

CheatSheet: LeetCode Common Templates & Common Code Problems

INTERVIEW

- PDF Link: [cheatsheet-leetcode-A4.pdf](#), Category: interview
- Blog URL: <https://cheatsheet.dennyzhang.com/cheatsheet-leetcode-A4>
- Related posts: CheatSheet: System Design For Job Interview, [#denny-cheatsheets](#)

File me Issues or star this repo.

1.1 Reference

Name	Summary
Cheatsheet	CheatSheet: Leetcode For Code Interview, CheatSheet: Common Code Problems & Follow-ups
Cheatsheet	CheatSheet: System Design For Job Interview, CheatSheet: SRE/DevOps/Sysadmin
Cheatsheet	CheatSheet: Behavior Questions For Coder Interview
Leetcode summary	Link: Top Google Questions, Link: Top 100 Liked Questions, Link: Top Interview Questions
Leetcode summary	GitHub: kdn251/interviews , Github: Algorithms-and-Coding-Interviews
YouTube	How to: Work at Google - Example Coding/Engineering Interview, lee 215, Aoxiang Cui, happygirlzt
Online test websites	hihocoder.com, codeforces.com, spoj.com, Google - codejam, hackerrank.com
Online test websites	hackerrank - hard, poj.org, acm.hdu.edu.cn, acm.zju.edu.cn, acm.timus.ru, uva.onlinejudge.org
visualgo	visualizing data structures and algorithms through animation
Reference	geeksforgeeks.org, Youtube: Abdul Bari - Algorithm
Reference	COS 423 Theory of Algorithms, 6.006: Introduction to Algorithms - MIT

1.2 Top 25 Code Templates

Num	Category/Tag	Example
1	#bfs	Leetcode: Max Area of Island
2	#dfs	LeetCode: Surrounded Regions
3	#binarysearch	LeetCode: Search Insert Position
4	#interval, #mergelist	LeetCode: Interval List Intersections, Leetcode: Merge Intervals
5	#twopointer	LeetCode: Reverse Words in a String II, LeetCode: Two Sum
6	#twopointer, #mergetwolist	LeetCode: Merge Sorted Array, Leetcode: Container With Most Water
7	#backtracking, #subset	LeetCode: Subsets II
8	#linkedlist, #presum	LeetCode: Remove Zero Sum Consecutive Nodes from Linked List
9	#unionfind	LeetCode: Accounts Merge
10	#trie	LeetCode: Longest Word in Dictionary
11	#stack	LeetCode: Valid Parentheses
12	#heap	LeetCode: Top K Frequent Elements
13	#baseconversion	LeetCode: Base 7, LeetCode: Convert to Base -2
14	#interval	LeetCode: Meeting Rooms II, LeetCode: My Calendar I
15	#monotone	LeetCode: Daily Temperatures
16	#knapsack	LeetCode: Coin Change
17	#sortbyfunction	LeetCode: Relative Sort Array
18	#slidingwindow	LeetCode: Longest Substring Without Repeating Characters
19	#editdistance, #dynamicprogramming	LeetCode: Longest Common Subsequence
20	#topologicalsort	LeetCode: Course Schedule
21	#bfs, bidirectional bfs	LeetCode: Word Ladder
22	#monotonicfunc, #binarysearch	LeetCode: Kth Smallest Number in Multiplication Table
23	#divideconquer, #mergesort	Leetcode: Count of Smaller Numbers After Self
24	#linesweep	Leetcode: The Skyline Problem, Leetcode: Employee Free Time
25	#concurrency	LeetCode: Web Crawler Multithreaded

<https://raw.githubusercontent.com/dennyzhang/cheatsheet.dennyzhang.com/master/cheatsheet-leetcode-A4/datastructre.png>

1.3 Typical Followup

Num	Name	Summary
1	From 1-D array to 2-D matrix	LeetCode: Number of Submatrices That Sum to Target
2	Instead of $O(n)$ space, use $O(1)$ space	LeetCode: Find Mode in Binary Search Tree
3	How to do it with multi-threading	LeetCode: Web Crawler Multithreaded
4	Data values have different ranges	LeetCode: Find Median from Data Stream
5	Instead of a fixed list, it's an ongoing data stream	Leetcode: Flatten 2D Vector

