Pattern	Question	Link 1	Link 2	Link 3	
	1. Pattern: Two Pointers				
	Pair with Target Sum (easy)	https://leetcode.com/problems/two-sum/			
	Remove Duplicates (easy)	https://leetcode.com/problems/remove-duplicates-from-sorted-list/	https://leetcode.com/problems/remove-duplicates-from-sorted-list-ii/	https://leetcode.com/problems/remove-duplicates-from-sorted-array-ii/	
	Squaring a Sorted Array (easy)	https://leetcode.com/problems/squares-of-a-sorted-array/			
	Triplet Sum to Zero (medium)	https://leetcode.com/problems/3sum/			
	Triplet Sum Close to Target (medium)	https://leetcode.com/problems/3sum-closest/			
	Triplets with Smaller Sum (medium)	https://www.geeksforgeeks.org/problems/count-triplets-with-sum-smaller-than-x5549/1			
	Subarrays with Product Less than a Target (medium)	https://leetcode.com/problems/subarray-product-less-than-k/			
	Dutch National Flag Problem (medium)	https://leetcode.com/problems/sort-colors/description/			
	Problem Challenge 1: Quadruple Sum to Target (medium)	https://leetcode.com/problems/4sum/			
	Problem Challenge 2: Comparing Strings containing Backspaces (medium)	https://leetcode.com/problems/backspace-string-compare/			
	Problem Challenge 3: Minimum Window Sort (medium)	https://leetcode.com/problems/shortest-unsorted-continuous-subarray/	https://www.ideserve.co.in/learn/minimum-length-subarray-sorting-which-results-in-sorted-array		
	2. Pattern: Fast & Slow pointers				
	LinkedList Cycle (easy)	https://leetcode.com/problems/linked-list-cycle/			
	Start of LinkedList Cycle (medium)	https://leetcode.com/problems/linked-list-cycle-ii/			
	Happy Number (medium)	https://leetcode.com/problems/happy-number/			
	Middle of the LinkedList (easy)	https://leetcode.com/problems/middle-of-the-linked-list/			
	Problem Challenge 1: Palindrome LinkedList (medium)	https://leetcode.com/problems/palindrome-linked-list/			
	Problem Challenge 2: Rearrange a LinkedList (medium)	https://leetcode.com/problems/reorder-list/			
	Problem Challenge 3: Cycle in a Circular Array (hard)	https://leetcode.com/problems/circular-array-loop/			
	3. Pattern: Sliding Window				
	Maximum Sum Subarray of Size K (easy)				
	Smallest Subarray with a given sum (easy)	https://www.educative.io/courses/grokking-the-coding-interview/7XMlMEQPnnQ			
	Longest Substring with K Distinct Characters (medium)	https://www.educative.io/courses/grokking-the-coding-interview/YQQwQMWLx80			
	Fruits into Baskets (medium)	https://leetcode.com/problems/fruit-into-baskets/			
	No-repeat Substring (hard)	https://leetcode.com/problems/longest-substring-without-repeating-characters/			
	Longest Substring with Same Letters after Replacement (hard)	https://leetcode.com/problems/longest-repeating-character-replacement/			
	Longest Subarray with Ones after Replacement (hard)	https://leetcode.com/problems/max-consecutive-ones-iii/			
	Problem Challenge 1: Permutation in a String (hard)	https://leetcode.com/problems/permutation-in-string/			
	Problem Challenge 2: String Anagrams (hard)	https://leetcode.com/problems/find-all-anagrams-in-a-string/			
	Problem Challenge 3: Smallest Window containing Substring (hard)	https://leetcode.com/problems/minimum-window-substring/			
	Problem Challenge 4: Words Concatenation (hard)	https://leetcode.com/problems/substring-with-concatenation-of-all-words/			
	4. Pattern: Merge Intervals				
	Merge Intervals (medium)	https://www.educative.io/courses/grokking-the-coding-interview/3jyVPKRA8yx			
	Insert Interval (medium)	https://www.educative.io/courses/grokking-the-coding-interview/3jKlyNMJPEM			
