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| Topic: | Problem: | | | | | |
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| Array | Reverse the array | | | | | |
| Array | Find the maximum and minimum element in an array | | | | | |
| Array | Find the "Kth" max and min element of an array | | | | | |
| Array | Given an array which consists of only 0, 1 and 2. Sort the array without using any sorting algo | | | | | |
| Array | Move all the negative elements to one side of the array | | | | | |
| Array | Find the Union and Intersection of the two sorted arrays. | | | | | |
| Array | Write a program to cyclically rotate an array by one. | | | | | |
| Array | find Largest sum contiguous Subarray [V. IMP] | | | | | |
| Array | Minimise the maximum difference between heights [V.IMP] | | | | | |
| Array | Minimum no. of Jumps to reach end of an array | | | | | |
| Array | find duplicate in an array of N+1 Integers | | | | | |
| Array | Merge 2 sorted arrays without using Extra space. | | | | | |
| Array | Kadane's Algo [V.V.V.V.V IMP] | | | | | |
| Array | Merge Intervals | | | | | |
| Array | Next Permutation | | | | | |
| Array | Count Inversion | | | | | |
| Array | Best time to buy and Sell stock | | | | | |
| Array | find all pairs on integer array whose sum is equal to given number | | | | | |
| Array | find common elements In 3 sorted arrays | | | | | |
| Array | Rearrange the array in alternating positive and negative items with O(1) extra space | | | | | |
| Array | Find if there is any subarray with sum equal to 0 | | | | | |
| Array | Find factorial of a large number | | | | | |
| Array | find maximum product subarray | | | | | |
| Array | Find longest coinsecutive subsequence | | | | | |
| Array | Given an array of size n and a number k, fin all elements that appear more than " n/k " times. | | | | | |
| Array | Maximum profit by buying and selling a share atmost twice | | | | | |
| Array | Find whether an array is a subset of another array | | | | | |
| Array | Find the triplet that sum to a given value | | | | | |

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|--------|---|--|--|--|--|
| Array | Trapping Rain water problem | | | | |
| Array | Chocolate Distribution problem | | | | |
| Array | Smallest Subarray with sum greater than a given value | | | | |
| Array | Three way partitioning of an array around a given value | | | | |
| Array | Minimum swaps required bring elements less equal K together | | | | |
| Array | Minimum no. of operations required to make an array palindrome | | | | |
| Array | Median of 2 sorted arrays of equal size | | | | |
| Array | Median of 2 sorted arrays of different size | | | | |
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| Matrix | Spiral traversal on a Matrix | | | | |
| Matrix | Search an element in a matrix | | | | |
| Matrix | Find median in a row wise sorted matrix | | | | |
| Matrix | Find row with maximum no. of 1's | | | | |
| Matrix | Print elements in sorted order using row-column wise sorted matrix | | | | |
| Matrix | Maximum size rectangle | | | | |
| Matrix | Find a specific pair in matrix | | | | |
| Matrix | Rotate matrix by 90 degrees | | | | |
| Matrix | Kth smallest element in a row-column wise sorted matrix | | | | |
| Matrix | Common elements in all rows of a given matrix | | | | |
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| String | Reverse a String | | | | |
| String | Check whether a String is Palindrome or not | | | | |
| String | Find Duplicate characters in a string | | | | |
| String | Why strings are immutable in Java? | | | | |
| String | Write a Code to check whether one string is a rotation of another | | | | |
| String | Write a Program to check whether a string is a valid shuffle of two strings or not | | | | |
| String | Count and Say problem | | | | |
| String | Write a program to find the longest Palindrome in a string.[Longest palindromic Substring] | | | | |

