

S No	Question SubTopic	Question Name	Question Link		
Arrays - 1 (Class)					
1	Prefix Concept and two Pointer	Rain Water Traping	https://leetcode.com/problems/trapping-rain-water/	Linkedln	https://www.linkedin.com/in/monu-kumar-273850177/
2	Prefix Concept and two Pointer	Product of Array Excpnt -self	https://leetcode.com/problems/product-of-array-except-self/	Github	https://github.com/monukumar98
3	Greedy	Gas Station	https://leetcode.com/problems/gas-station/		
4	Kadanes	Kadanes + Circular	https://leetcode.com/problems/maximum-sum-circular-subarray/		
5	PigeonHole	Divisible SubArray	https://code-gym.codingblocks.com/problems/1065		
Arrays - 2 (Class)					
6	Divide and Conquer	Aggressive Cows (HB)	https://www.spoj.com/problems/AGGRCOW/		
7	Divide and Conquer	Book Allocation	https://codeskiller.codingblocks.com/problems/1365		
8	Divide and Conquer	Search in Rotated Sorted Array	https://leetcode.com/problems/search-in-rotated-sorted-array/description/		
9	Divide and Conquer	Moving Points (Div 3 - F, 1900)	https://codeforces.com/problemset/problem/1311/F		
10	PigeonHole	Hallow	https://www.spoj.com/problems/HALLOW/		
Arrays - 3 (Class)					
11	Divide and Conquer	Median of two sorted arrays	https://leetcode.com/problems/median-of-two-sorted-arrays/		
12	Array	Partition Array into Disjoint Intervals	https://leetcode.com/problems/partition-array-into-disjoint-intervals/		
13	Maths Array	Patching	https://leetcode.com/problems/patching-array/		
14	Divide and Conquer and Hard Binary Search	Kth Smallest Product of Two Sorted Arrays	https://leetcode.com/problems/kth-smallest-product-of-two-sorted-arrays/		
15	Sorting	Day at the Beach	https://codeforces.com/problemset/problem/599/C		
String - 4 (Class)					
16	Prefix Sum	Pasha and String	https://codeforces.com/contest/525/problem/B		
17	String Partition	Pallindromic Substring(Without using DP)	https://leetcode.com/problems/palindromic-substrings/		
18	Array	Number of Ways	https://codeforces.com/problemset/problem/466/C		
19	Gready Math Sorting	Two Arrays and Sum of Functions	https://codeforces.com/problemset/problem/1165/E		
20	String Partition	Pallindromic Substring(Without using DP)	https://leetcode.com/problems/palindromic-substrings/		
21	String Partition	Longest Palindromic Substring	https://leetcode.com/problems/longest-palindromic-substring/description/		
22					
Sliding Window- 5 (Class)					
23	Fixed Size Window	Maximum sum of SubArray of Size k			
24	Sliding Window-(Variable)	Subarray Sum Equals K	https://leetcode.com/problems/subarray-sum-equals-k/		
25	Sliding Window-(Variable)	Subarray Product Less Than K	https://leetcode.com/problems/subarray-product-less-than-k/		
26	Sliding Window-(Variable)	Monu bhaiya and Score	https://codeskiller.codingblocks.com/problems/3877		
27	Sliding Window-(Variable)	Longest SubString Without Repeating Characters	https://leetcode.com/problems/longest-substring-without-repeating-characters/description/		
28	Sliding Window-(Variable)	Longest Repeating Characters Replacemnet	https://leetcode.com/problems/longest-repeating-character-replacement/		
29	Sliding Window-(Variable)	Minimum Window Substring(Without HAsHMap)	https://leetcode.com/problems/minimum-window-substring/		
Recursion 1- 6 (Class)					
30	Basic Recursion	Fact			
31	Basic Recursion	Power			
32	Basic Recursion	Print increasing			
33	Basic Recursion	Print Decreasing			
34	Basic Recursion	First Occr in Array			
35	Basic Recursion	Last Occr in Array			
36	Tail Recursion of Fact				
37	Tail Recursion of Power				
Recursion 2 - 7 (Class)					
38	Medium Recursion	Fibo			
39	Print and Count	SubSequce			
40	Print and Count	Coin Toss			
41	Print and Count	Borad Path			
Recursion 3 - 8 (Class)					
42	Hard Recursion	Lexico-Counting	https://leetcode.com/problems/lexicalographical-numbers/		
