

[Ask or Search Quora](#)[Ask Question](#)[Read](#)[Answer](#)¹[Notifications](#)¹ [Dikshit](#)

TECHIE DELIGHT

500 Data Structures and Algorithms practice problems and their solutions

Vivek Srivastava

Array

[Find pair with given sum in the array](#)
[Find sub-array 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 be 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 \(Kadane's algorithm\)](#)
[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](#)
[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](#)
[Length of longest continuous sequence with same sum in given binary arrays](#)

[Merging Overlapping Intervals](#)
[Activity Selection Problem](#)
[Job Sequencing Problem with Deadlines](#)
[Introduction to Priority Queues using Binary Heaps](#)

[Upvote](#) **2.4k**[Downvote](#) [Comments](#) **35+**

Ask or Search Quora

Ask Question

Read

Answer¹Notifications¹ Dikshit

[Find Kth largest element in an array](#)
[Sort a K-Sorted Array](#)
[Merge M sorted lists of variable length](#)
[Find Kth 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](#)
[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 \$A\[s\] - A\[r\] + A\[q\] - A\[p\]\$ where \$s > r > q > p\$](#)
[Partition problem](#)
[Subset sum problem](#)
[Minimum Sum Partition problem](#)
[Rod Cutting](#)
[Coin change-making problem \(unlimited supply of coins\)](#)
[Coin Change Problem – Find total number of ways to get the denomination of coins](#)
[Longest alternating subsequence](#)
[Combinations of words formed by replacing given numbers with corresponding English alphabets](#)
[Decode the given sequence to construct minimum number without repeated digits](#)
[All combinations of elements satisfying given constraints](#)

Backtracking

[Print all possible solutions to N Queens problem](#)
[Print all Possible Knight's Tours in a chessboard](#)
[Magnet Puzzle](#)
[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](#)

Upvote 2.4k

Downvote Comments 35+

Ask or Search Quora

Ask Question

Read

Answer¹Notifications¹ Dikshit

[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](#)
[Reverse Bits of a given Integer](#)

[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](#)

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 English 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](#)

Upvote 2.4k

Downvote Comments 35+

[Ask or Search Quora](#)[Ask Question](#)[Read](#)[Answer](#)¹[Notifications](#)¹ [Dikshit](#)[Determine if given Binary Tree is a BST or not](#)**Binary Search Tree (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](#)**Divide & Conquer**[Binary Search](#)[Ternary Search vs Binary search](#)[Exponential search](#)[Interpolation 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](#)[Merge Sort](#)[Merge Sort for Singly Linked List](#)[Inversion Count of an array](#)[Quicksort](#)[Iterative Implementation of Quicksort](#)[Hybrid QuickSort](#)**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](#)[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](#)[Upvote](#) **2.4k**[Downvote](#) [Comments](#) **35+**

Ask or Search Quora

Ask Question

Read

Answer¹Notifications¹ Dikshit[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](#)[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](#)[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](#)

Graphs

[Terminology and Representations of Graphs](#)[Graph Implementation using STL](#)[Graph Implementation in C++ without using STL](#)[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](#)[Minimum number of throws required to win Snake and Ladder game](#)[Topological Sorting in a DAG](#)[Transitive Closure of a Graph](#)[Check if an undirected graph contains cycle or not](#)[Total number of 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](#)[Print all k-colorable configurations of the graph \(Vertex coloring of graph\)](#)[Print All Hamiltonian Path present in a graph](#)[Greedy coloring of graph](#)

Heaps

[Introduction to Priority Queues using Binary Heaps](#)[Min Heap and Max Heap Implementation in C++](#)[Heap Sort \(Out-of-place and In-place implementation in C++ and C\)](#)

Upvote 2.4k

Downvote Comments 35+

Ask or Search Quora

Ask Question

Read

Answer¹Notifications¹ Dikshit[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 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 \(Floyd's Cycle Detection Algorithm\)](#)

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](#)

Upvote 2.4k

Downvote Comments 35+

Ask or Search Quora

Ask Question

Read

Answer¹Notifications¹ Dikshit[Lee algorithm | Shortest path in a Maze](#)[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](#)

Queue

[Chess Knight Problem – Find Shortest path from source to destination](#)[Lee algorithm | Shortest path in a Maze](#)[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](#)

Sorting

[Insertion sort | Iterative & Recursive](#)[Selection sort | Iterative & Recursive](#)[Bubble sort | Iterative & Recursive](#)[Merge Sort](#)[Quicksort](#)[Iterative Implementation of Quicksort](#)[Hybrid QuickSort](#)[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](#)[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](#)[Merge Sort for Singly Linked List](#)[Group anagrams together from given list of words](#)[Activity Selection Problem](#)

Upvote 2.4k

Downvote Comments 35+

Ask or Search Quora

Ask Question

Read

Answer¹Notifications¹ Dikshit

[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](#)

Stack

[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](#)

String

[Check if given set of moves is circular or not](#)
[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](#)
[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 palindromic 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](#)
[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](#)

Upvote 2.4k

Downvote Comments 35+

[Ask or Search Quora](#)[Ask Question](#)[Read](#)[Answer](#)¹[Notifications](#)¹ [Dikshit](#)[Check if given sentence is syntactically correct or not](#)[Find all N-digit strictly increasing numbers \(Bottom-Up and Top-Down Approach\)](#)[Combinations of words formed by replacing given numbers with corresponding English 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](#)

Trie

[Trie Implementation | Insert, Search and Delete](#)[Memory efficient Trie Implementation using Map | Insert, Search and Delete](#)[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](#)

Greedy

[Activity Selection Problem](#)[Huffman Coding](#)[Shortest Superstring Problem](#)[Job Sequencing Problem with Deadlines](#)[Greedy coloring of graph](#)

Puzzles

[Clock angle problem – Find angle between hour and minute hand](#)[Add two numbers without using addition operator | 5 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](#)[Magnet Puzzle](#)

228,880 views · 2,499 upvotes · Posted Dec 27

[Upvote](#) **2.4k**[Downvote](#) [Comments](#) **35+**