1.4 Top 30 Graph Problems

Num	Problem	Summary
1	Graph Connectivity: Count islands in a 2D matrix	LeetCode: Number of Islands, LeetCode: Island Perimeter
2	Get the size of the largest island	LeetCode: Max Area of Island
3	Cycle detection in a directed graph	LeetCode: Redundant Connection II
4	Detect all cycles in a directed graph	LeetCode: Find Eventual Safe States
5	Whether a graph is a tree	LeetCode: Graph Valid Tree
6	Update a specific region	LeetCode: Flood Fill
7	Graph traversal from borders	Leetcode: Surrounded Regions
8	Number of Distinct Islands	LeetCode: Number of Distinct Islands
9	Mark levels	LeetCode: 01 Matrix
10	Diameter of a tree in graph theory	LeetCode: Tree Diameter
11	Duplicate edges	LeetCode: Reconstruct Itinerary
12	Find a certain node in a graph	LeetCode: Find the Celebrity
13	Graph with next steps by a trie	Leetcode: Word Search II
14	Coloring graph	LeetCode: Minesweeper
15	Find a certain path from source to destination in a graph	LeetCode: Path With Maximum Minimum Value
16	Find the shortest distance from point1 to point2	LeetCode: Word Ladder, LeetCode: Sliding Puzzle
17	Find shortest distance in a weighted graph	LeetCode: Find the City With the Smallest Number of Neighbors
18	Find all minimum paths from point1 to point2	LeetCode: Word Ladder II
19	All Paths from Source Lead to Destination	LeetCode: All Paths from Source Lead to Destination
20	Node connectivity problem for a sparse 2D matrix	LeetCode: Escape a Large Maze
21	Bricks Falling When Hit	LeetCode: Bricks Falling When Hit
22	Bridges in a connected graph - Tarjan's algorithm	LeetCode: Critical Connections in a Network
23	Valid & Invalid moves	LeetCode: Alphabet Board Path
24	Move in different directions: 4 directions, 8 directions	LeetCode: Queens That Can Attack the King
25	String Transforms Into Another String	LeetCode: String Transforms Into Another String
26	Candidates are (i, j, r), instead of (i, j)	LeetCode: Shortest Path in a Grid with Obstacles Elimination
27	Clone Graph	Leetcode: Clone Graph
28	Array problem with hidden graph	LeetCode: Number of Squareful Arrays
29	Is Graph Bipartite	LeetCode: Is Graph Bipartite
30	Search an infinite graph	LeetCode: Escape a Large Maze

1.5 Top 25 Binarysearch Problems

Num	Problem	Summary
1	Find whether target in the range	LeetCode: Guess Number Higher or Lower
2	Find the first target with duplicates	LeetCode: First Bad Version
3	Find the last target with duplicates	LeetCode: Longest Repeating Substring
4	Find the first and last target	LeetCode: Find First and Last Position of Element in Sorted Array
5	Search Insert Position	LeetCode: Search Insert Position, LeetCode: Time Based Key-Value Store
6	Mountain Array	LeetCode: Peak Index in a Mountain Array
7	Missing Element in Sorted Array	LeetCode: Missing Element in Sorted Array
8	Find smallest letter greater than target	LeetCode: Find Smallest Letter Greater Than Target
9	Random Point in Non-overlapping Rectangles	LeetCode: Random Point in Non-overlapping Rectangles
10	Binary search on monotonic function	LeetCode: Sqrt(x), LeetCode: Capacity To Ship Packages Within D Days
11	Place k elements to minimize max distance	LeetCode: Minimize Max Distance to Gas Station
12	Decide a number	LeetCode: Split Array Largest Sum
13	Kth Smallest Number in Multiplication Table	LeetCode: Kth Smallest Number in Multiplication Table
14	Search for a Range	LeetCode: Search for a Range
15	Dynamic programming with binary search	LeetCode: Maximum Profit in Job Scheduling
16	Monotone stack with binary search	LeetCode: Maximum Width Ramp
17	Find Right Interval	LeetCode: Find Right Interval
18	Patient sort	LeetCode: Longest Increasing Subsequence
19	Find Minimum in Rotated Sorted Array	LeetCode: Find Minimum in Rotated Sorted Array
20	Find Minimum in Rotated Sorted Array II	LeetCode: Find Minimum in Rotated Sorted Array II
21	Maximum Profit in Job Scheduling	LeetCode: Maximum Profit in Job Scheduling
22	Tweet Counts Per Frequency	LeetCode: Tweet Counts Per Frequency
23	Median of Two Sorted Arrays	LeetCode: Median of Two Sorted Arrays