43	Hard Recursion	Tower of Hanoi	https://codeskiller.codingblocks.com/problems/1259		

44	Hard Recursion	Key Paid	https://leetcode.com/problems/letter-combinations-of-a-phone-number/
45	Hard Recursion	Generate Parentheses	https://leetcode.com/problems/generate-parentheses/
	Recursion and BackTracking - 9 (Class)		
46	Recursion and BackTracking	Combinations	https://leetcode.com/problems/combinations/
47	Recursion and BackTracking	Combinations sum	https://leetcode.com/problems/combination-sum/
48	Recursion and BackTracking	Combinations - sum 3	https://leetcode.com/problems/combination-sum-iii/
49	Recursion and BackTracking	Combinations-sum2	https://leetcode.com/problems/combination-sum-ii/
	Recursion and BackTracking - 10 (Class)		
50	Recursion and BackTracking	Palindrome-Partitioning	https://leetcode.com/problems/palindrome-partitioning/
51	Recursion and BackTracking	SubSet-1	https://leetcode.com/problems/subsets/
52	Recursion and BackTracking	SubSet-2	https://leetcode.com/problems/subsets-ii/
53	Recursion and BackTracking	Permutations	https://leetcode.com/problems/permutations/
54	Recursion and BackTracking	Permutations	https://leetcode.com/problems/permutations-ii/
	Recursion and BackTracking - 11 (Class)		
55	Recursion and BackTracking	Rat in maze	https://hack.codingblocks.com/app/contests/2315/535/problem
56	Recursion and BackTracking	Word Search	https://leetcode.com/problems/word-search/
57	Recursion and BackTracking	Letter-Tile	https://leetcode.com/problems/letter-tile-possibilities/
58	Recursion and BackTracking	Different way to add parenthesis	https://leetcode.com/problems/different-ways-to-add-parentheses/
	Recursion and BackTracking - 12 (Class)		
59	Recursion	Additive Number	https://leetcode.com/problems/additive-number/
60	Recursion	Number of Squareful Arrays	https://leetcode.com/problems/number-of-squareful-arrays/
61	Recursion	Good Array	https://leetcode.com/problems/check-if-it-is-a-good-array/
62	Recursion	Chessboard Problem - 1	https://hack.codingblocks.com/admin/contents/76/problem
63	Recursion	Reconstruct a 2 Row Binary Matrix	https://leetcode.com/problems/reconstruct-a-2-row-binary-matrix/
64	Recursion	Binary Watch	https://leetcode.com/problems/binary-watch/
	Stack and Queue - 13 (Class)		
65	Implementation	Stack	
66	Implementation	Queue (Circular)	
67	Basic	Reverse Stack	
68	Basic	Reverse Queue	
	Stack and Queue - 14 (Class)		
69	stack	Stock Span	https://codeskiller.codingblocks.com/problems/502
70	stack	Next Greater Element	https://codeskiller.codingblocks.com/problems/1053
71	stack	Previous Smaller Element	
72	stack	Histogram	https://leetcode.com/problems/largest-rectangle-in-histogram/
73	stack	Implement A Stack (GetMin()) in O(1)	https://hack.codingblocks.com/admin/contents/283/problem?step=3
	Stack and Queue - 15 (Class)		
74	stack	Pattern 132	https://leetcode.com/problems/132-pattern/
75	stack	Number of Valid Subarrays	https://leetcode.com/problems/number-of-valid-subarrays/
76	stack	Maximal Rectangle	https://leetcode.com/problems/maximal-rectangle/
77	stack	Construct Smallest Number From DI String	https://leetcode.com/problems/construct-smallest-number-from-di-string/
78	stack	Maximum Score of a Good Subarray	https://leetcode.com/problems/maximum-score-of-a-good-subarray/
	Stack and Queue - 16 (Class)		
79	Queue	Sliding Window Maximum	https://leetcode.com/problems/sliding-window-maximum/
80	Queue	Shortest Safe Route	http://www.techiedelight.com/find-shortest-safe-route-field-sensors-present/
81	Queue	Chess Knight	http://www.techiedelight.com/chess-knight-problem-find-shortest-path-source-destination/
82	Queue	First negative integer in every window of size k	https://hack.codingblocks.com/admin/contents/467/problem
83	Stack	Next greater element - 2	https://leetcode.com/problems/next-greater-element-ii/
84	Stack	Maximum Square	https://leetcode.com/problems/maximal-square/
