ItsRunTym

DSA Coding Sheet

150+ DSA Leetcode questions

Arrays/String

Serial Number	Problem Name	Difficulty	Link
1	Merge Sorted Array	Easy	⇉
2	Remove Element	Easy	⇉
3	Remove Duplicates from Sorted Array	Easy	⇉
4	Remove Duplicates from Sorted Array II	Medium	⇉
5	Majority Element	Easy	⇉
6	Rotate Array	Medium	⇉
7	Best Time to Buy and Sell Stock	Easy	⇉
8	Best Time to Buy and Sell Stock II	Medium	⇉
9	Jump Game	Medium	⇉
10	Jump Game II	Medium	⇉
11	H-Index	Medium	⇉
12	Insert Delete GetRandom O(1)	Medium	⇉
13	Product of Array Except Self	Medium	⇉
14	Gas Station	Medium	⇉

Serial Number	Problem Name	Difficulty	Link
15	Candy	Hard	
16	Trapping Rain Water	Hard	
17	Roman to Integer	Easy	
18	Integer to Roman	Medium	
19	Length of Last Word	Easy	
20	Longest Common Prefix	Easy	
21	Reverse Words in a String	Medium	
22	Zigzag Conversion	Medium	
23	Find the Index of the First Occurrence in a String	Easy	
24	Text Justification	Hard	
25	Rotate Matrix	Medium	
26	Merge Overlapping Subintervals	Medium	
27	Merge two sorted arrays without extra space	Medium	
28	Find the duplicate in an array of N+1 integers	Medium	
29	Grid Unique Paths	Medium	
30	Majority Element (n/3 times)	Medium	

Two Pointers

Serial Number	Problem Name	Difficulty	Link
31	Valid Palindrome	Easy	
32	Is Subsequence	Easy	

Serial Number	Problem Name	Difficulty	Link
33	Two Sum II - Input Array Is Sorted	Medium	⮂
34	Container With Most Water	Medium	⮂
35	3Sum	Medium	⮂
36	Move Zeroes	Easy	⮂

Sliding Window

Serial Number	Problem Name	Difficulty	Link
37	Minimum Size Subarray Sum	Medium	⮂
38	Longest Substring Without Repeating Characters	Medium	⮂
39	Substring with Concatenation of All Words	Hard	⮂
40	Minimum Window Substring	Hard	⮂

Matrix

Serial Number	Problem Name	Difficulty	Link
41	Valid Sudoku	Medium	⮂
42	Spiral Matrix	Medium	⮂
43	Rotate Image	Medium	⮂
44	Set Matrix Zeroes	Medium	⮂
45	Game of Life	Medium	⮂

Linked List

Serial Number	Problem Name	Difficulty	Link
46	Linked List Cycle	Easy	⮂

Serial Number	Problem Name	Difficulty	Link
47	Add Two Numbers	Medium	⇗
48	Merge Two Sorted Lists	Easy	⇗
49	Copy List with Random Pointer	Medium	⇗
50	Reverse Linked List II	Medium	⇗
51	Reverse Nodes in k-Group	Hard	⇗
52	Remove Nth Node From End of List	Medium	⇗
53	Remove Duplicates from Sorted List II	Medium	⇗
54	Rotate List	Medium	⇗
55	Partition List	Medium	⇗
56	LRU Cache	Medium	⇗
57	Find intersection point of Y LinkedList	Medium	⇗
58	Detect a cycle in Linked List	Medium	⇗
59	Reverse a LinkedList in groups of size k	Hard	⇗
60	Check if a LinkedList is palindrome or not	Medium	⇗
61	Find the starting point of the Loop of LinkedList	Medium	⇗
62	Flattening of a LinkedList	Hard	⇗

Stack

Serial Number	Problem Name	Difficulty	Link
63	Valid Parentheses	Easy	⇗
64	Simplify Path	Medium	⇗

Serial Number	Problem Name	Difficulty	Link
65	Min Stack	Medium	⇌
66	Evaluate Reverse Polish Notation	Medium	⇌
67	Basic Calculator	Hard	⇌
68	Largest Rectangle in a Histogram	Medium	⇌
69	Sliding Window Maximum	Hard	⇌
70	Implement Min Stack	Medium	⇌
71	Rotten Orange (Using BFS)	Medium	⇌
72	Stock Span Problem	Medium	⇌
73	Find the Maximum of Minimums of Every Window Size	Medium	⇌
74	The Celebrity Problem	Hard	⇌

Recursion

Serial Number	Problem Name	Difficulty	Link
75	Subset Sums	Medium	⇌
76	Subset-II	Medium	⇌
77	Combination Sum-1	Medium	⇌
78	Combination Sum-2	Medium	⇌
79	Palindrome Partitioning	Medium	⇌
80	K-th Permutation Sequence	Hard	⇌