	Intervals Intersection (medium)	https://www.educative.io/courses/grokking-the-coding-interview/JExVVqRAN9D			
	Conflicting Appointments (medium)	https://www.geeksforgeeks.org/check-if-any-two-intervals-overlap-among-a-given-set-of-intervals/			
	Problem Challenge 1: Minimum Meeting Rooms (hard)	https://www.lintcode.com/problem/meeting-rooms-ii/			
	Problem Challenge 2: Maximum CPU Load (hard)	https://www.geeksforgeeks.org/maximum-cpu-load-from-the-given-list-of-jobs/			
	Problem Challenge 3: Employee Free Time (hard)	https://www.codertrain.co/employee-free-time			
	5. Pattern: Cyclic Sort				
	Cyclic Sort (easy)	https://www.geeksforgeeks.org/sort-an-array-which-contain-1-to-n-values-in-on-using-cycle-sort/			
	Find the Missing Number (easy)	https://leetcode.com/problems/missing-number/			
	Find all Missing Numbers (easy)	https://leetcode.com/problems/find-all-numbers-disappeared-in-an-array/			
	Find the Duplicate Number (easy)	https://leetcode.com/problems/find-the-duplicate-number/			
	Find all Duplicate Numbers (easy)	https://leetcode.com/problems/find-all-duplicates-in-an-array/			
	Problem Challenge 1: Find the Corrupt Pair (easy)	https://thecodingsimplified.com/find-currupt-pair/			
	Problem Challenge 2: Find the Smallest Missing Positive Number (medium)	https://thecodingsimplified.com/first-missing-positive/			
	Problem Challenge 3: Find the First K Missing Positive Numbers (hard)	https://thecodingsimplified.com/find-the-first-k-missing-positive-number/			
	6. Pattern: In-place Reversal of a LinkedList				
	Reverse a LinkedList (easy)	https://leetcode.com/problems/reverse-linked-list/			
	Reverse a Sub-list (medium)	https://leetcode.com/problems/reverse-linked-list-ii/			
	Reverse every K-element Sub-list (medium)	https://leetcode.com/problems/reverse-nodes-in-k-group/			
	Problem Challenge 1: Reverse alternating K-element Sub-list (medium)	https://www.geeksforgeeks.org/reverse-alternate-k-nodes-in-a-singly-linked-list/			
	Problem Challenge 2: Rotate a LinkedList (medium)	https://leetcode.com/problems/rotate-list/			
	7. Pattern: Stack				
	Balanced Parentheses	https://leetcode.com/problems/valid-parentheses/description/			
	Reverse a String				
	Decimal to Binary Conversion				
	Next Greater Element	https://leetcode.com/problems/next-greater-element-i/	https://leetcode.com/problems/next-greater-element-ii/	https://leetcode.com/problems/next-greater-element-iv/	
	Sorting a Stack				
	Simplify Path	https://leetcode.com/problems/simplify-path/			
	8. Pattern: Monotonic Stack				
	Next Greater Element (easy)	https://leetcode.com/problems/next-greater-element-i/	https://leetcode.com/problems/next-greater-element-ii/	https://leetcode.com/problems/next-greater-element-iv/	
	Daily Temperatures (easy)	https://leetcode.com/problems/daily-temperatures/			
	Remove Nodes From Linked List (easy)	https://leetcode.com/problems/remove-nodes-from-linked-list/			
	Remove All Adjacent Duplicates In String (easy)	https://leetcode.com/problems/remove-all-adjacent-duplicates-in-string/			
	Remove All Adjacent Duplicates in String II (medium)	https://leetcode.com/problems/remove-all-adjacent-duplicates-in-string-ii/			
	Remove K Digits (hard)	https://leetcode.com/problems/remove-k-digits/			
	9. Pattern: Hash Maps				
	First Non-repeating Character (easy)	https://leetcode.com/problems/first-unique-character-in-a-string/			
	Largest Unique Number (easy)	https://leetcode.com/problems/largest-unique-number/			
	Maximum Number of Balloons (easy)	https://leetcode.com/problems/maximum-number-of-balloons/			
	Longest Palindrome(easy)	https://leetcode.com/problems/longest-palindrome/			
