

1.Array

1. Array Reverse the array
2. Array Find the maximum and minimum element in an array
3. Array Find the "Kth" max and min element of an array
4. Array Given an array which consists of only 0, 1 and 2. Sort the array without using any sorting algo
5. Array Move all the negative elements to one side of the array
6. Array Find the Union and Intersection of the two sorted arrays.
7. Array Write a program to cyclically rotate an array by one.
8. Array find Largest sum contiguous Subarray [V. IMP]
9. Array Minimise the maximum difference between heights [V.IMP]
10. Array Minimum no. of Jumps to reach end of an array
11. Array find duplicate in an array of N+1 Integers
12. Array Merge 2 sorted arrays without using Extra space.
13. Array Kadane's Algo [V.V.V.V.V IMP]
14. Array Merge Intervals
15. Array Next Permutation
16. Array Count Inversion
17. Array Best time to buy and Sell stock
18. Array find all pairs on integer array whose sum is equal to given number
19. Array find common elements In 3 sorted arrays
20. Array Rearrange the array in alternating positive and negative items with O(1) extra space
21. Array Find if there is any subarray with sum equal to 0
22. Array Find factorial of a large number
23. Array find maximum product subarray
24. Array Find longest coinsecutive subsequence
25. Array Given an array of size n and a number k, find all elements that appear more than " n/k " times.
26. Array Maximum profit by buying and selling a share atmost twice
27. Array Find whether an array is a subset of another array
28. Array Find the triplet that sum to a given value
29. Array Trapping Rain water problem
30. Array Chocolate Distribution problem
31. Array Smallest Subarray with sum greater than a given value
32. Array Three way partitioning of an array around a given value
33. Array Minimum swaps required bring elements less equal K together
34. Array Minimum no. of operations required to make an array palindrome
35. Array Median of 2 sorted arrays of equal size
36. Array Median of 2 sorted arrays of different size

2.Matrix

- 37. Matrix Spiral traversal on a Matrix
- 38. Matrix Search an element in a matrix
- 39. Matrix Find median in a row wise sorted matrix
- 40. Matrix Find row with maximum no. of 1's
- 41. Matrix Print elements in sorted order using row-column wise sorted matrix
- 42. Matrix Maximum size rectangle
- 43. Matrix Find a specific pair in matrix
- 44. Matrix Rotate matrix by 90 degrees
- 45. Matrix Kth smallest element in a row-column wise sorted matrix
- 46. Matrix Common elements in all rows of a given matrix

3.String

47. String Reverse a String
48. String Check whether a String is Palindrome or not
49. String Find Duplicate characters in a string
50. String Why strings are immutable in Java?
51. String Write a Code to check whether one string is a rotation of another
52. String Write a Program to check whether a string is a valid shuffle of two strings or not
53. String Count and Say problem
54. String Write a program to find the longest Palindrome in a string.[Longest palindro
55. String Find Longest Recurring Subsequence in String
56. String Print all Subsequences of a string.
57. String Print all the permutations of the given string
58. String Split the Binary string into two substring with equal 0's and 1's
59. String Word Wrap Problem [VERY IMP].
60. String EDIT Distance [Very Imp]
61. String Find next greater number with same set of digits. [Very Very IMP]
62. String Balanced Parenthesis problem.[Imp]
63. String Word break Problem[Very Imp]
64. String Rabin Karp Algo
65. String KMP Algo
66. String Convert a Sentence into its equivalent mobile numeric keypad sequence.
67. String Minimum number of bracket reversals needed to make an expression balanced.
68. String Count All Palindromic Subsequence in a given String.
69. String Count of number of given string in 2D character array
70. String Search a Word in a 2D Grid of characters.
71. String Boyer Moore Algorithm for Pattern Searching.
72. String Converting Roman Numerals to Decimal
73. String Longest Common Prefix
74. String Number of flips to make binary string alternate
75. String Find the first repeated word in string.
76. String Minimum number of swaps for bracket balancing.
77. String Find the longest common subsequence between two strings.
78. String Program to generate all possible valid IP addresses from given string.
79. String Write a program to find the smallest window that contains all characters of string
80. String Rearrange characters in a string such that no two adjacent are same
81. String Minimum characters to be added at front to make string palindrome
82. String Given a sequence of words, print all anagrams together
83. String Find the smallest window in a string containing all characters of another string
84. String Recursively remove all adjacent duplicates
85. String String matching where one string contains wildcard characters
86. String Function to find Number of customers who could not get a computer
87. String Transform One String to Another using Minimum Number of Given Operation
88. String Check if two given strings are isomorphic to each other