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| String | Find Longest Recurring Subsequence in String | | | |
| String | Print all Subsequences of a string. | | | |
| String | Print all the permutations of the given string | | | |
| String | Split the Binary string into two substring with equal 0's and 1's | | | |
| String | Word Wrap Problem [VERY IMP]. | | | |
| String | EDIT Distance [Very Imp] | | | |
| String | Find next greater number with same set of digits. [Very Very IMP] | | | |
| String | Balanced Parenthesis problem.[Imp] | | | |
| String | Word break Problem[Very Imp] | | | |
| String | Rabin Karp Algo | | | |
| String | KMP Algo | | | |
| String | Convert a Sentence into its equivalent mobile numeric keypad sequence. | | | |
| String | Minimum number of bracket reversals needed to make an expression balanced. | | | |
| String | Count All Palindromic Subsequence in a given String. | | | |
| String | Count of number of given string in 2D character array | | | |
| String | Search a Word in a 2D Grid of characters. | | | |
| String | Boyer Moore Algorithm for Pattern Searching. | | | |
| String | Converting Roman Numerals to Decimal | | | |
| String | Longest Common Prefix | | | |
| String | Number of flips to make binary string alternate | | | |
| String | Find the first repeated word in string. | | | |
| String | Minimum number of swaps for bracket balancing. | | | |
| String | Find the longest common subsequence between two strings. | | | |
| String | Program to generate all possible valid IP addresses from given string. | | | |
| String | Write a program to find the smallest window that contains all characters of string itself. | | | |
| String | Rearrange characters in a string such that no two adjacent are same | | | |
| String | Minimum characters to be added at front to make string palindrome | | | |
| String | Given a sequence of words, print all anagrams together | | | |
| String | Find the smallest window in a string containing all characters of another string | | | |
| String | Recursively remove all adjacent duplicates | | | |

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| String | String matching where one string contains wildcard characters | | |
| String | Function to find Number of customers who could not get a computer | | |
| String | Transform One String to Another using Minimum Number of Given Operation | | |
| String | Check if two given strings are isomorphic to each other | | |
| String | Recursively print all sentences that can be formed from list of word lists | | |
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| Searching & Sorting | Find first and last positions of an element in a sorted array | | |
| Searching & Sorting | Find a Fixed Point (Value equal to index) in a given array | | |
| Searching & Sorting | Search in a rotated sorted array | | |
| Searching & Sorting | square root of an integer | | |
| Searching & Sorting | Maximum and minimum of an array using minimum number of comparisons | | |
| Searching & Sorting | Optimum location of point to minimize total distance | | |
| Searching & Sorting | Find the repeating and the missing | | |
| Searching & Sorting | find majority element | | |
| Searching & Sorting | Searching in an array where adjacent differ by at most k | | |
| Searching & Sorting | find a pair with a given difference | | |
| Searching & Sorting | find four elements that sum to a given value | | |
| Searching & Sorting | maximum sum such that no 2 elements are adjacent | | |
| Searching & Sorting | Count triplet with sum smaller than a given value | | |
| Searching & Sorting | merge 2 sorted arrays | | |
| Searching & Sorting | print all subarrays with 0 sum | | |
| Searching & Sorting | Product array Puzzle | | |
| Searching & Sorting | Sort array according to count of set bits | | |
| Searching & Sorting | minimum no. of swaps required to sort the array | | |
