## 1 CheatSheet: Common Code Problems & Follow-ups

INTERVIEW

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- PDF Link: cheatsheet-followup-A4.pdf, Category: interview
- Blog URL: https://cheatsheet.dennyzhang.com/cheatsheet-followup-A4
- $\bullet$ Related posts: Cheat Sheet: System Design For Job Interview, #denny-cheat sheets

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## 1.1 Review Problems By Category

Num	Name	Summary
1	#binarytree	Review: Binary Tree Problems
2	# linked list	Review: Linked List Problems
3	#binarysearch	Review: Binary Search Problems
4	#dynamic programming	Review: Dynamic Programming Problems
5	$\# { m twopointer}$	Review: TwoPointers Problems
6	$\# { m trie}$	Review: Trie Tree Problems
7	$\#\mathrm{string}$	Review: String Problems
8	$\#\mathrm{stack}$	Review: Stack Problems
9	#bfs	Review: BFS Problems
10	$\#\mathrm{dfs}$	Review: DFS Problems
11	#array	Review: Array/SubArray Problems
12	# hashmap	Review: Hashmap Problems
13	$\# \mathrm{minimax}$	Review: minimax Problems
14	# monotone	Review: Monotone Stack Or Monotone Queue Problems
15	$\#\mathrm{knapsack}$	Review: Knapsack Problems
16	$\#\mathrm{heap}$	Review: Heap Problems
17	#divideconquer	Review: Divide And Conquer Problems
18	# backtracking	Review: Backtracking Problems
19	$\# \mathrm{unionfind}$	Review: Union Find Problems
20	#greedy	Review: Greedy Problems
21	$\#\mathrm{gcd}$	Review: GCD Problems
22	# interval	Review: Interval Problems
23	# combination	Review: Combinations and Permutations Problems
24	$\#\mathrm{sql}$	Review: SQL Problems
25	#sqrt	Review: sqrt Problems
26	#bucketsort	Review: Bucketsort Problems
27	# countsort	Review: Countsort Problems
28	# topological sort	Review: Topological Sort Problems
29	$\#\mathrm{random}$	Review: Random Problems
30	#concurrency	Review: Concurrency Problems
31	$\#\mathrm{mergesort}$	Review: Mergesort Problems
32	#bitmanipulation	Review: Bit manipulation problems
33	#manydetails	Review: Problems With Many Details

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## 1.2 70 Typical Code Problems & Follow-ups

Vum	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 Problems & Follow-up
24	#rectangle	Rectangle Problems & Follow-up
25	$\# { m triangle}$	Triangle Problems & Follow-up
26	$\#  ext{geometry}$	Geometry Problems & Follow-up
27	$\# { m reachpoint}$	Reach point Problems & Follow-Up
28	$\# { m getmedian}$	Get Median Problems & Follow-Up
29	#wiggle	Wiggle Array Problems & Follow-up
30	$\# { m groupelements}$	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	#convertds	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
	#poison #slidingpuzzle	<u>-</u>
39	,,	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	$\# { m constructarray}$	Construct array Problems & Follow-up
47	$\#  ext{colorgraph}$	Coloring graph nodes Problems & Follow-up
48	$\# { m graph change cell}$	Change cells of graph Problems & Follow-up
49	#splitarray	Split Array Problems & Follow-up
50	$\# \mathrm{multiplechoices}$	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	#intervaldp	Dynamic Programming On Interval Problems & Follow-up
55	#treedp	Dynamic Programming On Binary Tree Problems & Follow-up
56	#possibilities	Possibilities Problems & Follow-up
57	#possibilities #uglynumber	Ugly Number Problems & Follow-up
	#ugrynumber #prime	Prime Problems & Follow-up
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## 1.3 More Resources

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