1 CheatSheet: Common Code Problems & Follow-ups

INTERVIEW

Updated: January 13, 2020

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

File me Issues or star this repo.

 $Git Hub:\ https://github.com/dennyzhang/cheatsheet.dennyzhang.com/tree/master/cheatsheet-followup-A4$

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$1.1 \quad 66 \ {\rm Typical \ Code \ Problems} \ \& \ {\rm Follow-ups}$

Num	${ m Category/Tag}$	Example
1	#atmostkdistinct, #string	Substring with at most k distinct characters
2	#twosum, #array	TwoSum Problems & Follow-Up
3	#maxsubarraysum, #array	Maximum subarray problem
3	#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
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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	$\# { m subsequence}$	Find Subsequence In Strings & Follow-up
18	$\#\mathrm{lis}$	Longest increasing subsequence & Follow-up
19	$\#\mathrm{lcs}$	Longest common subsequence & Follow-up
20	$\# \mathrm{findduplicates}$	Find duplicates from a list & Follow-up
21	$\#\mathrm{coin}$	Coin Problems & Follow-Up
22	$\# { m wiggle}$	Wiggle Array Problems & Follow-up
23	$\# { m groupelements}$	Seperate a list into several groups
24	#treetraversal, $#$ binarytree	Tree Traversal & Follow-up
25	$\# { m calculator}$	Calculator & Follow-up
26	$\# { m meeting conflict}$	Meeting Conflict Problems & Follow-up
27	#meetingpoint	Meeting Point Problems & Follow-up
28	#convertds	Convert Data Structure Problems & Follow-Up
29	$\# { m expression}$	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	# maxprofit with cost	Maximum profits with certain costs Problems & Follow-u
41	$\# { m constructstring}$	Construct string Problems & Follow-up
42	$\# { m constructarray}$	Construct array Problems & Follow-up
43	$\# { m colorgraph}$	Coloring graph nodes Problems & Follow-up
44	$\# { m graphchangecell}$	Change cells of graph Problems & Follow-up
45	$\# ext{split} ext{array}$	Split Array Problems & Follow-up
46	$\# ext{multiplechoices}$	Multiple Choices At Each Step Problems & Follow-Up
47	$\# { m rollinghash}$	Rolling Hash Problems & Follow-up
48	$\# ext{lfu}$	LFU - Least Frequently Used Cache Problems & Follow-u
49	$\# { m geometry}$	Geometry Problems & Follow-up
50	$\# { m reach point}$	Reach point Problems & Follow-Up
51	$\# { m getmedian}$	Get Median Problems & Follow-Up
52	#mountainarray	Mountain Array Problems & Follow-Up
53	#intervaldp	Dynamic Programming On Interval Problems & Follow-u
54	#possibilities	Possibilities Problems & Follow-up
55	#uglynumber	Ugly Number Problems & Follow-up
56	#prime	Prime Problems & Follow-up
57	#geometry	Geometry Problems & Follow-up
58	#palindrome	Palindrome Problems & Follow-Up
90	# paintaronic	Extending Problems & Follow upl

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1.2 Review Problems By Category

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

1.3 More Resources

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