

# 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](#)

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## 1.1 Review Problems By Category

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



## 1.2 70 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	#findduplicates	Find duplicates from a list & Follow-up
19	#lis	Longest increasing subsequence & Follow-up
20	#lcs	Longest common subsequence & Follow-up
21	#coin	Coin Problems & Follow-Up
22	#frogjump	Frog Jump Game & Follow-up
23	#houserobber	House Robber & Follow-up
24	#paintfence	Paint Fence & Follow-up
25	#rectangle	<a href="https://code.dennyzhang.com/followup-rectangle">https://code.dennyzhang.com/followup-rectangle</a>
26	#geometry	Geometry Problems & Follow-up
27	#reachpoint	Reach point Problems & Follow-Up
28	#getmedian	Get Median Problems & Follow-Up
29	#wiggle	Wiggle Array Problems & Follow-up
30	#groupelements	Seperate a list into several groups
31	#treetraversal, #binarytree	Tree Traversal & Follow-up
32	#calculator	Calculator & Follow-up
33	#meetingconflict	Meeting Conflict Problems & Follow-up
34	#meetingpoint	Meeting Point Problems & Follow-up
35	#convertids	Convert Data Structure Problems & Follow-Up
36	#expression	Expression Problems & Follow-Up
37	#ipaddress	IP Address Problems & Follow-Up
38	#poison	Poison Problems & Follow-up
39	#slidingpuzzle	Sliding Puzzle & Follow-up
40	#trappingrain	Trapping Rain & Follow-up
41	#parentheses	Parentheses problems & Follow-up
42	#buystock	Buystock Problems & Follow-Up
43	#countdistinctmoves	Count of distinct moves Problems & Follow-Up
44	#maxprofitwithcost	Maximum profits with certain costs Problems & Follow-up
45	#constructstring	Construct string Problems & Follow-up
46	#constructarray	Construct array Problems & Follow-up
47	#colorgraph	Coloring graph nodes Problems & Follow-up
48	#graphchange cell	Change cells of graph Problems & Follow-up
49	#splitarray	Split Array Problems & Follow-up
50	#multiplechoices	Multiple Choices At Each Step Problems & Follow-Up
51	#rollinghash	Rolling Hash Problems & Follow-up
52	#lfu	LFU - Least Frequently Used Cache Problems & Follow-up
53	#mountainarray	Mountain Array Problems & Follow-Up
54	#interval dp	Dynamic Programming On Interval Problems & Follow-up
55	#treedp	Dynamic Programming On Binary Tree Problems & Follow-up
56	#possibilities	Possibilities Problems & Follow-up
57	#uglynumber	Ugly Number Problems & Follow-up
58	#prime	Prime Problems & Follow-up
59	#geometry	Geometry Problems & Follow-up
60	#palindrome	Palindrome Problems & Follow-Up

## 1.3 More Resources

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