	Linked List - 17 (Class)		
85	Implementation	AddFirst, Add Last , Add at Index	

86	Linked List	Removefirst , Remove last , Remove at index	
87	Linked List	Get First , Get last , Get at Index	
88	Linked List	Reverse Linked List	https://leetcode.com/problems/reverse-linked-list/
	Linked List 2 - 18 (Class)		
89	Linked List	Remove Duplicate	https://leetcode.com/problems/remove-duplicates-from-sorted-list/
90	Linked List	Mid of LL	https://leetcode.com/problems/middle-of-the-linked-list/
91	Linked List	Cycle in LL	https://leetcode.com/problems/linked-list-cycle/
92	Linked List	Intersection of LL	https://leetcode.com/problems/intersection-of-two-linked-lists/
93	Linked List	Nth Node from End	https://leetcode.com/problems/remove-nth-node-from-end-of-list/
94	Linked List	Swap Node	https://leetcode.com/problems/swap-nodes-in-pairs/
95	Linked List	Revese Linked list -2	https://leetcode.com/problems/reverse-linked-list-ii/
	Linked List 3 - 19 (Class)		
96	Linked List	Merge Two LL	https://leetcode.com/problems/merge-two-sorted-lists/
97	Linked List	Sort LL	https://leetcode.com/problems/sort-list/
98	Linked List	Odd -Even	https://leetcode.com/problems/odd-even-linked-list/
99	Linked List	Reverse in K Group	https://leetcode.com/problems/reverse-nodes-in-k-group/
100	Linked List	Linked List Components	https://leetcode.com/problems/linked-list-components/
101	Linked List	Cycle Removal	
	Binary Tree 1- 20 (Class)		
102	Implementation	Implementation of BT Using pre-Order	
103	Basic	Hight	
104	Basic	find	
105	Basic	Post-Order	https://leetcode.com/problems/binary-tree-postorder-traversal/
106	Basic	In-Order	https://leetcode.com/problems/binary-tree-inorder-traversal/
107	Basic	Pre-Order	https://leetcode.com/problems/binary-tree-preorder-traversal/
108	Basic	Level Order	https://leetcode.com/problems/binary-tree-level-order-traversal/
	Binary Tree 2- 21 (Class)		
109	BT	Symmertic Tree	https://leetcode.com/problems/symmetric-tree/
110	BT	Flip Equivalent	https://leetcode.com/problems/flip-equivalent-binary-trees/
111	BT	root to leaf	https://leetcode.com/problems/sum-root-to-leaf-numbers/
112	BT	Diameter	https://leetcode.com/problems/diameter-of-binary-tree/
113	BT	Is-balance	https://leetcode.com/problems/balanced-binary-tree/
	Binary Tree 2- 22 (Class)		
114	BT	Path Sum-2	https://leetcode.com/problems/path-sum-ii/
115	BT	Path Sum-3	https://leetcode.com/problems/path-sum-iii/
116	BT	Path Sum	https://leetcode.com/problems/path-sum/
117	BT	LCA	https://leetcode.com/problems/lowest-common-ancestor-of-a-binary-tree/
118	BT	LCA-2	https://leetcode.com/problems/lowest-common-ancestor-of-a-binary-tree-ii/
119	BT	Right View	https://leetcode.com/problems/binary-tree-right-side-view/
	Binary Search Tree - 23 (Class)		
120	Implementation	Implementation of BsT Using IN-Order	
121	BST	Insert into BST	https://leetcode.com/problems/insert-into-a-binary-search-tree/
122	BST	Delete BST	https://leetcode.com/problems/delete-node-in-a-bst/
123	BST	Validate BST	https://leetcode.com/problems/validate-binary-search-tree/
124	BST	Max Sum BST	https://leetcode.com/problems/maximum-sum-bst-in-binary-tree/
	BST and BT - 24 (Class)		
125	Trees	Binary Tree Cameras	https://leetcode.com/problems/binary-tree-cameras/
126	Trees	Binary Tree Maximum Path Sum	https://leetcode.com/problems/binary-tree-maximum-path-sum/
127	Trees	Flip binary tree	https://www.geeksforgeeks.org/flip-binary-tree/
128	Trees	Distribute coins in a binary tree	https://leetcode.com/problems/distribute-coins-in-binary-tree/
129	Binary Tree	Tree Top View	https://www.hackerrank.com/challenges/tree-top-view/problem
	BST and BT - 25 (Class)		

130	BT	Construct Binary Tree using Inorder and Pre-Order	https://leetcode.com/problems/construct-binary-tree-from-preorder-and-inorder-traversal/