89. String Recursively print all sentences that can be formed from list of word lists

4. Searching & Sorting

- | | | |
|------|---------------------|---|
| 90. | Searching & Sorting | Find first and last positions of an element in a sorted array |
| 91. | Searching & Sorting | Find a Fixed Point (Value equal to index) in a given array |
| 92. | Searching & Sorting | Search in a rotated sorted array |
| 93. | Searching & Sorting | square root of an integer |
| 94. | Searching & Sorting | Maximum and minimum of an array using minimum number of comparisons |
| 95. | Searching & Sorting | Optimum location of point to minimize total distance |
| 96. | Searching & Sorting | Find the repeating and the missing |
| 97. | Searching & Sorting | find majority element |
| 98. | Searching & Sorting | Searching in an array where adjacent differ by at most k |
| 99. | Searching & Sorting | find a pair with a given difference |
| 100. | Searching & Sorting | find four elements that sum to a given value |
| 101. | Searching & Sorting | maximum sum such that no 2 elements are adjacent |
| 102. | Searching & Sorting | Count triplet with sum smaller than a given value |
| 103. | Searching & Sorting | merge 2 sorted arrays |
| 104. | Searching & Sorting | print all subarrays with 0 sum |
| 105. | Searching & Sorting | Product array Puzzle |
| 106. | Searching & Sorting | Sort array according to count of set bits |
| 107. | Searching & Sorting | minimum no. of swaps required to sort the array |
| 108. | Searching & Sorting | Bishu and Soldiers |
| 109. | Searching & Sorting | Rasta and Kheshtak |
| 110. | Searching & Sorting | Kth smallest number again |
| 111. | Searching & Sorting | Find pivot element in a sorted array |
| 112. | Searching & Sorting | K-th Element of Two Sorted Arrays |
| 113. | Searching & Sorting | Aggressive cows |
| 114. | Searching & Sorting | Book Allocation Problem |
| 115. | Searching & Sorting | EKOSPOJ: |
| 116. | Searching & Sorting | Job Scheduling Algo |
| 117. | Searching & Sorting | Missing Number in AP |
| 118. | Searching & Sorting | Smallest number with atleast n trailing zeroes in factorial |
| 119. | Searching & Sorting | Painters Partition Problem: |
| 120. | Searching & Sorting | ROTI-Prata SPOJ |
| 121. | Searching & Sorting | Double Helix SPOJ |
| 122. | Searching & Sorting | Subset Sums |
| 123. | Searching & Sorting | Find the inversion count |
| 124. | Searching & Sorting | Implement Merge-sort in-place |
| 125. | Searching & Sorting | Partitioning and Sorting Arrays with Many Repeated Entries |