| Searching & Sorting | Bishu and Soldiers | | |
| Searching & Sorting | Rasta and Kheshtak | | |
| Searching & Sorting | Kth smallest number again | | |
| Searching & Sorting | Find pivot element in a sorted array | | |
| Searching & Sorting | K-th Element of Two Sorted Arrays | | |

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| Searching & Sorting | Aggressive cows | | | | |
| Searching & Sorting | Book Allocation Problem | | | | |
| Searching & Sorting | EKOSPOJ: | | | | |
| Searching & Sorting | Job Scheduling Algo | | | | |
| Searching & Sorting | Missing Number in AP | | | | |
| Searching & Sorting | Smallest number with atleastn trailing zeroes infactorial | | | | |
| Searching & Sorting | Painters Partition Problem: | | | | |
| Searching & Sorting | ROTI-Prata SPOJ | | | | |
| Searching & Sorting | DoubleHelix SPOJ | | | | |
| Searching & Sorting | Subset Sums | | | | |
| Searching & Sorting | Findthe inversion count | | | | |
| Searching & Sorting | Implement Merge-sort in-place | | | | |
| Searching & Sorting | Partitioning and Sorting Arrays with Many Repeated Entries | | | | |
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| LinkedList | Write a Program to reverse the Linked List. (Both Iterative and recursive) | | | | |
| LinkedList | Reverse a Linked List in group of Given Size. [Very Imp] | | | | |
| LinkedList | Write a program to Detect loop in a linked list. | | | | |
| LinkedList | Write a program to Delete loop in a linked list. | | | | |
| LinkedList | Find the starting point of the loop. | | | | |
| LinkedList | Remove Duplicates in a sorted Linked List. | | | | |
| LinkedList | Remove Duplicates in a Un-sorted Linked List. | | | | |
| LinkedList | Write a Program to Move the last element to Front in a Linked List. | | | | |
| LinkedList | Add "1" to a number represented as a Linked List. | | | | |
| LinkedList | Add two numbers represented by linked lists. | | | | |
| LinkedList | Intersection of two Sorted Linked List. | | | | |
| LinkedList | Intersection Point of two Linked Lists. | | | | |
| LinkedList | Merge Sort For Linked lists.[Very Important] | | | | |
| LinkedList | Quicksort for Linked Lists.[Very Important] | | | | |
| LinkedList | Find the middle Element of a linked list. | | | | |

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| LinkedList | Check if a linked list is a circular linked list. | | | |
| LinkedList | Split a Circular linked list into two halves. | | | |
| LinkedList | Write a Program to check whether the Singly Linked list is a palindrome or not. | | | |
| LinkedList | Deletion from a Circular Linked List. | | | |
| LinkedList | Reverse a Doubly Linked list. | | | |
| LinkedList | Find pairs with a given sum in a DLL. | | | |
| LinkedList | Count triplets in a sorted DLL whose sum is equal to given value "X". | | | |
| LinkedList | Sort a "k"sorted Doubly Linked list.[Very IMP] | | | |
| LinkedList | Rotate DoublyLinked list by N nodes. | | | |
| LinkedList | Rotate a Doubly Linked list in group of Given Size.[Very IMP] | | | |
| LinkedList | Can we reverse a linked list in less than O(n) ? | | | |
| LinkedList | Why Quicksort is preferred for. Arrays and Merge Sort for LinkedLists ? | | | |
| LinkedList | Flatten a Linked List | | | |
| LinkedList | Sort a LL of 0's, 1's and 2's | | | |
| LinkedList | Clone a linked list with next and random pointer | | | |
| LinkedList | Merge K sorted Linked list | | | |
| LinkedList | Multiply 2 no. represented by LL | | | |
| LinkedList | Delete nodes which have a greater value on right side | | | |
| LinkedList | Segregate even and odd nodes in a Linked List | | | |
| LinkedList | Program for n'th node from the end of a Linked List | | | |
| LinkedList | Find the first non-repeating character from a stream of characters | | | |
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| Binary Trees | level order traversal | | | |