	Ransom Note (easy)	https://leetcode.com/problems/ransom-note/			
	10. Pattern: Tree Breadth First Search				
	Binary Tree Level Order Traversal (easy)	https://leetcode.com/problems/binary-tree-level-order-traversal/			
	Reverse Level Order Traversal (easy)	https://leetcode.com/problems/binary-tree-level-order-traversal-ii/			
	Zigzag Traversal (medium)	https://leetcode.com/problems/binary-tree-zigzag-level-order-traversal/			
	Level Averages in a Binary Tree (easy)	https://leetcode.com/problems/average-of-levels-in-binary-tree/			
	Minimum Depth of a Binary Tree (easy)	https://leetcode.com/problems/minimum-depth-of-binary-tree/			
	Maximum Depth of a Binary Tree (easy)	https://leetcode.com/problems/maximum-depth-of-binary-tree/			
	Level Order Successor (easy)	https://www.geeksforgeeks.org/level-order-successor-of-a-node-in-binary-tree/			
	Connect Level Order Siblings (medium)	https://leetcode.com/problems/populating-next-right-pointers-in-each-node/			
	Problem Challenge 1: Connect All Level Order Siblings (medium)	https://www.educative.io/m/connect-all-siblings			
	Problem Challenge 2: Right View of a Binary Tree (easy)	https://leetcode.com/problems/binary-tree-right-side-view/			
	11. Pattern: Tree Depth First Search				
	Binary Tree Path Sum (easy)	https://leetcode.com/problems/path-sum/			
	All Paths for a Sum (medium)	https://leetcode.com/problems/path-sum-iii/			
	Sum of Path Numbers (medium)	https://leetcode.com/problems/sum-root-to-leaf-numbers/			
	Path With Given Sequence (medium)	https://www.geeksforgeeks.org/check-root-leaf-path-given-sequence/			
	Count Paths for a Sum (medium)	https://leetcode.com/problems/path-sum-iii/			
	Problem Challenge 1: Tree Diameter (medium)	https://leetcode.com/problems/diameter-of-binary-tree/			
	Problem Challenge 2: Path with Maximum Sum (hard)	https://leetcode.com/problems/binary-tree-maximum-path-sum/			
	12. Pattern: Graphs				
	Graph Traversal: Depth First Search(DFS)				
	Graph Traversal: Breadth First Search (BFS)				
	Find if Path Exists in Graph(easy)	https://leetcode.com/problems/find-if-path-exists-in-graph/			
	Number of Provinces (medium)	https://leetcode.com/problems/number-of-provinces/			
	Minimum Number of Vertices to Reach All Nodes(medium)	https://leetcode.com/problems/minimum-number-of-vertices-to-reach-all-nodes/			
	13. Pattern: Island (Matrix traversal)				
	Number of Islands (easy)	https://leetcode.com/problems/number-of-islands/			
	Biggest Island (easy)				
	Flood Fill (easy)	https://leetcode.com/problems/flood-fill/			
	Number of Closed Islands (easy)	https://leetcode.com/problems/number-of-closed-islands/			
	Problem Challenge 1 (easy)				
	Problem Challenge 2 (medium)				
	Problem Challenge 3 (medium)				
	14. Pattern: Two Heaps				
	Find the Median of a Number Stream (medium)	https://leetcode.com/problems/find-median-from-data-stream/			
	Sliding Window Median (hard)	https://leetcode.com/problems/sliding-window-median/			
	Maximize Capital (hard)	https://leetcode.com/problems/ipo/			
	*Maximum Sum Combinations (medium)	https://www.interviewbit.com/problems/maximum-sum-combinations/			
	15. Pattern: Subsets				
	Subsets (easy)	https://www.educative.io/courses/grokking-the-coding-interview/gx2OqlvEnWG			
	Subsets With Duplicates (easy)	https://www.educative.io/courses/grokking-the-coding-interview/7npk3V3JQNr			
	Permutations (medium)	https://www.educative.io/courses/grokking-the-coding-interview/B8R83jyN3KY			
	String Permutations by changing case (medium)				

Problem	Link 1	Link 2	Link 3
Balanced Parentheses (hard)			