5. Linked List

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|------|--------------------------|---|
| 126. | LinkedList
recursive) | Write a Program to reverse the Linked List. (Both Iterative and |
| 127. | LinkedList | Reverse a Linked List in group of Given Size. [Very Imp] |
| 128. | LinkedList | Write a program to Detect loop in a linked list. |
| 129. | LinkedList | Write a program to Delete loop in a linked list. |
| 130. | LinkedList | Find the starting point of the loop. |
| 131. | LinkedList | Remove Duplicates in a sorted Linked List. |
| 132. | LinkedList | Remove Duplicates in a Un-sorted Linked List. |
| 133. | LinkedList | Write a Program to Move the last element to Front in a Linked List. |
| 134. | LinkedList | Add "1" to a number represented as a Linked List. |
| 135. | LinkedList | Add two numbers represented by linked lists. |
| 136. | LinkedList | Intersection of two Sorted Linked List. |
| 137. | LinkedList | Intersection Point of two Linked Lists. |
| 138. | LinkedList | Merge Sort For Linked lists.[Very Important] |
| 139. | LinkedList | Quicksort for Linked Lists.[Very Important] |
| 140. | LinkedList | Find the middle Element of a linked list. |
| 141. | LinkedList | Check if a linked list is a circular linked list. |
| 142. | LinkedList | Split a Circular linked list into two halves. |
| 143. | LinkedList | Write a Program to check whether the Singly Linked list is a palindrome |
| | or not. | |
| 144. | LinkedList | Deletion from a Circular Linked List. |
| 145. | LinkedList | Reverse a Doubly Linked list. |
| 146. | LinkedList | Find pairs with a given sum in a DLL. |
| 147. | LinkedList | Count triplets in a sorted DLL whose sum is equal to given value "X". |
| 148. | LinkedList | Sort a "k" sorted Doubly Linked list.[Very IMP] |
| 149. | LinkedList | Rotate DoublyLinked list by N nodes. |
| 150. | LinkedList | Rotate a Doubly Linked list in group of Given Size.[Very IMP] |
| 151. | LinkedList | Can we reverse a linked list in less than $O(n)$? |
| 152. | LinkedList | Why Quicksort is preferred for. Arrays and Merge Sort for LinkedLists ? |
| 153. | LinkedList | Flatten a Linked List |
| 154. | LinkedList | Sort a LL of 0's, 1's and 2's |
| 155. | LinkedList | Clone a linked list with next and random pointer |
| 156. | LinkedList | Merge K sorted Linked list |
| 157. | LinkedList | Multiply 2 no. represented by LL |
| 158. | LinkedList | Delete nodes which have a greater value on right side |
| 159. | LinkedList | Segregate even and odd nodes in a Linked List |
| 160. | LinkedList | Program for n'th node from the end of a Linked List |
| 161. | LinkedList | Find the first non-repeating character from a stream of characters |

6.Binary Tree

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|------|--------------|--|
| 162. | Binary Trees | levelorder traversal |
| 163. | Binary Trees | Reverse LevelOrder traversal |
| 164. | Binary Trees | Height of a tree |
| 165. | Binary Trees | Diameter of a tree |
| 166. | Binary Trees | Mirror of a tree |
| 167. | Binary Trees | Inorder Traversal of a tree both using recursion and Iteration |
| 168. | Binary Trees | Preorder Traversal of a tree both using recursion and Iteration |
| 169. | Binary Trees | Postorder Traversal of a tree both using recursion and Iteration |
| 170. | Binary Trees | Left View of a tree |
| 171. | Binary Trees | Right View of Tree |
| 172. | Binary Trees | Top View of a tree |
| 173. | Binary Trees | Bottom View of a tree |
| 174. | Binary Trees | Zig-Zag traversal of a binary tree |
| 175. | Binary Trees | Check if a tree is balanced or not |
| 176. | Binary Trees | Diagnol Traversal of a Binary tree |
| 177. | Binary Trees | Boundary traversal of a Binary tree |
| 178. | Binary Trees | Construct Binary Tree from String with Bracket Representation |
| 179. | Binary Trees | Convert Binary tree into Doubly Linked List |
| 180. | Binary Trees | Convert Binary tree into Sum tree |
| 181. | Binary Trees | Construct Binary tree from Inorder and preorder traversal |
| 182. | Binary Trees | Find minimum swaps required to convert a Binary tree into BST |
| 183. | Binary Trees | Check if Binary tree is Sum tree or not |
| 184. | Binary Trees | Check if all leaf nodes are at same level or not |
| 185. | Binary Trees | Check if a Binary Tree contains duplicate subtrees of size 2 or more [|
| | IMP] | |
| 186. | Binary Trees | Check if 2 trees are mirror or not |
| 187. | Binary Trees | Sum of Nodes on the Longest path from root to leaf node |
| 188. | Binary Trees | Check if given graph is tree or not. [IMP] |
| 189. | Binary Trees | Find Largest subtree sum in a tree |
| 190. | Binary Trees | Maximum Sum of nodes in Binary tree such that no two are adjacent |
| 191. | Binary Trees | Print all "K" Sum paths in a Binary tree |
| 192. | Binary Trees | Find LCA in a Binary tree |
| 193. | Binary Trees | Find distance between 2 nodes in a Binary tree |
| 194. | Binary Trees | Kth Ancestor of node in a Binary tree |
| 195. | Binary Trees | Find all Duplicate subtrees in a Binary tree [IMP] |
| 196. | Binary Trees | Tree Isomorphism Problem |