| Binary Trees | Reverse Level Order traversal | | | |
| Binary Trees | Height of a tree | | | |
| Binary Trees | Diameter of a tree | | | |
| Binary Trees | Mirror of a tree | | | |
| Binary Trees | Inorder Traversal of a tree both using recursion and Iteration | | | |
| Binary Trees | Preorder Traversal of a tree both using recursion and Iteration | | | |

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| Binary Trees | Postorder Traversal of a tree both using recursion and Iteration | | | | |
| Binary Trees | Left View of a tree | | | | |
| Binary Trees | Right View of Tree | | | | |
| Binary Trees | Top View of a tree | | | | |
| Binary Trees | Bottom View of a tree | | | | |
| Binary Trees | Zig-Zag traversal of a binary tree | | | | |
| Binary Trees | Check if a tree is balanced or not | | | | |
| Binary Trees | Diagnol Traversal of a Binary tree | | | | |
| Binary Trees | Boundary traversal of a Binary tree | | | | |
| Binary Trees | Construct Binary Tree from String with Bracket Representation | | | | |
| Binary Trees | Convert Binary tree into Doubly Linked List | | | | |
| Binary Trees | Convert Binary tree into Sum tree | | | | |
| Binary Trees | Construct Binary tree from Inorder and preorder traversal | | | | |
| Binary Trees | Find minimum swaps required to convert a Binary tree into BST | | | | |
| Binary Trees | Check if Binary tree is Sum tree or not | | | | |
| Binary Trees | Check if all leaf nodes are at same level or not | | | | |
| Binary Trees | Check if a Binary Tree contains duplicate subtrees of size 2 or more [IMP] | | | | |
| Binary Trees | Check if 2 trees are mirror or not | | | | |
| Binary Trees | Sum of Nodes on the Longest path from root to leaf node | | | | |
| Binary Trees | Check if given graph is tree or not. [IMP] | | | | |
| Binary Trees | Find Largest subtree sum in a tree | | | | |
| Binary Trees | Maximum Sum of nodes in Binary tree such that no two are adjacent | | | | |
| Binary Trees | Print all "K" Sum paths in a Binary tree | | | | |
| Binary Trees | Find LCA in a Binary tree | | | | |
| Binary Trees | Find distance between 2 nodes in a Binary tree | | | | |
| Binary Trees | Kth Ancestor of node in a Binary tree | | | | |
| Binary Trees | Find all Duplicate subtrees in a Binary tree [IMP] | | | | |
| Binary Trees | Tree Isomorphism Problem | | | | |
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| Binary Search Trees | Find a value in a BST | | | | |
| Binary Search Trees | Deletion of a node in a BST | | | | |
| Binary Search Trees | Find min and max value in a BST | | | | |
| Binary Search Trees | Find inorder successor and inorder predecessor in a BST | | | | |
| Binary Search Trees | Check if a tree is a BST or not | | | | |
| Binary Search Trees | Populate Inorder successor of all nodes | | | | |
| Binary Search Trees | Find LCA of 2 nodes in a BST | | | | |
| Binary Search Trees | Construct BST from preorder traversal | | | | |
| Binary Search Trees | Convert Binary tree into BST | | | | |
| Binary Search Trees | Convert a normal BST into a Balanced BST | | | | |
| Binary Search Trees | Merge two BST [V.V.V>IMP] | | | | |
| Binary Search Trees | Find Kth largest element in a BST | | | | |
| Binary Search Trees | Find Kth smallest element in a BST | | | | |
| Binary Search Trees | Count pairs from 2 BST whose sum is equal to given value "X" | | | | |
| Binary Search Trees | Find the median of BST in O(n) time and O(1) space | | | | |
| Binary Search Trees | Count BST nodes that lie in a given range | | | | |
| Binary Search Trees | Replace every element with the least greater element on its right | | | | |
| Binary Search Trees | Given "n" appointments, find the conflicting appointments | | | | |
| Binary Search Trees | Check preorder is valid or not | | | | |
| Binary Search Trees | Check whether BST contains Dead end | | | | |
| Binary Search Trees | Largest BST in a Binary Tree [V.V.V.V.V IMP] | | | | |
