¹⁷ Week	Topics	Concepts to Cover	Practice Focus
Week 1	Arrays	Basics, Prefix Sum, Sliding Window intro	Kadane's Algo, Two Sum, Subarray Sum = K
	Sorting	Bubble, Merge, Quick, Counting Sort	Sorting intervals, Custom sort
Week 2	Two Pointers	Sorted arrays, opposite direction pointers	3Sum, Container With Most Water
	Sliding Window	Fixed & variable length windows, maximum/minimum in window	Longest Substring Without Repeat, Max Sum Subarray of Size K
Week 3	Binary Search	Basic & advanced, on answer	Search in Rotated Array, Median of Two Arrays
	Bit Manipulation	AND, OR, XOR, Bit tricks	Single Number, Bit Counting
Week 4	Linked List + In-place Reversal	Reverse, Detect Cycle (Floyd's Algo), Merge Two LL	Palindrome LL, Intersection, Reorder List
	Fast & Slow Pointers	Cycle detection, finding middle	Happy Number, Detect Cycle
Week 5	Greedy Algorithms	Sorting-based greedy, activity selection	Jump Game, Gas Station, Interval Scheduling
	Backtracking	Subsets, Permutations, Constraints	N-Queens, Word Search, Sudoku Solver
Week 6	Stack & Queue (optional but important)	Monotonic Stack, Valid Parentheses	Next Greater Element, Min Stack
	Heap (Priority Queue)	Min/Max Heap, K elements problems	Top K Frequent, Kth Largest, Merge K Sorted Lists
Week 7	Intervals	Overlapping intervals, merging	Insert Interval, Meeting Rooms

	QuickSelect	Partition-based Kth element search	Kth Largest Element in Array
Week 8	Dynamic Programming (DP)	Memoization, Tabulation, 0/1 Knapsack, Subset problems	House Robber, Coin Change, Longest Palindromic Substring
Week 9	Graph - BFS, DFS	Adjacency List, Matrix Graphs, Traversals	Number of Islands, Clone Graph, Word Ladder
	Union Find (Disjoint Set)	Union by Rank, Path Compression	Number of Provinces, Detect Cycle in Undirected Graph
Week 10	Topological Sort + Graph	Kahn's Algorithm, DFS-based Topo Sort	Course Schedule, Alien Dictionary
	Trie	Insert/Search, Prefix matching	Word Dictionary, Replace Words
Week 11	Design Problems	LRU Cache, Rate Limiter, File System	Implement LRU, Design Twitter
Week 12	Bucket Sort	Counting frequency problems	Sort Characters by Frequency, Top K Frequent Words