1.6 Top 25 Dynamic Programming Problems

Num	Problem	Time Complexity	Summary
1	Maximum subarray problem - Kadane's algorithm	$O(n)$	LeetCode: Maximum Subarray
2	LIS - Longest increasing subsequence	$O(n)$	LeetCode: Longest Increasing Subsequence
3	LCS - Longest Common Subsequence	$O(n*m)$	LeetCode: Longest Common Subsequence
4	LPS - Longest Palindromic Subsequence	$O(n)$	LeetCode: Longest Palindromic Subsequence
5	Longest Palindromic Substring	$O(n^2)$	LeetCode: Longest Palindromic Substring
6	Edit distance of two strings	$O(n^2)$	LeetCode: Edit Distance
7	Maximum profits with certain costs	$O(n^2)$	LeetCode: 4 Keys Keyboard
8	Count of distinct subsequence	$O(n)$	LeetCode: Distinct Subsequences II
9	Count out of boundary paths in a 2D matrix	$O(n*m*N)$	LeetCode: Out of Boundary Paths
10	Regular Expression Matching	$O(n*m)$	LeetCode: Regular Expression Matching
11	Wildcard Matching	$O(n*m)$	LeetCode: Wildcard Matching
12	Multiple choices for each step	$O(n*m)$	LeetCode: Filling Bookcase Shelves
13	Knapsack: put array to bag A, B or discard it	$O(n*s)$	LeetCode: Tallest Billboard
14	Knapsack problem to maximize benefits	$O(n*s)$	LeetCode: Coin Change
15	Minimum Cost to Merge Stones	$O(n^3)$	LeetCode: Minimum Cost to Merge Stones
16	DP over interval: Minimum-weight triangulation	$O(n^3)$	LeetCode: Minimum Score Triangulation of Polygon
17	Burst Balloons	$O(n^3)$	LeetCode: Burst Balloons
18	Remove Boxes	$O(n^4)$	LeetCode: Remove Boxes
19	Largest Sum of Averages	$O(k*n*n)$	LeetCode: Largest Sum of Averages
20	Uncrossed Lines	$O(n*m)$	LeetCode: Uncrossed Lines
21	Binary Trees With Factors	$O(n^2)$	LeetCode: Binary Trees With Factors

1.7 Top 15 BinaryTree Problems

Num	Problem	Summary
1	Binary Tree Level Order Traversal	LeetCode: Binary Tree Right Side View
2	Get binary tree height, width	LeetCode: Balanced Binary Tree
3	LCA - Lowest Common Ancestor of a binary Tree	LeetCode: Lowest Common Ancestor of a Binary Tree
4	Validate Binary Search Tree	LeetCode: Validate Binary Search Tree
5	Construct binary tree	LeetCode: Construct Binary Tree from Preorder and Postorder Traversal
6	Distribute Coins in Binary Tree	LeetCode: Distribute Coins in Binary Tree
7	Binary Tree Vertical Order Traversal	LeetCode: Binary Tree Vertical Order Traversal
8	Verify Preorder Sequence in Binary Search Tree	LeetCode: Verify Preorder Sequence in Binary Search Tree
9	Recursive + Greedy	LeetCode: Binary Tree Coloring Game
10	Binary tree + greedy	LeetCode: Binary Tree Cameras

1.8 Top 10 String Problems

Num	Problem	Summary
1	Edit distance of two strings	LeetCode: Edit Distance
2	Remove duplicate letters	Remove Duplicate Letters
3	Word ladder	LeetCode: Word Ladder
4	lrs - Longest repeating substring	LeetCode: Longest Repeating Substring
5	Remove Comments	LeetCode: Remove Comments
6	Split Concatenated Strings	LeetCode: Split Concatenated Strings
7	Vowel Spellchecker	LeetCode: Vowel Spellchecker
8	Lexicographically minimal string rotation	LeetCode: Last Substring in Lexicographical Order
9	String Transforms Into Another String	LeetCode: String Transforms Into Another String
10	Find the Closest Palindrome	LeetCode: Find the Closest Palindrome

1.9 Top 5 Stack Problems

Num	Problem	Summary
1	Recursive deletion during pushing process	LeetCode: Verify Preorder Serialization of a Binary Tree
2	Examine whether the input string is valid	LeetCode: Asteroid Collision
3	When pushing to stack, whether delayed push	LeetCode: Decode String

1.10 Top 5 Array Problems

Num	Problem	Summary
1	Transpose Matrix	LeetCode: Transpose Matrix
2	Largest 1-Bordered Square	LeetCode: Largest 1-Bordered Square
3	Alphabet Board Path	LeetCode: Alphabet Board Path
4	Set Mismatch	LeetCode: Set Mismatch
5	Majority Element	LeetCode: Majority Element