| Binary Search Trees | Flatten BST to sorted list | | | | |
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| Greedy | Activity Selection Problem | | | | |
| Greedy | Job Sequencing Problem | | | | |
| Greedy | Huffman Coding | | | | |
| Greedy | Water Connection Problem | | | | |
| Greedy | Fractional Knapsack Problem | | | | |
| Greedy | Greedy Algorithm to find Minimum number of Coins | | | | |

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| Greedy | Maximum trains for which stoppage can be provided | | | | |
| Greedy | Minimum Platforms Problem | | | | |
| Greedy | Buy Maximum Stocks if i stocks can be bought on i-th day | | | | |
| Greedy | Find the minimum and maximum amount to buy all N candies | | | | |
| 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 | | | | |
| Greedy | Check if it is possible to survive on Island | | | | |
| Greedy | Find maximum meetings in one room | | | | |
| Greedy | Maximum product subset of an array | | | | |
| Greedy | Maximize array sum after K negations | | | | |
| Greedy | Maximize the sum of $arr[i]*i$ | | | | |
| Greedy | Maximum sum of absolute difference of an array | | | | |
| Greedy | Maximize sum of consecutive differences in a circular array | | | | |
| Greedy | Minimum sum of absolute difference of pairs of two arrays | | | | |
| Greedy | Program for Shortest Job First (or SJF) CPU Scheduling | | | | |
| Greedy | Program for Least Recently Used (LRU) Page Replacement algorithm | | | | |
| Greedy | Smallest subset with sum greater than all other elements | | | | |
| Greedy | Chocolate Distribution Problem | | | | |
| Greedy | DEFKIN -Defense of a Kingdom | | | | |
| Greedy | DIEHARD -DIE HARD | | | | |
| Greedy | GERGOVIA -Wine trading in Gergovia | | | | |
| Greedy | Picking Up Chicks | | | | |
| Greedy | CHOCOLA –Chocolate | | | | |
| Greedy | ARRANGE -Arranging Amplifiers | | | | |
| Greedy | K Centers Problem | | | | |
| Greedy | Minimum Cost of ropes | | | | |
| Greedy | Find smallest number with given number of digits and sum of digits | | | | |
| Greedy | Rearrange characters in a string such that no two adjacent are same | | | | |
| Greedy | Find maximum sum possible equal sum of three stacks | | | | |
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| BackTracking | Rat in a maze Problem | | | | | |
| BackTracking | Printing all solutions in N-Queen Problem | | | | | |
| BackTracking | Word Break Problem using Backtracking | | | | | |
| BackTracking | Remove Invalid Parentheses | | | | | |
| BackTracking | Sudoku Solver | | | | | |
| BackTracking | m Coloring Problem | | | | | |
| BackTracking | Print all palindromic partitions of a string | | | | | |
| BackTracking | Subset Sum Problem | | | | | |
| BackTracking | The Knight's tour problem | | | | | |
| BackTracking | Tug of War | | | | | |
| BackTracking | Find shortest safe route in a path with landmines | | | | | |
| BackTracking | Combinational Sum | | | | | |
| BackTracking | Find Maximum number possible by doing at-most K swaps | | | | | |
| BackTracking | Print all permutations of a string | | | | | |
| BackTracking | Find if there is a path of more than k length from a source | | | | | |
| BackTracking | Longest Possible Route in a Matrix with Hurdles | | | | | |
| BackTracking | Print all possible paths from top left to bottom right of a mXn matrix | | | | | |
| BackTracking | Partition of a set into K subsets with equal sum | | | | | |
| BackTracking | Find the K-th Permutation Sequence of first N natural numbers | | | | | |
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| Stacks & Queues | Implement Stack from Scratch | | | | | |
| Stacks & Queues | Implement Queue from Scratch | | | | | |
| Stacks & Queues | Implement 2 stack in an array | | | | | |
| Stacks & Queues | find the middle element of a stack | | | | | |
| Stacks & Queues | Implement "N" stacks in an Array | | | | | |
| Stacks & Queues | Check the expression has valid or Balanced parenthesis or not. | | | | | |