7.Binary Serch Tree

197.	Binary Search Trees	Find a value in a BST
198.	Binary Search Trees	Deletion of a node in a BST
199.	Binary Search Trees	Find min and max value in a BST
200.	Binary Search Trees	Find inorder successor and inorder predecessor in a BST
201.	Binary Search Trees	Check if a tree is a BST or not
202.	Binary Search Trees	Populate Inorder successor of all nodes
203.	Binary Search Trees	Find LCA of 2 nodes in a BST
204.	Binary Search Trees	Construct BST from preorder traversal
205.	Binary Search Trees	Convert Binary tree into BST
206.	Binary Search Trees	Convert a normal BST into a Balanced BST
207.	Binary Search Trees	Merge two BST [V.V.V>IMP]
208.	Binary Search Trees	Find Kth largest element in a BST
209.	Binary Search Trees	Find Kth smallest element in a BST
210.	Binary Search Trees	Count pairs from 2 BST whose sum is equal to given value "X"
211.	Binary Search Trees	Find the median of BST in O(n) time and O(1) space
212.	Binary Search Trees	Count BST nodes that lie in a given range
213.	Binary Search Trees	Replace every element with the least greater element on its right
214.	Binary Search Trees	Given "n" appointments, find the conflicting appointments
215.	Binary Search Trees	Check preorder is valid or not
216.	Binary Search Trees	Check whether BST contains Dead end
217.	Binary Search Trees	Largest BST in a Binary Tree [V.V.V.V.VIMP]
218.	Binary Search Trees	Flatten BST to sorted list

8.Greedy algo

- 219. Greedy Activity Selection Problem
- 220. Greedy Job Sequencing Problem
- 221. Greedy Huffman Coding
- 222. Greedy Water Connection Problem
- 223. Greedy Fractional Knapsack Problem
- 224. Greedy Greedy Algorithm to find Minimum number of Coins
- 225. Greedy Maximum trains for which stoppage can be provided
- 226. Greedy Minimum Platforms Problem
- 227. Greedy Buy Maximum Stocks if i stocks can be bought on i-th day
- 228. Greedy Find the minimum and maximum amount to buy all N candies
- 229. Greedy Minimize Cash Flow among a given set of friends who have borrowed money from each other
- 230. Greedy Minimum Cost to cut a board into squares
- 231. Greedy Check if it is possible to survive on Island
- 232. Greedy Find maximum meetings in one room
- 233. Greedy Maximum product subset of an array
- 234. Greedy Maximize array sum after K negations
- 235. Greedy Maximize the sum of $arr[i] * i$
- 236. Greedy Maximum sum of absolute difference of an array
- 237. Greedy Maximize sum of consecutive differences in a circular array
- 238. Greedy Minimum sum of absolute difference of pairs of two arrays
- 239. Greedy Program for Shortest Job First (or SJF) CPU Scheduling
- 240. Greedy Program for Least Recently Used (LRU) Page Replacement algorithm
- 241. Greedy Smallest subset with sum greater than all other elements
- 242. Greedy Chocolate Distribution Problem
- 243. Greedy DEFKIN -Defense of a Kingdom
- 244. Greedy DIEHARD -DIE HARD
- 245. Greedy GERGOVIA -Wine trading in Gergovia
- 246. Greedy Picking Up Chicks
- 247. Greedy CHOCOLA –Chocolate
- 248. Greedy ARRANGE -Arranging Amplifiers
- 249. Greedy K Centers Problem
- 250. Greedy Minimum Cost of ropes
- 251. Greedy Find smallest number with given number of digits and sum of digits
- 252. Greedy Rearrange characters in a string such that no two adjacent are same
- 253. Greedy Find maximum sum possible equal sum of three stacks