131	Binary Search Tree	Count BST Subtrees that lie in a Given Range	https://hack.codingblocks.com/app/practice/2/340/problem
132	Binary Tree	Maximum Path Sum	https://leetcode.com/problems/binary-tree-maximum-path-sum/
133	Binary Tree	Add one row to tree	https://leetcode.com/problems/add-one-row-to-tree/
134	Binary Tree	Sum of the mirror image nodes	https://www.geeksforgeeks.org/sum-of-the-mirror-image-nodes-of-a-complete-binary-tree-in-an-inorder-way/
Bit Masking-26 (Class)			
135	Bitmasking	Maximum Product of Word Lengths	https://leetcode.com/problems/maximum-product-of-word-lengths/
136	Bitmasking	Maximum Score Words Formed by Letters	https://leetcode.com/problems/maximum-score-words-formed-by-letters/
137	Bitmasking	Preparing Olympiad	https://codeforces.com/problemset/problem/550/B
138	Bitmasking	Maximum XOR of Two Numbers in an Array	https://leetcode.com/problems/maximum-xor-of-two-numbers-in-an-array/
139	Bitmasking	Print Subsequences Using Bitmasking	
Priority Queue-27 (Class)			
140	Implementation	Heap	
141	Heap	Find Median from Data Stream	https://leetcode.com/problems/find-median-from-data-stream/
142	Heap	Merge K Sorted List	https://leetcode.com/problems/merge-k-sorted-lists/description/
143	Heap	Top K Frequent Element	https://leetcode.com/problems/top-k-frequent-elements/description/
144	Heap	K Closest Points to Origin	https://leetcode.com/problems/k-closest-points-to-origin/
HashMap-28 (Class)			
145	Implementation	HashMap	
146		Consecutive Sequence	https://leetcode.com/problems/longest-consecutive-sequence/
147		Intersection of Array	https://leetcode.com/problems/intersection-of-two-arrays-ii/
HashMap and Heap QPS-29 (Class)			
148	Heap	Sort Characters by Frequency	https://leetcode.com/problems/sort-characters-by-frequency/
149	Heap	IPO	https://leetcode.com/problems/ipo/
150	Map	Group Anagram	https://leetcode.com/problems/group-anagrams/
151	Map	Merge K Sorted List	https://leetcode.com/problems/merge-k-sorted-lists/solution/
Trie-30 (Class)			
152	Trie	Prefix Tree	https://leetcode.com/problems/implement-trie-prefix-tree/
153	Trie	Longest Common prefix	https://leetcode.com/problems/longest-common-prefix/
154	Trie	Contacts	https://www.hackerrank.com/challenges/ctci-contacts/problem
155	Tries	Maximum xor value pair	https://www.geeksforgeeks.org/minimum-xor-value-pair/
156	Tries	Maximum xor Subarray	https://www.geeksforgeeks.org/find-the-maximum-subarray-xor-in-a-given-array/
157			
Interval - 31(Class)			
158	Interval	Insert Interval	https://leetcode.com/problems/insert-interval/description/
159	Interval	Merger Interval	https://leetcode.com/problems/merge-intervals/description/
160	Interval	Non-Overlapping Interval	https://leetcode.com/problems/non-overlapping-intervals/description/
161	Interval	Meeting Room	https://leetcode.com/problems/meeting-rooms/description/
162	Interval	Meeting Room -2	https://leetcode.com/problems/meeting-rooms-ii/
163	Interval	Busy Man	https://www.spoj.com/problems/BUSYMAN/
Graph 1- 32 (Theory Class)			
164	Graph	Unidirected Generic Graph Impl	
165	Graph	Directed Generic Graph Impl	
166	Graph	BFS, DFS	
167	Graph	BFT and DFT	
168	Graph	Count connected components, Clone of Graph	https://leetcode.com/problems/clone-graph/description/
Graph 2 - 33(Class)			
169	Topological Sorting	Topological Sorting(DFS, BFS)	
170	Topological Sorting	Course Schedule - 1 and 2	https://leetcode.com/problems/course-schedule/
171	SSSP	Flood Fill Algorithm	https://leetcode.com/problems/flood-fill/
172	Topological Sorting	Alien-Dictionary	https://leetcode.com/problems/alien-dictionary/description/
Graph 3 - 33 (Class)			

Graph 3 - 33 (Class)			
173	BFS/DFS	Number-of-Islands	https://leetcode.com/problems/number-of-islands/description/
174	BFS/DFS	Pacific-Atlantic-water	https://leetcode.com/problems/pacific-atlantic-water-flow/