| Stacks & Queues | Reverse a String using Stack | | | | | |
| Stacks & Queues | Design a Stack that supports getMin() in O(1) time and O(1) extra space. | | | | | |

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|-----------------|---|--|--|--|--|
| Stacks & Queues | Find the next Greater element | | | | |
| Stacks & Queues | The celebrity Problem | | | | |
| Stacks & Queues | Arithmetic Expression evaluation | | | | |
| Stacks & Queues | Evaluation of Postfix expression | | | | |
| Stacks & Queues | Implement a method to insert an element at its bottom without using any other data structure. | | | | |
| Stacks & Queues | Reverse a stack using recursion | | | | |
| Stacks & Queues | Sort a Stack using recursion | | | | |
| Stacks & Queues | Merge Overlapping Intervals | | | | |
| Stacks & Queues | Largest rectangular Area in Histogram | | | | |
| Stacks & Queues | Length of the Longest Valid Substring | | | | |
| Stacks & Queues | Expression contains redundant bracket or not | | | | |
| Stacks & Queues | Implement Stack using Queue | | | | |
| Stacks & Queues | Implement Stack using Deque | | | | |
| Stacks & Queues | Stack Permutations (Check if an array is stack permutation of other) | | | | |
| Stacks & Queues | Implement Queue using Stack | | | | |
| Stacks & Queues | Implement "n" queue in an array | | | | |
| Stacks & Queues | Implement a Circular queue | | | | |
| Stacks & Queues | LRU Cache Implementation | | | | |
| Stacks & Queues | Reverse a Queue using recursion | | | | |
| Stacks & Queues | Reverse the first "K" elements of a queue | | | | |
| Stacks & Queues | Interleave the first half of the queue with second half | | | | |
| Stacks & Queues | Find the first circular tour that visits all Petrol Pumps | | | | |
| Stacks & Queues | Minimum time required to rot all oranges | | | | |
| Stacks & Queues | Distance of nearest cell having 1 in a binary matrix | | | | |
| Stacks & Queues | First negative integer in every window of size "k" | | | | |
| Stacks & Queues | Check if all levels of two trees are anagrams or not. | | | | |
| Stacks & Queues | Sum of minimum and maximum elements of all subarrays of size "k". | | | | |
| Stacks & Queues | Minimum sum of squares of character counts in a given string after removing "k" characters. | | | | |
| Stacks & Queues | Queue based approach or first non-repeating character in a stream. | | | | |
| Stacks & Queues | Next Smaller Element | | | | |

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| Heap | Implement a Maxheap/MinHeap using arrays and recursion. | | | | | |
| Heap | Sort an Array using heap. (HeapSort) | | | | | |
| Heap | Maximum of all subarrays of size k. | | | | | |
| Heap | "k" largest element in an array | | | | | |
| Heap | Kth smallest and largest element in an unsorted array | | | | | |
| Heap | Merge "K" sorted arrays. [IMP] | | | | | |
| Heap | Merge 2 Binary Max Heaps | | | | | |
| Heap | Kth largest sum continuous subarrays | | | | | |
| Heap | Leetcode- reorganize strings | | | | | |
| Heap | Merge "K" Sorted Linked Lists [V.IMP] | | | | | |
| Heap | Smallest range in "K" Lists | | | | | |
| Heap | Median in a stream of Integers | | | | | |
| Heap | Check if a Binary Tree is Heap | | | | | |
| Heap | Connect "n" ropes with minimum cost | | | | | |
| Heap | Convert BST to Min Heap | | | | | |
| Heap | Convert min heap to max heap | | | | | |
| Heap | Rearrange characters in a string such that no two adjacent are same. | | | | | |
| Heap | Minimum sum of two numbers formed from digits of an array | | | | | |
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| Graph | Create a Graph, print it | | | | | |
| Graph | Implement BFS algorithm | | | | | |
| Graph | Implement DFS Algo | | | | | |
| Graph | Detect Cycle in Directed Graph using BFS/DFS Algo | | | | | |
| Graph | Detect Cycle in UnDirected Graph using BFS/DFS Algo | | | | | |