1.11 Top 5 Linkedlist Problems

Num	Problem	Summary
1	Merge k Sorted Lists	LeetCode: Merge k Sorted Lists
2	Detect cycle for a linked list	LeetCode: Linked List Cycle
3	Swap odd with even nodes	Leetcode: Swap Nodes in Pairs
4	LFU cache with double linkedlist	LeetCode: LFU Cache

1.12 Top 10 Sliding Window Problems

Num	Problem	Summary
1	Sliding window with fixed size	LeetCode: Find All Anagrams in a String
2	Sliding window with non-decreasing size	LeetCode: Max Consecutive Ones III
3	How to initialize the time window?	LeetCode: Minimum Swaps to Group All 1's Together
4	Sliding window with non-decreasing size	LeetCode: Max Consecutive Ones III
5	Move two pointers: two loop vs One loop	LeetCode: Longest Substring Without Repeating Characters
6	Inspiring sliding window problem	LeetCode: Moving Stones Until Consecutive II
7	Sliding window with adjustable size	
8	Move pointer1 to match the other, or the other way around	

1.13 Top 10 Math Problems

Num	Problem	Summary
1	Check prime - Sieve of Eratosthenes	LeetCode: Count Primes
2	Check leap year	LeetCode: Day of the Week
3	GCD	LeetCode: Fraction Addition and Subtraction
4	Overlapping area of two rectangles	LeetCode: Rectangle Area
5	Rotate Array by k steps	LeetCode: Rotate Array
6	Mapping data range of getRand algorithm	LeetCode: Implement Rand10() Using Rand7()
7	Deal with float	LeetCode: Minimize Max Distance to Gas Station
8	Sum of Subsequence Widths	LeetCode: Sum of Subsequence Widths
9	Reduce $f(x, y)$ to $g(x)$	LeetCode: Maximum of Absolute Value Expression
10	Remove 9	LeetCode: Remove 9
11	Fraction to Recurring Decimal	LeetCode: Fraction to Recurring Decimal
12	Check if two line segments intersect	

1.14 Top 10 Greedy Problems

Num	Problem	Summary
1	Next Permutation	LeetCode: Next Permutation
2	Split Array into Consecutive Subsequences	LeetCode: Split Array into Consecutive Subsequences
3	Remove duplicate letters	Remove Duplicate Letters
4	Bag of Tokens	LeetCode: Bag of Tokens
5	Two City Scheduling	LeetCode: Two City Scheduling
6	Split Concatenated Strings	LeetCode: Split Concatenated Strings
7	Jump Game II	LeetCode: Jump Game II
8	Delete Columns to Make Sorted II	LeetCode: Delete Columns to Make Sorted II

1.15 Top 5 Trie Problems

Num	Problem	Summary
1	Extra datastructure in trie to save caculation	LeetCode: Word Search II
2	Trie for bit manipulation	LeetCode: Maximum XOR of Two Numbers in an Array.
3	Fuzzy match for trie tree	LeetCode: Implement Magic Dictionary

1.16 Top 5 Union Find Problems

Num	Problem	Summary
1	Union find for weighted graph	LeetCode: Evaluate Division
2	Union find: connect groups and merge node count	LeetCode: Bricks Falling When Hit

1.17 Top 5 Heap/Priority Queue Problems

Num	Problem	Summary
1	Meeting Rooms II	LeetCode: Meeting Rooms II
2	Task Scheduler	LeetCode: Task Scheduler
3	Last Stone Weight	LeetCode: Last Stone Weight
4	The Skyline Problem	LeetCode: The Skyline Problem

1.18 Top 5 Monotone Stack/Queue Problems

Num	Problem	Summary
1	Use monotone stack to find next bigger value	LeetCode: Next Greater Element I
2	Monotone stack for consecutive subarrays	LeetCode: Online Stock Span, LeetCode: Sum of Subarray Minimums
3	Shortest Subarray with Sum at Least K	LeetCode: Shortest Subarray with Sum at Least K
4	Monotone queue	LeetCode: Constrained Subset Sum, LeetCode: Sliding Window Maximum

1.19 Top 10 Backtracking Problems

Num	Problem	Summary
1	Generate unique permutation	LeetCode: Permutations II
2	Permutation: All elements must take	LeetCode: Pyramid Transition Matrix
3	Combination: All elements can take or don't take	LeetCode: Subsets II
4	Expression Add Operators	LeetCode: Expression Add Operators
5	Permutation vs Combination	LeetCode: Campus Bikes II
6	Define dfs backtracking function	LeetCode: Verbal Arithmetic Puzzle

