

# LeetCode Phase 1 Problem Sheet

## Arrays & Hashing

S.No	Problem Name	LeetCode #
1	Two Sum	1
2	Subarray Sum Equals K	560
3	Contiguous Array	525
4	Longest Consecutive Sequence	128
5	Intersection of Two Arrays	349
6	Majority Element	169
7	Product of Array Except Self	238
8	Longest Substring Without Repeating Characters	3
9	Count Number of Nice Subarrays	1248
10	Group Anagrams	49

## Two Pointers

S.No	Problem Name	LeetCode #
11	Two Sum II - Input Array Is Sorted	167
12	3Sum	15
13	Valid Palindrome	125
14	Container With Most Water	11
15	Remove Duplicates from Sorted Array II	80
16	Minimum Size Subarray Sum	209
17	Remove Nth Node From End of List	19
18	Longest Substring with At Most K Distinct Characters	340
19	Move Zeroes	283
20	Merge Sorted Array	88

## Sliding Window

S.No	Problem Name	LeetCode #
21	Maximum Average Subarray I	643
22	Maximum Sum of Subarray of Size K	643
23	Longest Repeating Character Replacement	424
24	Permutation in String	567
25	Minimum Window Substring	76

S.No	Problem Name	LeetCode #
26	Sliding Window Maximum	239
27	Find All Anagrams in a String	438
28	Max Consecutive Ones III	1004
29	Count Number of Substrings Containing All Three Characters	1358
30	Longest Subarray with Sum $\leq K$	862

## Prefix Sum / Difference Array

S.No	Problem Name	LeetCode #
31	Range Sum Query - Immutable	303
32	Subarray Sum Equals K	560
33	Continuous Subarray Sum	523
34	Find Pivot Index	724
35	Split Array With Equal Sum	548
36	Maximum Size Subarray Sum Equals k	325
37	Minimum Value to Get Positive Step by Step Sum	1413
38	Difference Array (Range Addition)	370
39	Number of Subarrays With Bounded Maximum	795
40	Count of Range Sum	327

## Binary Search

S.No	Problem Name	LeetCode #
41	Binary Search	704
42	First Bad Version	278
43	Search Insert Position	35
44	Search in Rotated Sorted Array	33
45	Find Minimum in Rotated Sorted Array	153
46	Koko Eating Bananas	875
47	Median of Two Sorted Arrays	4
48	Capacity To Ship Packages Within D Days	1011
49	Find the Smallest Divisor Given a Threshold	1283
50	Aggressive Cows	GFG

## Sorting + Greedy

S.No	Problem Name	LeetCode #
51	Sort Colors	75
52	Merge Intervals	56
53	Non-overlapping Intervals	435
54	Meeting Rooms II	253
55	Minimum Number of Arrows to Burst Balloons	452

<b>S.No</b>	<b>Problem Name</b>	<b>LeetCode #</b>
56	Queue Reconstruction by Height	406
57	Minimum Platforms	GFG
58	Assign Cookies	455
59	Jump Game	55
60	Gas Station	134

## Stacks

<b>S.No</b>	<b>Problem Name</b>	<b>LeetCode #</b>
61	Valid Parentheses	20
62	Min Stack	155
63	Daily Temperatures	739
64	Next Greater Element I	496
65	Next Greater Element II	503
66	Asteroid Collision	735
67	Remove K Digits	402
68	Largest Rectangle in Histogram	84
69	Simplify Path	71
70	Decode String	394

## Queues & Deques

<b>S.No</b>	<b>Problem Name</b>	<b>LeetCode #</b>
71	Sliding Window Maximum	239
72	Rotting Oranges	994
73	Open the Lock	752
74	Perfect Squares	279
75	Shortest Path in Binary Matrix	1091
76	Dota2 Senate	649
77	Time Based Key-Value Store	981
78	Design Circular Queue	622
79	Number of Recent Calls	933
80	Reveal Cards In Increasing Order	950

## Breadth-First Search (BFS)

<b>S.No</b>	<b>Problem Name</b>	<b>LeetCode #</b>
81	Binary Tree Level Order Traversal	102
82	Number of Islands	200
83	Rotting Oranges	994
84	Word Ladder	127
85	Open the Lock	752

S.No	Problem Name	LeetCode #
86	Minimum Depth of Binary Tree	111
87	Surrounded Regions	130
88	Shortest Path in Binary Matrix	1091
89	01 Matrix	542
90	Jump Game IV	1345

## Depth-First Search (DFS)

S.No	Problem Name	LeetCode #
91	Maximum Depth of Binary Tree	104
92	Number of Islands	200
93	Flood Fill	733
94	Path Sum	112
95	All Paths From Source to Target	797
96	Letter Combinations of a Phone Number	17
97	Permutations	46
98	Combination Sum	39
99	Word Search	79
100	Pacific Atlantic Water Flow	417

# LeetCode Phase 2 Problem Sheet

## Dynamic Programming (1D, 2D, State Compression)

S.No	Problem Name	LeetCode #
1	Climbing Stairs	70
2	House Robber	198
3	House Robber II	213
4	Coin Change	322
5	Coin Change II	518
6	Longest Increasing Subsequence	300
7	Partition Equal Subset Sum	416
8	Edit Distance	72
9	Decode Ways	91
10	Maximum Product Subarray	152
11	Best Time to Buy and Sell Stock with Cooldown	309

S.No	Problem Name	LeetCode #
12	Palindromic Substrings	647
13	Regular Expression Matching	10
14	Burst Balloons	312
15	Minimum Cost to Merge Stones	1000