9.BackTracking

254.	BackTracking	Rat in a maze Problem
255.	BackTracking	Printing all solutions in N-Queen Problem
256.	BackTracking	Word Break Problem using Backtracking
257.	BackTracking	Remove Invalid Parentheses
258.	BackTracking	Sudoku Solver
259.	BackTracking	m Coloring Problem
260.	BackTracking	Print all palindromic partitions of a string
261.	BackTracking	Subset Sum Problem
262.	BackTracking	The Knight's tour problem
263.	BackTracking	Tug of War
264.	BackTracking	Find shortest safe route in a path with landmines
265.	BackTracking	Combinational Sum
266.	BackTracking	Find Maximum number possible by doing at-most K swaps
267.	BackTracking	Print all permutations of a string
268.	BackTracking	Find if there is a path of more than k length from a source
269.	BackTracking	Longest Possible Route in a Matrix with Hurdles
270.	BackTracking	Print all possible paths from top left to bottom right of a mXn matrix
271.	BackTracking	Partition of a set into K subsets with equal sum
272.	BackTracking	Find the K-th Permutation Sequence of first N natural numbers

10.Stack & Queue

273.	Stacks & Queues	Implement Stack from Scratch
274.	Stacks & Queues	Implement Queue from Scratch
275.	Stacks & Queues	Implement 2 stack in an array
276.	Stacks & Queues	find the middle element of a stack
277.	Stacks & Queues	Implement "N" stacks in an Array
278.	Stacks & Queues	Check the expression has valid or Balanced parenthesis or not.
279.	Stacks & Queues	Reverse a String using Stack
280.	Stacks & Queues	Design a Stack that supports getMin() in O(1) time and O(1) space
281.	Stacks & Queues	Find the next Greater element
282.	Stacks & Queues	The celebrity Problem
283.	Stacks & Queues	Arithmetic Expression evaluation
284.	Stacks & Queues	Evaluation of Postfix expression
285.	Stacks & Queues	Implement a method to insert an element at its bottom
withoutds		
286.	Stacks & Queues	Reverse a stack using recursion
287.	Stacks & Queues	Sort a Stack using recursion
288.	Stacks & Queues	Merge Overlapping Intervals
289.	Stacks & Queues	Largest rectangular Area in Histogram
290.	Stacks & Queues	Length of the Longest Valid Substring
291.	Stacks & Queues	Expression contains redundant bracket or not
292.	Stacks & Queues	Implement Stack using Queue
293.	Stacks & Queues	Implement Stack using Deque
294.	Stacks & Queues	Stack Permutations (Check if an array is stack permutation of other)
295.	Stacks & Queues	Implement Queue using Stack
296.	Stacks & Queues	Implement "n" queue in an array
297.	Stacks & Queues	Implement a Circular queue
298.	Stacks & Queues	LRU Cache Implementationa
299.	Stacks & Queues	Reverse a Queue using recursion
300.	Stacks & Queues	Reverse the first "K" elements of a queue
301.	Stacks & Queues	Interleave the first half of the queue with second half
302.	Stacks & Queues	Find the first circular tour that visits all Petrol Pumps
303.	Stacks & Queues	Minimum time required to rot all oranges
304.	Stacks & Queues	Distance of nearest cell having 1 in a binary matrix
305.	Stacks & Queues	First negative integer in every window of size "k"
306.	Stacks & Queues	Check if all levels of two trees are anagrams or not.
307.	Stacks & Queues	Sum of minimum and maximum elements of all subarrays of size k
308.	Minimum sum of squares of character counts in a given string after remove	
309.	Queue based approach or first non-repeating character in a stream&	
310.	Next Smaller Element	