Binary Tree General

Serial Number	Problem Name	Difficulty	Link

Serial Number	Problem Name	Difficulty	Link
81	Maximum Depth of Binary Tree	Easy	⇒
82	Same Tree	Easy	⇒
83	Invert Binary Tree	Easy	⇒
84	Symmetric Tree	Easy	⇒
85	Construct Binary Tree from Preorder and Inorder Traversal	Medium	⇒
86	Construct Binary Tree from Inorder and Postorder Traversal	Medium	⇒
87	Populating Next Right Pointers in Each Node II	Medium	⇒
88	Flatten Binary Tree to Linked List	Medium	⇒
89	Path Sum	Easy	⇒
90	Sum Root to Leaf Numbers	Medium	⇒
91	Binary Tree Maximum Path Sum	Hard	⇒
92	Binary Search Tree Iterator	Medium	⇒
93	Count Complete Tree Nodes	Easy	⇒
94	Lowest Common Ancestor of a Binary Tree	Medium	⇒

Binary Tree BFS

Serial Number	Problem Name	Difficulty	Link
95	Binary Tree Right Side View	Medium	⇒
96	Average of Levels in Binary Tree	Easy	⇒

Serial Number	Problem Name	Difficulty	Link
97	Binary Tree Level Order Traversal	Medium	⮃
98	Binary Tree Zigzag Level Order Traversal	Medium	⮃

Binary Search Tree

Serial Number	Problem Name	Difficulty	Link
99	Minimum Absolute Difference in BST	Easy	⮃
100	Kth Smallest Element in a BST	Medium	⮃
101	Validate Binary Search Tree	Medium	⮃

Graph General

Serial Number	Problem Name	Difficulty	Link
103	Number of Islands	Medium	⮃
104	Surrounded Regions	Medium	⮃
105	Clone Graph	Medium	⮃
106	Evaluate Division	Medium	⮃
107	Course Schedule	Medium	⮃
108	Course Schedule II	Medium	⮃

Graph BFS

Serial Number	Problem Name	Difficulty	Link
109	Snakes and Ladders	Medium	⮃
110	Minimum Genetic Mutation	Medium	⮃
111	Word Ladder	Hard	⮃

Trie

Serial Number	Problem Name	Difficulty	Link
112	Implement Trie (Prefix Tree)	Medium	⇊
113	Design Add and Search Words Data Structure	Medium	⇊
114	Word Search II	Hard	⇊

Backtracking

Serial Number	Problem Name	Difficulty	Link
115	Letter Combinations of a Phone Number	Medium	⇊
116	Combinations	Medium	⇊
117	Permutations	Medium	⇊
118	Combination Sum	Medium	⇊
119	N-Queens II	Hard	⇊
120	Generate Parentheses	Medium	⇊
121	Word Search	Medium	⇊

Divide & Conquer

Serial Number	Problem Name	Difficulty	Link
122	Convert Sorted Array to Binary Search Tree	Easy	⇊
123	Sort List	Medium	⇊
124	Construct Quad Tree	Medium	⇊
125	Merge k Sorted Lists	Hard	⇊

Kadane's Algorithm

Serial Number	Problem Name	Difficulty	Link
126	Maximum Subarray	Medium	
127	Maximum Sum Circular Subarray	Medium	

Binary Search

Serial Number	Problem Name	Difficulty	Link
128	Search Insert Position	Easy	
129	Search a 2D Matrix	Medium	
130	Find Peak Element	Medium	
131	Search in Rotated Sorted Array	Medium	
132	Find First and Last Position of Element in Sorted Array	Medium	
133	Find Minimum in Rotated Sorted Array	Medium	
134	Median of Two Sorted Arrays	Hard	

Heap

Serial Number	Problem Name	Difficulty	Link
135	Kth Largest Element in an Array	Medium	
136	IPO	Hard	
137	Find K Pairs with Smallest Sums	Medium	
138	Find Median from Data Stream	Hard	

Bit Manipulation

Serial Number	Problem Name	Difficulty	Link
139	Add Binary	Easy	
140	Reverse Bits	Easy	

Serial Number	Problem Name	Difficulty	Link
141	Number of 1 Bits	Easy	⮀
142	Single Number	Easy	⮀
143	Single Number II	Medium	⮀
144	Bitwise AND of Numbers Range	Medium	⮀

Math

Serial Number	Problem Name	Difficulty	Link
145	Palindrome Number	Easy	⮀
146	Plus One	Easy	⮀
147	Factorial Trailing Zeroes	Medium	⮀
148	Sqrt(x)	Easy	⮀
149	Pow(x, n)	Medium	⮀
150	Max Points on a Line	Hard	⮀

1D DP

Serial Number	Problem Name	Difficulty	Link
151	Climbing Stairs	Easy	⮀
152	House Robber	Medium	⮀
153	Word Break	Medium	⮀
154	Coin Change	Medium	⮀
155	Longest Increasing Subsequence	Medium	⮀

Multidimensional DP

Serial Number	Problem Name	Difficulty	Link
156	Triangle	Medium	⮀

Serial Number	Problem Name	Difficulty	Link
157	Minimum Path Sum	Medium	
158	Unique Paths II	Medium	
159	Longest Palindromic Substring	Medium	
160	Interleaving String	Medium	
161	Edit Distance	Medium	
162	Best Time to Buy and Sell Stock III	Hard	
163	Best Time to Buy and Sell Stock IV	Hard	
164	Maximal Square	Medium	