1.20 Top 20 Object-Oriented Design Problems

Num	Problem	Example
1	Cache	LeetCode: LRU Cache, LeetCode: LFU Cache, LeetCode: All O'one Data Structure
2	Throttling	LeetCode: Design Hit Counter, LeetCode: Logger Rate Limiter
3	Design Log Storage System	LeetCode: Design Log Storage System
4	Linked List with random access	LeetCode: Design Linked List
5	Max Stack	LeetCode: Max Stack
6	Design HashMap	LeetCode: Design HashMap
7	Circular Queue	LeetCode: Design Circular Queue, LeetCode: Design Circular Deque
8	Trie tree	LeetCode: Implement Trie (Prefix Tree), LeetCode: Add and Search Word
9	Get Median	LeetCode: Find Median from Data Stream
10	Range Sum Query	LeetCode: Range Sum Query - Mutable, LeetCode: Range Sum Query - Immutable
11	Design File System	LeetCode: Design File System
12	Tree Iterator	LeetCode: Binary Search Tree Iterator
13	String Iterator	LeetCode: Design Compressed String Iterator
14	ZigZag Iterator	LeetCode: Zigzag Iterator
15	Insert Delete GetRandom O(1)	LeetCode: Insert Delete GetRandom O(1)
16	Insert Delete GetRandom O(1) II	LeetCode: Insert Delete GetRandom O(1) - Duplicates allowed
17	Random Pick with Blacklist	LeetCode: Random Pick with Blacklist

1.21 Top 50 General Problems

Num	Problem	Example
1	Longest substring with at most K distinct characters	LeetCode: Longest Substring with At Most K Distinct Characters
2	Longest subarray with maximum K 0s	LeetCode: Max Consecutive Ones III
3	Separate a list into several groups	LeetCode: Summary Ranges
4	Split string	LeetCode: License Key Formatting
5	TopK problem	LeetCode: Top K Frequent Elements, LeetCode: Find K Pairs with Smallest Sums
6	Longest Palindromic Subsequence	LeetCode: Longest Palindromic Subsequence
7	Sort one array based on another array	LeetCode: Relative Sort Array
8	Range update with lazy propagation	LeetCode: Corporate Flight Bookings
9	Sliding window with lazy removal	LeetCode: Sliding Window Median
10	Get all possibilities of subsets	LeetCode: Subsets II, LeetCode: Subsets
11	Choose k numbers from a list	LeetCode: Combination Sum II
12	Combination from multiple segments	LeetCode: Letter Combinations of a Phone Number
13	Remove nodes from linked list	LeetCode: Remove Zero Sum Consecutive Nodes from Linked List
14	Two pointers	LeetCode: Two Sum
15	Buy stock for maximum profit list	LeetCode: Best Time to Buy and Sell Stock
16	Prefix search from a list of strings	LeetCode: Longest Word in Dictionary
17	Factor Combinations	LeetCode: Factor Combinations
18	Permutation without duplicates	LeetCode: Palindrome Permutation II
19	Convert a number into negative base representation	LeetCode: Convert to Base -2
20	Network connectivity	LeetCode: Friend Circles
21	Build relationship among different sets	LeetCode: Accounts Merge
22	Find the next greater value	LeetCode: Daily Temperatures
23	Meeting conflict	LeetCode: Meeting Rooms, LeetCode: Course Schedule
24	Minimum conference rooms	LeetCode: Meeting Rooms II
25	Quick slow pointers	LeetCode: Middle of Linked List
26	Longest Repeating Character with at most K changes	LeetCode: Longest Repeating Character Replacement
27	Prefix and Suffix Search	LeetCode: Prefix and Suffix Search
28	Remove duplicate letters	LeetCode: Remove Duplicate Letters
29	Beautiful array	LeetCode: Beautiful Array
30	Whether 132 pattern exists in array	LeetCode: 132 Pattern
31	Detect conflicts of intervals	LeetCode: Non-overlapping Intervals
32	Segment tree: solves range query problems quickly	LeetCode: Range Sum Query - Mutable
33	Find best meeting points for a list of nodes	LeetCode: Best Meeting Point
34	Find the size of longest wiggle subsequence	LeetCode: Wiggle Subsequence
35	Sequence reconstruction	LeetCode: Sequence Reconstruction
36	Construct Binary Tree from String	Construct Binary Tree from String
37	Use more space to save time	LeetCode: Min Stack
38	Min max game problems	LeetCode: Predict the Winner, LeetCode: Stone Game
39	Shortest Subarray with Sum at Least K	LeetCode: Shortest Subarray with Sum at Least K
40	Wiggle sort	LeetCode: Wiggle Sort II
41	Array compressed storage	LeetCode: Design Tic-Tac-Toe
42	Dead lock: the Dining Philosophers	LeetCode: The Dining Philosophers
43	Maintain the order	LeetCode: Building H2O
44	Int to string or string to int	
45	Expression Add Operators	LeetCode: Expression Add Operators
46	Merge k Sorted Lists	LeetCode: Merge k Sorted Lists
47	Trapping Rain Water	LeetCode: Trapping Rain Water

