## 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	# binary search	Review: Binary Search Problems
4	#dynamic programming	Review: Dynamic Programming Problems
5	# two pointer	Review: TwoPointers Problems
6	#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	$\#\mathrm{array}$	Review: Array/SubArray Problems
12	$\# \mathrm{hashmap}$	Review: Hashmap Problems
13	$\# \mathrm{minimax}$	Review: minimax Problems
14	$\# \mathrm{monotone}$	Review: Monotone Stack Or Monotone Queue Problems
15	# 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	$\# \mathrm{sqrt}$	Review: sqrt Problems
26	# bucketsort	Review: Bucketsort Problems
27	$\# { m countsort}$	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	$\# { m bitmanipulation}$	Review: Bit manipulation problems
33	#manydetails	Review: Problems With Many Details

## $1.2\quad 70\ {\rm Typical\ Code\ Problems\ \&\ Follow-ups}$

Nι	um	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	#triangle	Triangle Problems & Follow-up  Triangle Problems & Follow-up	
	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 33	#calculator	Calculator & Follow-up Meeting Conflict Problems & Follow-up	
	34	#meetingconflict	-	
	$\frac{34}{35}$	#meetingpoint #convertds	Meeting Point Problems & Follow-up Convert Data Structure Problems & Follow-Up	
	36	#expression	<del>-</del>	
	37		Expression Problems & Follow-Up IP Address Problems & Follow-Up	
	38	#ipaddress #poison	Poison Problems & Follow-up	
	39	#slidingpuzzle	<del>-</del>	
			Sliding Puzzle & Follow-up Thanning Pain & Follow-up	
	40	#trappingrain	Trapping Rain & Follow-up	
	41 42	#parentheses	Parentheses problems & Follow-up Buystock Problems & Follow-Up	
	43	#buystock #countdistinctmoves	· -	
	44	#maxprofitwithcost	Count of distinct moves Problems & Follow-Up Maximum profits with certain costs Problems & Follow-up	
		#constructstring		
	45 46	#constructstring #constructarray	Construct string Problems & Follow-up Construct array Problems & Follow-up	
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	47	#colorgraph	Claring graph nodes Problems & Follow-up	
	48	#graphchangecell	Change cells of graph Problems & Follow-up	
	49	#splitarray	Split Array Problems & Follow-up  Multiple Chaines At Fach Step 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	#intervaldp	Dynamic Programming On Interval Problems & Follow-up	
	55 50	#treedp	Dynamic Programming On Binary Tree Problems & Follow-up	
	56	#possibilities	Possibilities Problems & Follow-up	
	57	#uglynumber	Ugly Number Problems & Follow-up	
TT 1 .	58	#prime	Prime Problems & Follow-up	_
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## 1.3 More Resources

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