## DP on Grids / 2D DP

S.No	Problem Name	LeetCode #
16	Unique Paths	62
17	Minimum Path Sum	64
18	Dungeon Game	174
19	Cherry Pickup	741
20	Longest Path With Same Value	1373
21	Maximum Side Length of a Square with Sum $\leq K$	1292
22	Maximal Square	221
23	Paint House	256
24	Number of Paths with Max Score	1301
25	Count Square Submatrices with All Ones	1277

## DP on Trees

S.No	Problem Name	LeetCode #
26	House Robber III	337
27	Longest Univalue Path	687
28	Diameter of N-ary Tree	1522
29	Smallest String Starting from Leaf	988
30	Count Good Nodes in Binary Tree	1448
31	Longest ZigZag Path in a Binary Tree	1372
32	Path Sum III	437
33	Distribute Coins in Binary Tree	979
34	Binary Tree Cameras	968
35	Maximum Path Sum Between Two Leaves	1245

## Bitmasking & DP with Bitmask

S.No	Problem Name	LeetCode #
36	Subsets	78
37	Partition to K Equal Sum Subsets	698
38	Count Numbers with Unique Digits	357
39	Maximum AND Sum of Array	2009
40	Matchsticks to Square	473
41	Minimum Number of Increments on Subarrays to Form Target	1526

S.No	Problem Name	LeetCode #
42	Shortest Superstring	943
43	Minimum XOR Sum of Two Arrays	1879
44	Count Arrangement (Beautiful Arrangement)	526
45	Travelling Salesman (Held-Karp DP)	847

## Graphs – BFS/DFS/Topo Sort/DP on Graphs

S.No	Problem Name	LeetCode #
46	Number of Connected Components in an Undirected Graph	323
47	Course Schedule	207
48	Course Schedule II	210
49	Alien Dictionary	269
50	Word Ladder	127
51	Reconstruct Itinerary	332
52	Minimum Height Trees	310
53	Longest Path in a DAG	2212
54	Parallel Courses	1136
55	Sequence Reconstruction	444

## Union-Find (DSU)

S.No	Problem Name	LeetCode #
56	Graph Valid Tree	261
57	Redundant Connection	684
58	Number of Provinces	547
59	Accounts Merge	721
60	Most Stones Removed with Same Row or Column	947
61	Friend Circles	547
62	Lexicographically Smallest Equivalent String	1061
63	Smallest String With Swaps	1202
64	Regions Cut by Slashes	959
65	Satisfiability of Equality Equations	990

## Dijkstra / Shortest Path Algorithms

S.No	Problem Name	LeetCode #
66	Dijkstra Template Practice (Network Delay Time)	743
67	Path with Minimum Effort	1631
68	Minimum Cost to Reach Destination in Time	1928
69	Cheapest Flights Within K Stops	787

S.No	Problem Name	LeetCode #
70	Find the City With the Smallest Number of Neighbors	1334
71	Minimum Time to Collect All Apples	1443
72	The Maze III	499
73	Reachable Nodes In Subdivided Graph	882
74	Swim in Rising Water	778

## Trie + Word Algorithms

S.No	Problem Name	LeetCode #
75	Implement Trie	208
76	Add and Search Word - Data Structure	211
77	Replace Words	648
78	Word Search II	212
79	Maximum XOR of Two Numbers in an Array	421
80	Longest Word in Dictionary	720
81	Concatenated Words	472
82	Palindrome Pairs	336
83	Power of Two Words	745
84	Stream of Characters	1032

## Math, Combinatorics, GCD, Modular Inverse

S.No	Problem Name	LeetCode #
85	Count Primes	204
86	GCD of Strings	1071
87	Multiply Strings	43
88	Pow(x, n)	50
89	Combination Sum IV	377
90	Kth Permutation Sequence	60
91	Modular Inverse with Fermat's Theorem	1922
92	Number of Digit One	233
93	Count Numbers With Unique Digits	357
94	Sum of Subsequence Widths	891

## Binary Indexed Tree / Segment Tree

S.No	Problem Name	LeetCode #
95	Range Sum Query - Mutable	307
96	Count of Smaller Numbers After Self	315
97	Reverse Pairs	493

S.No	Problem Name	LeetCode #
98	Kth Smallest Number in Multiplication Table	668
99	Count of Range Sum	327
100	Range Addition	370
101	Range Sum Query 2D – Mutable	308
102	Number of Longest Increasing Subsequence	673
103	Longest Continuous Increasing Subsequence II	1284
104	Minimum Number of Removals to Make Mountain Array	1671

## Greedy – Harder Set

S.No	Problem Name	LeetCode #
105	Minimum Number of Arrows to Burst Balloons	452
106	Candy	135
107	Jump Game II	45
108	Split Array into Consecutive Subsequences	659
109	Trapping Rain Water	42
110	Merge Triplets to Form Target Triplet	1899
111	Remove Duplicate Letters	316
112	Create Maximum Number	321
113	Reorganize String	767
114	IPO	502

## Advanced Sliding Window / Two Pointers

S.No	Problem Name	LeetCode #
115	Longest Substring with At Most Two Distinct Characters	159
116	Longest Substring with At Most K Distinct Characters	340
117	Count Number of Nice Subarrays	1248
118	Max Consecutive Ones III	1004
119	Minimum Window Substring	76
120	Sliding Window Maximum	239
121	Subarrays with K Different Integers	992
122	Minimum Number of Operations to Make Array Continuous	2009
123	Find the Longest Substring Containing Vowels in Even Counts	1371
124	Count Subarrays With Median K	2488