45-Day LeetCode Practice Plan for Java DSA (Expanded)

Days 1-4

Setup & Java Basics (no LeetCode)

Days 5-6

Arrays & Basic Sorting/Search:

- Two Sum (1)
- Merge Sorted Array (88)
- Search Insert Position (35)
- Move Zeroes (283)
- Plus One (66)

Days 7-8

Linked List:

- Reverse Linked List (206)
- Merge Two Sorted Lists (21)
- Remove Duplicates (83)
- Intersection of Two Linked Lists (160)
- Reverse Linked List II (92)

Days 9-10

Stack & Queue:

- Valid Parentheses (20)
- Queue via Stacks (232)
- Stack via Queues (225)
- Min Stack (155)
- Design Circular Queue (622)

Day 11

Hash Table:

- Two Sum (1)
- Contains Duplicate (217)
- Ransom Note (383)
- Valid Anagram (242)
- Insert Delete GetRandom O(1) (380)

Days 12-13

Trees & BST:

- Inorder Traversal (94)
- Same Tree (100)
- Validate BST (98)

- Invert Binary Tree (226)
- Diameter of Binary Tree (543)

Day 14

Heap / Priority Queue:

- Kth Largest in Stream (703)
- Kth Largest in Array (215)
- Median from Data Stream (295)
- Last Stone Weight (1046)
- Top K Frequent Elements (347)

Days 15-17

Sorting Algorithms:

- Sort an Array (912)
- Non-overlapping Sub-arrays (1477)
- Assign Cookies (455)
- Maximum Product of Three Numbers (628)
- Sort Characters By Frequency (451)

Day 18

Binary Search:

- Binary Search (704)
- Search Rotated Array (33)
- Search 2D Matrix (74)
- Sqrt(x) (69)
- Peak Index in a Mountain Array (852)

Days 19-20

Recursion & Memoization:

- Fibonacci (509)
- Climbing Stairs (70)
- Integer Break (343)
- Generate Parentheses (22)
- Expression Add Operators (282)

Days 21-23

Backtracking:

- Permutations (46, 47)
- Combinations (77)
- Subsets (78, 90)
- N-Queens (51)
- Letter Combinations of a Phone Number (17)

Days 24-26

Dynamic Programming:

• House Robber (198)

- Coin Change (322)
- Longest Common Subsequence (1143)
- Maximum Subarray (53)
- Word Break (139)
- Maximum Product Subarray (152)

Days 27-28

Greedy Algorithms:

- Non-overlapping Intervals (435)
- Burst Balloons (452)
- Jump Game II (45)
- Gas Station (134)
- Candy (135)

Days 29-30

Graph Basics:

- Number of Islands (200)
- Clone Graph (133)
- The Maze (490)
- All Paths From Source to Target (797)
- Course Schedule (207)

Days 31-34

Advanced Graph:

- Cheapest Flights (787)
- Network Delay (743)
- Course Schedule II (210)
- Connecting Cities With Minimum Cost (1135)
- Minimum Height Trees (310)

Days 35-40

Mixed Practice:

- Palindrome Linked List (234)
- Increasing Subsequence (674)
- Palindromic Substrings (647)
- Remove Duplicates II (82)
- Sliding Window Maximum (239)

Days 41-45

Review & System Design:

- Re-solve top 5 problems under timed conditions
- Design LRU Cache/Rate Limiter (code design)
- STAR Behavioral Prep
- Mock System Design: Design TinyURL Service