Introduction

- Yellow = Important & Popular
- Prioritize Problems You Struggle At
- Other Resources I Put Together:
 - o Coding Challenge Playbook
 - o Coding Challenge Cheat Sheet

Arrays & Hashing

Easy: 4	Medium: 7	Hard: 2
 Contains Duplicate Valid Anagram Two Sum Longest Palindrome 	 Group Anagrams Top K Frequent Elements Product of Array Except Self Encode & Decode Strings Longest Consecutive Sequence Subarrays Divisible By K Kth Largest Element in an Array 	 Longest Substring with At Least K Repeating Characters First Missing Positive (Cycle Sort)

Two Pointers

Easy	Medium	Hard
 Two Sum Valid Palindrome Merge Sorted Array Backspace String Compare Palindrome Linked List Merge Two Sorted List Best Time to Buy & Sell Stock Remove Duplicates from Sorted Array Remove Duplicates from Sorted List 	 Longest Substring Without Repeating Characters Longest Palindrome Substring Container With Most Water Remove Duplicates from Sorted List II 3Sum Interval List Intersections Find All Anagrams in a String Subarray Product Less Than K Minimum Size Subarray Sum Remove Nth Node From End of List 3Sum Closest Add Two Numbers II Shortest Unsorted Continuous Subarray Longest Repeating Character Replacement Sort Colors (Dutch National Flag Problem) 	 Trapping Rain Water Rotate Array Minimum Window Substring

Queues

Easy	Medium	Hard
1. Rank Transform of an Array	 K Closest Points to Origin Kth Largest Element in an Array Task Scheduler Binary Tree Level Order Traversal II 	 Sliding Window Maximum Constrained Subsequence Sum Minimum Cost to Hire K Workers Merge k Sorted Lists Find Median from Data Stream

Stacks

Easy	Medium	Hard
 Reverse Linked List Valid Parentheses 	 Smallest Subsequence of Unique Characters Min Stack Basic Calculator II Find the Most Competitive Subsequence Reorder List Daily Temperatures Next Greater Element II Asteroid Collision Minimum Remove to Make Valid Parentheses Decode String 	 Longest Valid Parentheses Create Maximum Number Number of Atoms Largest Rectangle in Histogram

Resources

• https://leetcode.com/tag/monotonic-stack/

BFS, DFS & Shortest Paths

Easy	Medium	Hard
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1. Subtree of Another Tree (KMP)	1. Cheapest Flights Within K Stops	1. Bus Routes
2. <u>Same Tree</u>	2. Path With Minimum Effort	
3. Symmetric Tree	3. Course Schedule II	
	4. Implement Trie (Trie)	
	5. Number of Islands	
	6. Number of Provinces	
	7. Populating Next Right Pointers in	
	Each Node	
	8. Shortest Path in Binary Matrix	
	9. All Paths From Source To Target	
	10. Rotten Oranges	
	11. N-ary Tree Level Order Traversal	
	12. Time Needed to Inform All	
	<u>Employees</u>	
	13. Binary Tree Right Side View	
	14. Most Stones Removed with Same	
	Row or Column	

Recursion & Backtracking

Easy	Medium	Hard
 Balanced Binary Tree Invert Binary Tree Diameter of Binary Tree Binary Tree Inorder Traversal 	 Permutations II Generate Parentheses Path Sum III Kth Smallest Element in a BST Binary Search Tree Iterator Subsets Subsets II Permutations Combination Sum Combination Sum II Letter Combinations of a Phone Number Word Search Linked List in Binary Tree Validate Binary Search Tree Palindrome Partitioning 	 Word Search II N-Queens

Dynamic Programming

Easy	Medium	Hard
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1. Repeated Substring Pattern	1. Arithmetic Slices	1. Super Egg Drop
2. Climbing Stairs	2. Jump Game II	2. Edit Distance
	3. House Robber II	3. Minimum Number of Refueling
	4. Longest Increasing Subsequence	<u>Stops</u>
	5. Number of Longest Increasing	
	<u>Subsequence</u>	
	6. Partition Equal Subset Sum	
	7. Maximum Product Subarray	
	8. Generate Parentheses	
	9. <u>Maximum Subarray</u>	
	10. <u>Jump Game</u>	
	11. House Robber	
	12. <u>Unique Paths</u>	
	13. Word Break	
	14. Longest Common Subsequence	
	15. <u>Delete Operation for Two Strings</u>	
	16. Coin Change	
	17. Integer Break	
	18. Best Time to Buy and Sell Stock	
	with Cooldown	
	19. Minimum Path Sum	
	20. Combination Sum IV	

Greedy

Easy	Medium	Hard
1. <u>Lemonade Change</u>	 Maximum Subarray Find Valid Matrix Given Row and Column Sums Smallest Range II Valid Parenthesis String Non-overlapping Intervals Increasing Triplet Subsequence Partition Labels 	1. <u>Couples Holding Hands</u>2. <u>Candy</u>

Intervals

Easy	Medium	Hard
Insert Interval Meeting Rooms	 Merge Intervals Meeting Rooms II Remove Covered Intervals 	1.

Binary Search

Easy	Medium	Hard
1. Binary Search	 Find Peak Element Search in Rotated Sorted Array Find Minimum in Rotated Sorted Array Find First and Last Position of Element in Sorted Array Search a 2D Matrix Search a 2D Matrix II My Calendar I Time Based Key Value Store 	 Median of Two Sorted Array Split Array Largest Sum

Linked List

Easy	Medium	Hard
 Reverse Linked List Merge Two Sorted Lists Intersection of Two Linked List Linked List Cycle 	 Odd Even Linked List Copy List with Random Pointer Linked List Cycle II Swap Nodes in Pairs Reorder List Remove Nth Node From End of List Sort List (Merge Sort) 	1. Reverse Nodes in k-Group

Math & Logic

Easy	Medium	Hard
 Single Number Number of 1 Bits Counting Bits Missing Number 	 Next Greater Element III Subarray Sum Equals K Integer Break Bitwise AND of Numbers Range Set Matrix Zeroes Sum of Two Integers 	1. Max Points on a Line

Design

Easy	Medium	Hard

1. Implement Stack Using Queues	1. LRU Cache	 Dinner Plate Stacks
2. Implement Queue Using Stacks	2. Design Add and Search Words	
3. Design HashMap	Data Structure	
	3. <u>Design Circular Queue</u>	
	4. Seat Reservation Manager	

Graphs

Easy	Medium	Hard
1.	 Is Graph Bipartite? 	1.

Others

Easy	Medium	Hard
 Shuffle an Array (Fisher Yates Algorithm) Majority Element (Boyer-Moore Algorithm) Monotonic Array Range Sum Query 2D - Immutable Insert Delete GetRandom O(1) Word Pattern 	1.	1.