175	BFS/DFS	Is Graph Bipartite	https://leetcode.com/problems/is-graph-bipartite/
Graph 4 - 34(Class)			
176	Graph	Edge list impl of graph	
177	Graph	DSU with optimizations	
178	Graph	Detect Cycle	
179	Graph	Minimum Spanning Trees(Kruskal - Greedy)	https://www.spoj.com/problems/MST/
Graph 5 - 35(Class)			
180	Graphs	Floyd Warshall	Implementation
181	Graphs	Bellman Ford	Implementation
182	Graphs	Dijkstra	Implementation
Graph 6 - 35(Class)			
183	Graphs	K-Complete Word	https://codeforces.com/problemset/problem/1332/C
184	Graphs	Gourmet choice	https://codeforces.com/problemset/problem/1131/D
185	Graphs	PolandBall and Forest	https://codeforces.com/problemset/problem/755/C
186	Graphs	Kosaraju	Implementation
Dynamic Programming 1- 37 (Class)			
187	Dynamic 1-D	House Robber - 1	https://leetcode.com/problems/house-robber/
188	Dynamic 1-D	House Robber - 2	https://leetcode.com/problems/house-robber-ii/
189	Dynamic 1-D	Unbounded Knapsack	
190	Dynamic 1-D	Min coin change	
191	Dynamic 1-D	K climbing stairs	
Dynamic Programming 2- 38 (Class)			
192	1D-DP + Maths	Largest Divisible Subset	https://leetcode.com/problems/largest-divisible-subset/
193	Dynamic 2D	Longest common Subsequence	https://leetcode.com/problems/longest-common-subsequence/
194	Dynamic 2D	Longest Increasing Subsequence(Binary Search + i)	https://leetcode.com/problems/longest-increasing-subsequence/
195	Dynamic 2D	Uncrossed Lines	https://leetcode.com/problems/uncrossed-lines/
196	Dynamic 2D	Unique Path - 2	https://leetcode.com/problems/unique-paths-ii/
Dynamic Programming 3 - 39 (Class)			
197	Dynamic 2D	Min Cost Path	https://leetcode.com/problems/minimum-path-sum/
198	Knapsack	Knapsack 2	https://atcoder.jp/contests/dp/tasks/dp_e
199	Knapsack	Coins	https://atcoder.jp/contests/dp/tasks/dp_i
200	2D-DP	Word Break	https://leetcode.com/problems/word-break/
201	2D-DP	Best Time to buy and sell Stock 3	https://leetcode.com/problems/best-time-to-buy-and-sell-stock-iii/
Dynamic Programming 4 - 40 (Class)			
202	MCM	Matrix Chain Multiplication	https://www.interviewbit.com/problems/matrix-chain-multiplication/
203	2D-DP	Grid 1	https://atcoder.jp/contests/dp/tasks/dp_h
204	2D-DP	Candies	https://atcoder.jp/contests/dp/tasks/dp_m
205	2D-DP	Best Time to buy and sell Stock 4	https://leetcode.com/problems/best-time-to-buy-and-sell-stock-iv/
Dynamic Programming 5 - 41 (Class)			
206	2D-DP	Knight Probability	https://leetcode.com/problems/knight-probability-in-chessboard/
207	2D-DP	Wildcard matching	https://leetcode.com/problems/wildcard-matching/
208	2D-DP	Dungeon Game	https://leetcode.com/problems/dungeon-game/
209	2D-DP	Optimal Game Strategy	
Mathematics- 42 (Class)			
210	Maths	Robot Bounded in Circle	https://leetcode.com/problems/robot-bounded-in-circle/
211	Maths	Reaching Points	https://leetcode.com/problems/reaching-points/
212	Maths	Angle Between Hands of a Clock	https://leetcode.com/problems/angle-between-hands-of-a-clock/
213	Maths	Find next greater number	https://www.geeksforgeeks.org/find-next-greater-number-set-digits/ and https://leetcode.com/problems/next-greater-element-iii/

214	Maths	Farthest Co-Primes	https://leetcode.com/discuss/interview-question/125016/farthest-co-prime/124918		
	KMP and Rabin Karp - 43 (Class)				
215	KMP	KMP Algorithm	https://www.spoj.com/problems/NAJPF/		
216	Rabin Karp	Rabin Karp	Algorithm		
217	KMP	NHAY	https://www.spoj.com/problems/NHAY/		
	Z-Fun and Manachres - 44(Class)				
218	Implementation	Z-Function			
219	Prefix Sum	Pasha and String	https://codeforces.com/contest/525/problem/B		
220	Manacher's Algorithm	Manacher's Algorithm	Manacher's Algorithm		
	Segment Trees-45(Class)				
221	Segment Tree	Can you answer these queries	https://www.spoj.com/problems/GSS1/		
222	Lazy	Counting Primes	https://www.spoj.com/problems/CNTPRIME/		
223	Inversion Count	Count The Chaos	https://toph.co/p/count-the-chaos		