| Graph | Search in a Maze | | | | | |
| Graph | Minimum Step by Knight | | | | | |
| Graph | flood fill algo | | | | | |

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| Graph | Clone a graph | | | | | |
| Graph | Making wired Connections | | | | | |
| Graph | word Ladder | | | | | |
| Graph | Dijkstra algo | | | | | |
| Graph | Implement Topological Sort | | | | | |
| Graph | Minimum time taken by each job to be completed given by a Directed Acyclic Graph | | | | | |
| Graph | Find whether it is possible to finish all tasks or not from given dependencies | | | | | |
| Graph | Find the no. of Islands | | | | | |
| Graph | Given a sorted Dictionary of an Alien Language, find order of characters | | | | | |
| Graph | Implement Kruksal's Algorithm | | | | | |
| Graph | Implement Prim's Algorithm | | | | | |
| Graph | Total no. of Spanning tree in a graph | | | | | |
| Graph | Implement Bellman Ford Algorithm | | | | | |
| Graph | Implement Floyd warshall Algorithm | | | | | |
| Graph | Travelling Salesman Problem | | | | | |
| Graph | Graph Colouring Problem | | | | | |
| Graph | Snake and Ladders Problem | | | | | |
| Graph | Find bridge in a graph | | | | | |
| Graph | Count Strongly connected Components(Kosaraju Algo) | | | | | |
| Graph | Check whether a graph is Bipartite or Not | | | | | |
| Graph | Detect Negative cycle in a graph | | | | | |
| Graph | Longest path in a Directed Acyclic Graph | | | | | |
| Graph | Journey to the Moon | | | | | |
| Graph | Cheapest Flights Within K Stops | | | | | |
| Graph | Oliver and the Game | | | | | |
| Graph | Water Jug problem using BFS | | | | | |
| Graph | Water Jug problem using BFS | | | | | |
| Graph | Find if there is a path of more than length from a source | | | | | |
| Graph | M-Colouring Problem | | | | | |
| Graph | Minimum edges to reverse to make path from source to destination | | | | | |

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| Graph | Paths to travel each nodes using each edge(Seven Bridges) | | | | |
| Graph | Vertex Cover Problem | | | | |
| Graph | Chinese Postman or Route Inspection | | | | |
| Graph | Number of Triangles in a Directed and Undirected Graph | | | | |
| Graph | Minimise the cashflow among a given set of friends who have borrowed money from each other | | | | |
| Graph | Two Clique Problem | | | | |
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| Trie | Construct a trie from scratch | | | | |
| Trie | Find shortest unique prefix for every word in a given list | | | | |
| Trie | Word Break Problem (Trie solution) | | | | |
| Trie | Given a sequence of words, print all anagrams together | | | | |
| Trie | Implement a Phone Directory | | | | |
| Trie | Print unique rows in a given boolean matrix | | | | |
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| Dynamic Programming | Coin ChangeProblem | | | | |
| Dynamic Programming | Knapsack Problem | | | | |
| Dynamic Programming | Binomial CoefficientProblem | | | | |
| Dynamic Programming | Permutation CoefficientProblem | | | | |
| Dynamic Programming | Program for nth Catalan Number | | | | |
| Dynamic Programming | Matrix Chain Multiplication | | | | |
| Dynamic Programming | Edit Distance | | | | |
| Dynamic Programming | Subset Sum Problem | | | | |
| Dynamic Programming | Friends Pairing Problem | | | | |
| Dynamic Programming | Gold Mine Problem | | | | |
| Dynamic Programming | Assembly Line SchedulingProblem | | | | |
| Dynamic Programming | Painting the Fenceproblem | | | | |
| Dynamic Programming | Maximize The Cut Segments | | | | |
| Dynamic Programming | Longest Common Subsequence | | | | |

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| Dynamic Programming | Longest Repeated Subsequence | | | | |
| Dynamic Programming | Longest Increasing Subsequence | | | | |
| Dynamic Programming | Space Optimized Solution of LCS | | | | |
| Dynamic Programming | LCS (Longest Common Subsequence) of three strings | | | | |