1.22 Basic Thinking Methodologies

Num	Name	Summary
1	Trial and error	
2	Divide and Conquer	
3	Start with naive algorithm, then identify useless steps	

1.23 Tips: Think From The Other Direction

Num	Name	Summary
1	In graph, instead of deleting edges, add edge in reverse	LeetCode: Bricks Falling When Hit
2	Instead of BFS from empty to islands, do the otherwise	LeetCode: As Far from Land as Possible
3	Treat each point as the last item, instead of the first	LeetCode: Burst Balloons
4	Avoid deleting element from hashmaps	

1.24 Common Tips For Clean Code

Num	Name	Summary
1	Calculate sum of a range quickly	#presum, LeetCode: Maximum Subarray
2	Move in four directions for a matrix	LeetCode: Sliding Puzzle
3	Split string by multiple separators	LeetCode: Brace Expansion
4	Add a dummy tailing element to simplify code	LeetCode: Brace Expansion
5	Fast slow pointers	LintCode: Middle of Linked List
6	Deep copy an array	LeetCode: Combination Sum
7	Use arrays instead of hashmaps, if possible	LeetCode: Number of Days in a Month
8	Control the order of dfs	LeetCode: Subsets II
9	Avoid inserting into the head of an array	LeetCode: Path In Zigzag Labelled Binary Tree
10	From right to left, instead of left to right	LeetCode: Merge Sorted Array
11	Think the other way around	Add Items vs Remove Items, Increase Counter
12	Avoid unnecessary if...else...	res[j] = (diff/2 <= k), LeetCode: Can Make Palindrome
13	To get the case of K, solve: at most K - at most (K-1)	LeetCode: Subarrays with K Different Integers
14	Instead of deleting entry from hashmap, decrease counter	LeetCode: Longest Substring with At Most K Distinct Characters
15	Find the max/min; If not found, return 0	LeetCode: Minimum Area Rectangle
16	With helper function vs without helper function	LeetCode: Longest Repeating Character Replacement
17	Instead of adding a character, try to delete one	LeetCode: Longest String Chain
18	#roundtrip: from left to right, then right to left	LeetCode: Shortest Distance to a Character
19	Delayed calculation to simplify the code	LeetCode: Interval List Intersections
20	Instead of removing, add padding elements	LeetCode: Duplicate Zeros
21	Initialize array with n+1 length to simplify code	LeetCode: Range Addition
22	Look for off-by-one errors, sometimes use i+1<len(l) vs i<len(l)	LeetCode: Previous Permutation With One Swap
23	Hashmap can reduce calculation, but may complicate things too	LeetCode: Maximum Frequency Stack
24	Sliding window to get the longest size of subarray	LeetCode: Max Consecutive Ones III
25	In matrix dfs, change cell to impossible value to avoid state hashmap	LeetCode: Word Search II
26	For palindrome check, check the whole string, instead of left half	LeetCode: Longest Chunked Palindrome Decomposition
27	Use queue to keep flipping the orders	LeetCode: Zigzag Iterator
28	Find a pair with sum meets some requirements	LeetCode: Two Sum
29	Add a dummy head node for linked list	LeetCode: Reverse Linked List
30	When count sort, use one array instead of two	LeetCode: Minimum Number of Steps to Make T
31	Hide details which are irrelevant	
32	One pass instead of two pass	
33	Avoid unnecessary precheck	
34	Reduce search space	Leetcode: Bulb Switcher II

1.25 More Resources

License: Code is licensed under MIT License.

https://en.wikipedia.org/wiki/Data_structure

<https://www.cs.princeton.edu/~rs/AlgsDS07/>

<https://www.geeksforgeeks.org/top-10-algorithms-in-interview-questions/>