11.Heap

- 311. Heap Implement a Maxheap/MinHeap using arrays and recursion.
- 312. Heap Sort an Array using heap. (HeapSort)
- 313. Heap Maximum of all subarrays of size k.
- 314. Heap "k" largest element in an array
- 315. Heap Kth smallest and largest element in an unsorted array
- 316. Heap Merge "K" sorted arrays. [IMP]
- 317. Heap Merge 2 Binary Max Heaps
- 318. Heap Kth largest sum continuous subarrays
- 319. Heap Leetcode- reorganize strings
- 320. Heap Merge "K" Sorted Linked Lists [V.IMP]
- 321. Heap Smallest range in "K" Lists
- 322. Heap Median in a stream of Integers
- 323. Heap Check if a Binary Tree is Heap
- 324. Heap Connect "n" ropes with minimum cost
- 325. Heap Convert BST to Min Heap
- 326. Heap Convert min heap to max heap
- 327. Heap Rearrange characters in a string such that no two adjacent are same.
- 328. Heap Minimum sum of two numbers formed from digits of an array

12.Graph

- 329. Graph Create a Graph, print it
- 330. Graph Implement BFS algorithm
- 331. Graph Implement DFS Algo
- 332. Graph Detect Cycle in Directed Graph using BFS/DFS Algo
- 333. Graph Detect Cycle in UnDirected Graph using BFS/DFS Algo
- 334. Graph Search in a Maze
- 335. Graph Minimum Step by Knight
- 336. Graph flood fill algo
- 337. Graph Clone a graph
- 338. Graph Making wired Connections
- 339. Graph word Ladder
- 340. Graph Dijkstra algo
- 341. Graph Implement Topological Sort
- 342. Minimum time taken by each job to be completed given by a Directed acyclic graph
- 343. Graph Find whether it is possible to finish all tasks or not from given dependencies
- 344. Graph Find the no. of Islands
- 345. Graph Given a sorted Dictionary of an Alien Language, find order of characters
- 346. Graph Implement Kruskal's Algorithm
- 347. Graph Implement Prim's Algorithm
- 348. Graph Total no. of Spanning tree in a graph
- 349. Graph Implement Bellman Ford Algorithm
- 350. Graph Implement Floyd warshall Algorithm
- 351. Graph Travelling Salesman Problem
- 352. Graph Graph Colouring Problem
- 353. Graph Snake and Ladders Problem
- 354. Graph Find bridge in a graph
- 355. Graph Count Strongly connected Components (Kosaraju Algo)
- 356. Graph Check whether a graph is Bipartite or Not
- 357. Graph Detect Negative cycle in a graph
- 358. Graph Longest path in a Directed Acyclic Graph
- 359. Graph Journey to the Moon
- 360. Graph Cheapest Flights Within K Stops
- 361. Graph Oliver and the Game
- 362. Graph Water Jug problem using BFS
- 363. Graph Water Jug problem using DFS
- 364. Graph Find if there is a path of more than length from a source
- 365. Graph M-Colouring Problem
- 366. Graph Minimum edges to reverse to make path from source to destination
- 367. Graph Paths to travel each node using each edge (Seven Bridges)
- 368. Graph Vertex Cover Problem
- 369. Graph Chinese Postman or Route Inspection
- 370. Graph Number of Triangles in a Directed and Undirected Graph

371. Graph Minimise the cashflow among a given set of friends who have borrowed money from each other
372. Graph Two Clique Problem