| Dynamic Programming | Maximum Sum Increasing Subsequence | | | | |
| Dynamic Programming | Count all subsequences having product less than K | | | | |
| Dynamic Programming | Longest subsequence such that difference between adjacent is one | | | | |
| Dynamic Programming | Maximum subsequence sum such that no three are consecutive | | | | |
| Dynamic Programming | Egg Dropping Problem | | | | |
| Dynamic Programming | Maximum Length Chain of Pairs | | | | |
| Dynamic Programming | Maximum size square sub-matrix with all 1s | | | | |
| Dynamic Programming | Maximum sum of pairs with specific difference | | | | |
| Dynamic Programming | Min Cost Path Problem | | | | |
| Dynamic Programming | Maximum difference of zeros and ones in binary string | | | | |
| Dynamic Programming | Minimum number of jumps to reach end | | | | |
| Dynamic Programming | Minimum cost to fill given weight in a bag | | | | |
| Dynamic Programming | Minimum removals from array to make max –min <= K | | | | |
| Dynamic Programming | Longest Common Substring | | | | |
| Dynamic Programming | Count number of ways to reach a given score in a game | | | | |
| Dynamic Programming | Count Balanced Binary Trees of Height h | | | | |
| Dynamic Programming | Largest Sum Contiguous Subarray [V>V>V>V IMP] | | | | |
| Dynamic Programming | Smallest sum contiguous subarray | | | | |
| Dynamic Programming | Unbounded Knapsack (Repetition of items allowed) | | | | |
| Dynamic Programming | Word Break Problem | | | | |
| Dynamic Programming | Largest Independent Set Problem | | | | |
| Dynamic Programming | Partition problem | | | | |
| Dynamic Programming | Longest Palindromic Subsequence | | | | |
| Dynamic Programming | Count All Palindromic Subsequence in a given String | | | | |
| Dynamic Programming | Longest Palindromic Substring | | | | |
| Dynamic Programming | Longest alternating subsequence | | | | |

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| Dynamic Programming | Weighted Job Scheduling | | | | |
| Dynamic Programming | Coin game winner where every player has three choices | | | | |
| Dynamic Programming | Count Derangements (Permutation such that no element appears in its original position) [IMPORTANT] | | | | |
| Dynamic Programming | Maximum profit by buying and selling a share at most twice [IMP] | | | | |
| Dynamic Programming | Optimal Strategy for a Game | | | | |
| Dynamic Programming | Optimal Binary Search Tree | | | | |
| Dynamic Programming | Palindrome Partitioning Problem | | | | |
| Dynamic Programming | Word Wrap Problem | | | | |
| Dynamic Programming | Mobile Numeric Keypad Problem [IMP] | | | | |
| Dynamic Programming | Boolean Parenthesization Problem | | | | |
| Dynamic Programming | Largest rectangular sub-matrix whose sum is 0 | | | | |
| Dynamic Programming | Largest area rectangular sub-matrix with equal number of 1's and 0's [IMP] | | | | |
| Dynamic Programming | Maximum sum rectangle in a 2D matrix | | | | |
| Dynamic Programming | Maximum profit by buying and selling a share at most k times | | | | |
| Dynamic Programming | Find if a string is interleaved of two other strings | | | | |
| Dynamic Programming | Maximum Length of Pair Chain | | | | |
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| Bit Manipulation | Count set bits in an integer | | | | |
| Bit Manipulation | Find the two non-repeating elements in an array of repeating elements | | | | |
| 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 | Program to find whether a no is power of two | | | | |
| Bit Manipulation | Find position of the only set bit | | | | |
| Bit Manipulation | Copy set bits in a range | | | | |
| Bit Manipulation | Divide two integers without using multiplication, division and mod operator | | | | |
| Bit Manipulation | Calculate square of a number without using *, / and pow() | | | | |
| Bit Manipulation | Power Set | | | | |