Unique Generalized Abbreviations (hard)	https://leetcode.com/problems/generalized-abbreviation/		
16. Pattern : Modified Binary Search			
Order-agnostic Binary Search (easy)	https://www.geeksforgeeks.org/order-agnostic-binary-search/		
Ceiling of a Number (medium)	https://www.geeksforgeeks.org/ceiling-in-a-sorted-array/	https://www.geeksforgeeks.org/floor-in-a-sorted-array/	
Next Letter (medium)	https://leetcode.com/problems/find-smallest-letter-greater-than-target/		
Number Range (medium)	https://leetcode.com/problems/find-first-and-last-position-of-element-in-sorted-array/		
Search in a Sorted Infinite Array (medium)	https://www.geeksforgeeks.org/find-position-element-sorted-array-infinite-numbers/		
Minimum Difference Element (medium): Find the floor & ceil take the difference, minimum would be the ans			
Bitonic Array Maximum (easy)	https://www.geeksforgeeks.org/find-the-maximum-element-in-an-array-which-is-first-increasing-and-then-decreasing/		
Problem Challenge 1: Search Bitonic Array (medium)	https://leetcode.com/problems/find-in-mountain-array/		
Problem Challenge 2: Search in Rotated Array (medium)	https://leetcode.com/problems/search-in-rotated-sorted-array/		
Problem Challenge 3: Rotation Count (medium)	https://www.geeksforgeeks.org/find-rotation-count-rotated-sorted-array/		
*Search a 2D Matrix (medium)	https://leetcode.com/problems/search-a-2d-matrix/		
*Minimum Number of Days to Make m Bouquets (medium)	https://leetcode.com/problems/minimum-number-of-days-to-make-m-bouquets/		
*Koko Eating Bananas (medium)	https://leetcode.com/problems/koko-eating-bananas/		
*Capacity To Ship Packages Within D Days (medium)	https://leetcode.com/problems/capacity-to-ship-packages-within-d-days/		
*Median of Two Sorted Arrays (hard)	https://leetcode.com/problems/median-of-two-sorted-arrays/		
17. Pattern: Bitwise XOR			
Single Number (easy)			
Two Single Numbers (medium)			
Complement of Base 10 Number (medium)			
Problem Challenge 1: Flip and Invert an Image (hard)			
18. Pattern: Top 'K' Elements			
Top 'K' Numbers (easy)	https://github.com/dipjul/Grokking-the-Coding-Interview-Patterns-for-Coding-Questions/blob/master/13.-pattern-top-k-elements/02.top-k-numbers.md		
Kth Smallest Number (easy)			
K' Closest Points to the Origin (easy)	https://leetcode.com/problems/k-closest-points-to-origin/		
Connect Ropes (easy)			
Top 'K' Frequent Numbers (medium)			
Frequency Sort (medium)			
Kth Largest Number in a Stream (medium)	https://leetcode.com/problems/kth-largest-element-in-a-stream/		
K' Closest Numbers (medium)			
Maximum Distinct Elements (medium)			
Sum of Elements (medium)			
Rearrange String (hard)			
Problem Challenge 1: Rearrange String K Distance Apart (hard)			
Problem Challenge 2: Scheduling Tasks (hard)			
Problem Challenge 3: Frequency Stack (hard)			
*	https://github.com/dipjul/Grokking-the-Coding-Interview-Patterns-for-Coding-Questions/blob/master/13.-pattern-top-k-elements/13.HeapImplementation.md		
19. Pattern: K-way merge			
Merge K Sorted Lists (medium)	https://leetcode.com/problems/merge-k-sorted-lists/		
Kth Smallest Number in M Sorted Lists (Medium)	https://www.geeksforgeeks.org/find-m-th-smallest-value-in-k-sorted-arrays/		
Kth Smallest Number in a Sorted Matrix (Hard)	https://www.educative.io/courses/grokking-the-coding-interview/x1NJVYKNvqz		
Smallest Number Range (Hard)	https://leetcode.com/problems/smallest-range-covering-elements-from-k-lists/		
Problem Challenge 1: K Pairs with Largest Sums (hard)			
20. Pattern: Greedy Algorithms			
Valid Palindrome II (easy)	https://leetcode.com/problems/valid-palindrome-ii/		
