

# 1 CheatSheet: Common Code Problems & Follow-ups

## INTERVIEW

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

File me Issues or star this repo.

## 1.1 50 Typical Code Problems & Follow-ups

Num	Category/Tag	Example
1	#atmostkdistinct, #string	Substring with at most k distinct characters
2	#twosum, #array	TwoSum Problems & Follow-Up
3	#maxsubarraysum, #array	Maximum subarray problem
4	#nextpermutation, #string	Get the next permutation of an array
5	#editdistance, #string	Word Distance & Follow-up
6	#baseconversion	Base Conversion Problems & Follow-Up
7	#presum, #array	Caculate sum of a range quickly
8	#fibonacci	Fibonacci Problems & Follow-Up
9	#mergelist	Merge K Sorted List Problems & Follow-up
10	#sortedmatrix	Sorted 2D Matrix Problems & Follow-up
11	#endswith	Endswith Problems & Follow-up
12	#island, #dfs, #bfs, #unionfind	Island Problems & Follow-up
13	#matrixtraversal, #array	Matrix Traversal & Follow-up
14	#rangesum	Caculate range sum of a slice
15	#reverseitem	Reverse List/String & Follow-up
16	#topk, #heap	Top k elements of a problem domain
17	#subsequence	Find Subsequence In Strings & Follow-up
18	#lis	Longest increasing subsequence & Follow-up
19	#lcs	Longest common subsequence & Follow-up
20	#findduplicates	Find duplicates from a list & Follow-up
21	#coin	Coin Problems & Follow-Up
22	#wiggle	Wiggle Array Problems & Follow-up
23	#groupelements	Seperate a list into several groups
24	#treetraversal, #binarytree	Tree Traversal & Follow-up
25	#calculator	Calculator & Follow-up
26	#meetingconflict	Meeting Conflict Problems & Follow-up
27	#meetingpoint	Meeting Point Problems & Follow-up
28	#convertids	Convert Data Structure Problems & Follow-Up
29	#expression	Expression Problems & Follow-Up
30	#frogjump	Frog Jump Game & Follow-up
31	#houserobber	House Robber & Follow-up
32	#ipaddress	IP Address Problems & Follow-Up
33	#paintfence	Paint Fence & Follow-up
34	#poison	Poison Problems & Follow-up
35	#slidingpuzzle	Sliding Puzzle & Follow-up
36	#trappingrain	Trapping Rain & Follow-up
37	#parentheses	Parentheses problems & Follow-up
38	#buystock	Buystock Problems & Follow-Up
39	#countdistinctmoves	Count of distinct moves Problems & Follow-Up
40	#maxprofitwithcost	Maximum profits with certain costs Problems & Follow-up
41	#constructstring	Construct string Problems & Follow-up
42	#constructarray	Construct array Problems & Follow-up
43	#colorgraph	Coloring graph nodes Problems & Follow-up
44	#graphchange cell	Change cells of graph Problems & Follow-up
45	#splitarray	Split Array Problems & Follow-up
46	#multiplechoices	Multiple Choices At Each Step Problems & Follow-Up
47	#rollinghash	Rolling Hash Problems & Follow-up
48	#lfu	LFU - Least Frequently Used Cache Problems & Follow-up
49	#geometry	Geometry Problems & Follow-up
50	#reachpoint	Reach point Problems & Follow-Up
51	#getmedian	Get Median Problems & Follow-Up
52	#mountainarray	Mountain Array Problems & Follow-Up
53	#interval dp	Dynamic Programming On Interval Problems & Follow-up

## 1.2 Review Problems By Category

Num	Name	Summary
1	#binarytree	Review: Binary Tree Problems
2	#linkedlist	Review: Linked List Problems
3	#binarysearch	Review: Binary Search Problems
4	#dynamicprogramming	Review: Dynamic Programming Problems
5	#twopointer	Review: TwoPointers Problems
6	#trie	Review: Trie Tree Problems
7	#string	Review: String Problems
8	#stack	Review: Stack Problems
9	#bfs	Review: BFS Problems
10	#dfs	Review: DFS Problems
11	#array	Review: Array/SubArray Problems
12	#hashmap	Review: Hashmap Problems
13	#minmax	Review: minmax Problems
14	#monotone	Review: Monotone Stack Or Monotone Queue Problems
15	#knapsack	Review: Knapsack Problems
16	#heap	Review: Heap Problems
17	#divideconquer	Review: Divide And Conquer Problems
18	#backtracking	Review: Backtracking Problems
19	#unionfind	Review: Union Find Problems
20	#greedy	Review: Greedy Problems
21	#gcd	Review: GCD Problems
22	#interval	Review: Interval Problems
23	#combination	Review: Combinations and Permutations Problems
24	#sql	Review: SQL Problems
25	#sqrt	Review: sqrt Problems
26	#bucketsort	Review: Bucketsort Problems
27	#countsort	Review: Countsort Problems
28	#topologicalsort	Review: Topological Sort Problems
29	#random	Review: Random Problems
30	#rectangle	Review: Rectangle Problems
31	#concurrency	Review: Concurrency Problems

## 1.3 More Resources

License: Code is licensed under MIT License.