Data Structures and Algorithms Questions:

Topic:	Problem:	Done [yes or no]
		<->
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	<->
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	<->
		<->
		<->
Matrix	Spiral traversal on a Matrix	<->
Matrix	Search an element in a matriix	<->
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-cpumn wise sorted matrix	<->
Matrix	Common elements in all rows of a given matrix	<->
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]	<->
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 tofind 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	<->
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	<->

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	<->

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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	<->
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	<->

Linked List	Write a Program to reverse the Linked List. (Both Iterative and recursive)	<->
Linked List	Reverse a Linked List in group of Given Size. [Very Imp]	<->
Linked List	Write a program to Detect loop in a linked list.	<->
Linked List	Write a program to Delete loop in a linked list.	<->

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Linked List	Find the starting point of the loop.	
Linked List	Remove Duplicates in a sorted Linked List.	<->
Linked List	Remove Duplicates in a Un-sorted Linked List.	<->
Linked List	Write a Program to Move the last element to Front in a Linked List.	<->
Linked List	Add “1” to a number represented as a Linked List.	<->
Linked List	Add two numbers represented by linked lists.	<->
Linked List	Intersection of two Sorted Linked List.	<->
Linked List	Intersection Point of two Linked Lists.	<->
Linked List	Merge Sort For Linked lists.[Very Important]	<->
Linked List	Quicksort for Linked Lists.[Very Important]	<->
Linked List	Find the middle Element of a linked list.	<->
Linked List	Check if a linked list is a circular linked list.	<->
Linked List	Split a Circular linked list into two halves.	<->
Linked List	Write a Program to check whether the Singly Linked list is a palindrome or not.	<->
Linked List	Deletion from a Circular Linked List.	<->
Linked List	Reverse a Doubly Linked list.	<->
Linked List	Find pairs with a given sum in a DLL.	<->
Linked List	Count triplets in a sorted DLL whose sum is equal to given value “X”.	<->
Linked List	Sort a “k”sorted Doubly Linked list.[Very IMP]	<->
Linked List	Rotate DoublyLinked list by N nodes.	<->
Linked List	Rotate a Doubly Linked list in group of Given Size.[Very IMP]	<->
Linked List	Can we reverse a linked list in less than O(n) ?	<->
Linked List	Why Quick sort is preferred for arrays and Merge Sort for Linked Lists?	<->
Linked List	Flatten a Linked List	<->
Linked List	Sort a LL of 0's, 1's and 2's	<->
Linked List	Clone a linked list with next and random pointer	<->
Linked List	Merge K sorted Linked list	<->
Linked List	Multiply 2 no. represented by LL	<->
Linked List	Delete nodes which have a greater value on right side	<->

Linked List	Segregate even and odd nodes in a Linked List	<->
Linked List	Program for n’th node from the end of a Linked List	<->
Linked List	Find the first non-repeating character from a stream of characters	<->
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	<->
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]	<->

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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	<->

Binary Search Trees	Fina 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 ndoes 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	<->

Greedy	Activity Selection Problem	<->
Greedy	Job SequencingProblem	<->
Greedy	Huffman Coding	<->
Greedy	Water Connection Problem	<->
Greedy	Fractional Knapsack Problem	<->
Greedy	Greedy Algorithm to find Minimum number of Coins	<->
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	<->

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 intoK subsets with equal sum	<->
BackTracking	Find the K-th Permutation Sequence of first N natural numbers	<->

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.	<->
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 Implementationa	<->
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	<->

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	<->

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	<->
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 Isalnds	<->

Graph	Given a sorted Dictionary of an Alien Language, find order of characters	<->
Graph	Implement Kruksal'sAlgorithm	<->
Graph	Implement Prim's Algorithm	<->
Graph	Total no. of Spanning tree in a graph	<->
Graph	Implement Bellman Ford Algorithm	<->
Graph	Implement Floyd warshallAlgorithm	<->
Graph	Travelling Salesman Problem	<->
Graph	Graph ColouringProblem	<->
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 thank length from a source	<->
Graph	M-ColouringProblem	<->
Graph	Minimum edges to reverse o make path from source to destination	<->
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	<->

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	<->

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	<->
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 PathProblem	<->
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 reacha given score in a game	<->
Dynamic Programming	Count Balanced Binary Trees of Height h	<->
Dynamic Programming	LargestSum 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	<->
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 PartitioningProblem	<->
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	<->

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	<->