Maximum Length of Pair Chain (medium)	https://leetcode.com/problems/maximum-length-of-pair-chain/		
Minimum Add to Make Parentheses Valid (medium)	https://leetcode.com/problems/minimum-add-to-make-parentheses-valid/		
Remove Duplicate Letters (medium)	https://leetcode.com/problems/remove-duplicate-letters/		
Largest Palindromic Number (Medium)	https://leetcode.com/problems/largest-palindromic-number/		
Removing Minimum and Maximum From Array (medium)	https://leetcode.com/problems/removing-minimum-and-maximum-from-array/		
21. Pattern : 0/1 Knapsack (Dynamic Programming)			
0/1 Knapsack (medium)	https://www.geeksforgeeks.org/0-1-knapsack-problem-dp-10/		
Equal Subset Sum Partition (medium)	https://leetcode.com/problems/partition-equal-subset-sum/		
Subset Sum (medium)	https://www.geeksforgeeks.org/subset-sum-problem-dp-25/		
Minimum Subset Sum Difference (hard)	https://www.geeksforgeeks.org/partition-a-set-into-two-subsets-such-that-the-difference-of-subset-sums-is-minimum/		
Problem Challenge 1: Count of Subset Sum (hard)			
Problem Challenge 2: Target Sum (hard)			
22. Pattern: Backtracking			
Combination Sum (medium)	https://leetcode.com/problems/combination-sum/	https://leetcode.com/problems/combination-sum-ii/	https://leetcode.com/problems/combination-sum-iii/
Word Search (medium)	https://leetcode.com/problems/word-search/	https://leetcode.com/problems/word-search-ii/	
Sudoku Solver (hard)	https://leetcode.com/problems/sudoku-solver/		
Factor Combinations (medium)	https://leetcode.com/problems/factor-combinations/		
Split a String Into the Max Number of Unique Substrings (medium)	https://leetcode.com/problems/split-a-string-into-the-max-number-of-unique-substrings/		
23. Pattern: Trie			
Implement Trie (Prefix Tree) (medium)	https://leetcode.com/problems/implement-trie-prefix-tree/		
Index Pairs of a String (easy)	https://leetcode.com/problems/index-pairs-of-a-string/		
Design Add and Search Words Data Structure (medium)	https://leetcode.com/problems/design-add-and-search-words-data-structure/		
Extra Characters in a String (medium)	https://leetcode.com/problems/extra-characters-in-a-string/		
Search Suggestions System (medium)	https://leetcode.com/problems/search-suggestions-system/		
24. Pattern: Topological Sort (Graph)			
Topological Sort (medium)	https://www.youtube.com/watch?v=cIBFEhD77b4		
Tasks Scheduling (medium)	https://leetcode.com/problems/course-schedule/		
Tasks Scheduling Order (medium)	https://leetcode.com/problems/course-schedule/		
All Tasks Scheduling Orders (hard)	https://leetcode.com/problems/course-schedule-ii/		
Alien Dictionary (hard)	https://leetcode.com/problems/alien-dictionary/		
Problem Challenge 1: Reconstructing a Sequence (hard)	https://leetcode.com/problems/sequence-reconstruction/		
Problem Challenge 2: Minimum Height Trees (hard)	https://leetcode.com/problems/minimum-height-trees/		
25. Pattern: Union Find			
Redundant Connection (medium)	https://leetcode.com/problems/redundant-connection/	https://leetcode.com/problems/redundant-connection-ii/	
Number of Provinces (medium)	https://leetcode.com/problems/number-of-provinces/		
Is Graph Bipartite? (medium)	https://leetcode.com/problems/is-graph-bipartite/		
Path With Minimum Effort (medium)	https://leetcode.com/problems/path-with-minimum-effort/		
26. Ordered Set			
Merge Similar Items (easy)	https://leetcode.com/problems/merge-similar-items/		
132 Pattern (medium)	https://leetcode.com/problems/132-pattern/		
My Calendar I (medium)	https://leetcode.com/problems/my-calendar-i/	https://leetcode.com/problems/my-calendar-ii/	https://leetcode.com/problems/my-calendar-iii/