

12 Weeks LeetCode Strategy & Plan

Weeks 1-2: Foundations

- **Objective:** Build familiarity with key data structures and algorithms.
- **Daily Routine:**
 - **LeetCode Topics:** Arrays, Strings, Linked Lists, Stacks & Queues.
 - Solve 2-3 easy problems daily from each of the above topics.
 - **Resources:** Watch foundational videos or read articles on data structures & algorithms.
- **GOAL:** Complete 25-30 easy problems.

Weeks 3-4: Intermediate Data Structures

- **Objective:** Solidify understanding of more advanced structures.
- **Daily Routine:**
 - **LeetCode Topics:** Hashmaps, Sets, Trees, Binary Search Trees (BST), and Heaps.
 - Solve 2 medium problems daily.
 - Focus on time/space complexity of each solution.
- **GOAL:** Complete 20-25 medium problems.

Weeks 5-6: Searching & Sorting

- **Objective:** Get comfortable with classic algorithmic approaches.
- **Daily Routine:**
 - **LeetCode Topics:** Binary Search, DFS, BFS, Sorting Algorithms (Merge Sort, Quick Sort).
 - Solve 2-3 problems daily, focusing on binary search and graph traversal techniques.
- **GOAL:** Complete 15-20 problems related to searching and sorting.

Weeks 7-8: Dynamic Programming

- **Objective:** Master dynamic programming (DP) concepts.
- **Daily Routine:**
 - **LeetCode Topics:** Simple DP problems like Fibonacci, Knapsack, Coin Change.
 - Solve 1-2 DP problems daily.
 - Build intuition by breaking down problems into subproblems and using memoization or tabulation.
- **GOAL:** Complete 15-20 DP problems.

Weeks 9-10: Advanced Topics

- **Objective:** Tackle more difficult topics like greedy algorithms and backtracking.
- **Daily Routine:**
 - **LeetCode Topics:** Greedy, Backtracking, and Bit Manipulation.
 - Solve 1-2 hard problems or 2 medium problems daily.
 - Understand problem-solving approaches that involve multiple techniques.
- **GOAL:** Complete 20+ advanced problems.

Weeks 11-12: Mock Interviews & Optimization

- **Objective:** Simulate real interview conditions and improve weak areas.
- **Daily Routine:**
 - **LeetCode Topics:** Review previously solved problems (focus on weak areas).
 - Participate in mock interviews via platforms like Pramp or LeetCode's mock interview section.
 - Solve 1-2 problems under timed conditions.
- **GOAL:** Refine problem-solving speed, optimize solutions, and practice communication.

IMPORTANT POINTS:

- **Weekends:** Reserve weekends for reviewing notes, analysing common interview patterns, and relaxing.
- **Tracking Progress:** Create a spreadsheet or use LeetCode's progress tracker to see improvement over time.
- **Consistency:** Ensure daily practice with steady increases in difficulty level to build confidence.

This strategy builds a strong foundation and progressively deepens your problem-solving abilities, crucial for technical interviews.