13.Trie

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

14.Dynamic Programming

- 379. Dynamic Programming Coin Change Problem
- 380. Dynamic Programming Knapsack Problem
- 381. Dynamic Programming Binomial Coefficient Problem
- 382. Dynamic Programming Permutation Coefficient Problem
- 383. Dynamic Programming Program for nth Catalan Number
- 384. Dynamic Programming Matrix Chain Multiplication
- 385. Dynamic Programming Edit Distance
- 386. Dynamic Programming Subset Sum Problem
- 387. Dynamic Programming Friends Pairing Problem
- 388. Dynamic Programming Gold Mine Problem
- 389. Dynamic Programming Assembly Line Scheduling Problem
- 390. Dynamic Programming Painting the Fence problem
- 391. Dynamic Programming Maximize The Cut Segments
- 392. Dynamic Programming Longest Common Subsequence
- 393. Dynamic Programming Longest Repeated Subsequence
- 394. Dynamic Programming Longest Increasing Subsequence
- 395. Dynamic Programming Space Optimized Solution of LCS
- 396. Dynamic Programming LCS (Longest Common Subsequence) of three strings
- 397. Dynamic Programming Maximum Sum Increasing Subsequence
- 398. Dynamic Programming Count all subsequences having product less than K
- 399. Dynamic Programming Longest subsequence such that difference between adjacent is one
- 400. Dynamic Programming Maximum subsequence sum such that no three are consecutive
- 401. Dynamic Programming Egg Dropping Problem
- 402. Dynamic Programming Maximum Length Chain of Pairs
- 403. Dynamic Programming Maximum size square sub-matrix with all 1s
- 404. Dynamic Programming Maximum sum of pairs with specific difference
- 405. Dynamic Programming Min Cost Path Problem
- 406. Dynamic Programming Maximum difference of zeros and ones in binary string
- 407. Dynamic Programming Minimum number of jumps to reach end
- 408. Dynamic Programming Minimum cost to fill given weight in a bag
- 409. Dynamic Programming Minimum removals from array to make max – min $\leq K$
- 410. Dynamic Programming Longest Common Substring
- 411. Dynamic Programming Count number of ways to reach a given score in a game
- 412. Dynamic Programming Count Balanced Binary Trees of Height h
- 413. Dynamic Programming Largest Sum Contiguous Subarray [V > V > V > V IMP]
- 414. Dynamic Programming Smallest sum contiguous subarray
- 415. Dynamic Programming Unbounded Knapsack (Repetition of items allowed)
- 416. Dynamic Programming Word Break Problem
- 417. Dynamic Programming Largest Independent Set Problem
- 418. Dynamic Programming Partition problem
- 419. Dynamic Programming Longest Palindromic Subsequence

- 420. Dynamic Programming Count All Palindromic Subsequence in a given String
- 421. Dynamic Programming Longest Palindromic Substring
- 422. Dynamic Programming Longest alternating subsequence
- 423. Dynamic Programming Weighted Job Scheduling
- 424. Dynamic Programming Coin game winner where every player has three choices
- 425. Dynamic Programming Count Derangements (Permutation such that no element
appears in its original position) [IMPORTANT]
- 426. Dynamic Programming Maximum profit by buying and selling a share at most twice [IMP]
- 427. Dynamic Programming Optimal Strategy for a Game
- 428. Dynamic Programming Optimal Binary Search Tree
- 429. Dynamic Programming Palindrome Partitioning Problem
- 430. Dynamic Programming Word Wrap Problem
- 431. Dynamic Programming Mobile Numeric Keypad Problem [IMP]
- 432. Dynamic Programming Boolean Parenthesization Problem
- 433. Dynamic Programming Largest rectangular sub-matrix whose sum is 0
- 434. Dynamic Programming Largest area rectangular sub-matrix with equal number of 1's
and 0's [IMP]
- 435. Dynamic Programming Maximum sum rectangle in a 2D matrix
- 436. Dynamic Programming Maximum profit by buying and selling a share at most k times
- 437. Dynamic Programming Find if a string is interleaved of two other strings
- 438. Dynamic Programming Maximum Length of Pair Chain

15.Bit Manipulation

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