)
Generate 0 and 1 with 75% and 25% Probability
Generate Desired Random Numbers With Equal Probability
Return 0, 1 and 2 with equal Probability using the specified function
Generate Fair Results from a Biased Coin
Generate numbers from 1 to 7 with equal probability using specified function
Implement Ternary Operator Without Using Conditional Expressions
Determine if two integers are equal without using comparison and arithmetic operators
Return 0 and 1 with equal Probability using the specified function
Generate Random Input from an Array according to given Probabilities
Generate Fair Results from a Biased Coin
Magnet Puzzle