

LeetCode刷题分类手册

这是一本指导初学者刷题，并给出刷题顺序和分类的手册。

LeetCode是我们每个CS人都不得不面对的一道坎。但目前1400道LeetCode题足以“劝退”每一个想要在北美找工转码的同学。在盲目开始之前，我们应该先思考如下几个问题：

刷多少题才够？

把一千多题从头到尾刷完，对大多数人来说，是不现实也不值得提倡的，LeetCode题库相似题型很多，刷题重在总结而不仅仅是数量，所以先给结论：

刷400道高频题完全足够。

要怎么刷才快？

接上面。400道题是否意味着从第1题刷到第400题呢，而高频题又是怎么定义的呢？

——这就是这本手册存在的意义。

一言以蔽之，刷题最重要的是要按分类刷，是要刷高频题，是要得出最优解，也要有高效率的重复和高质量的总结。基于此，我们把LeetCode做了一个分类：

1. 400题是我们从LeetCode1-1000题里挑选出来的高频（面试常出现）或有代表性（代表一整类题型）的题目。
2. 对上述400题，本手册以tag为依据分大类，再以题型为依据分小类、旨在提供科学、高效的刷题顺序。

关于我们

如果有同学想看到这些高频题的最优解讲解视频，请到www.flageek996.com购买后观看。

如果觉得直接上手LeetCode吃力，我们有算法专题课程（CS301A和CS301B）作为过渡；如果某一块知识点是短板，那么专题系列课程（CS202/CS203/CS204/CS205）就是你的选择；对于刷题已经过关的同学，简历修改服务（CS105）和模拟面试服务（CS502）也值得尝试。

这本刷题手册的内容会持续更新，题目也会不断补充。所有信息会统一在公众号和小助手朋友圈发布，欢迎大家围观：

小助手微信：flageek996

公众号：FLAGeek频道



小助手微信



微信公众号

String

CS301B Chapter 2	
14	Longest Common prefix
58	Length Of Last Word
387	First Unique Character in a String
383	Ransom Note
415	Add Strings
205	Isomorphic Strings
451	Sort Characters By Frequency
293	Flip Game
294	Flip Game
290	Word Pattern
249	Group Shifted Strings
161	One Edit Distance
819	Most Common Word
38	Count and Say
771	Jewels and Stones
316	Remove Duplicate Letters
168	Excel Sheet Column Title
171	Excel Sheet Column Number
13	Roman to Integer
12	Integer to Roman
246	Strobogrammatic Number
247	Strobogrammatic Number
248	Strobogrammatic Number
157	Read N Characters Given Read4
539	Minimum Time Difference
556	Next Greater Element
395	Longest Substring with At Least K Repeating Characters
419	Battleships in a Board
1055	Shortest Way to Form String
String类之翻转	
344	Reverse String
151	Reverse Words in a String
186	Reverse Words in a String
557	Reverse Words in a String
345	Reverse Vowels of a String

451: int一维数组不能重写compare, compare里面是abstract, 需要使用integer List转int[]不能直接转也是这个道理

819: split("[,!?]+")

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CS301B Chapter 2	
541	Reverse String
String类之回文类	
125	Valid Palindrome
266	Palindrome Permutation
5	Longest Palindromic Substring
9	Palindrome Number
516	Longest Palindromic Subsequence
647	Palindromic Substrings
336	Palindrome Pairs
680	Valid Palindrome
String类之子序列	
392	Is Subsequence
115	Distinct Subsequences
334	Increasing Triplet Subsequence
String类之括号类问题	
20	Valid Parentheses
32	Longest Valid Parentheses
301	Remove Invalid Parentheses
241	Different Ways to Add Parentheses
String类之加密与解密	
271	Encode and Decode Strings
443	String Compression
535	Encode and Decode TinyURL
394	Decode String
820	Short Encoding of Words
String类之Anagrams	
242	Valid Anagram
49	Group Anagrams
438	Find All Anagrams in a String
String类之子集类问题	
28	Implement strStr()
3	Longest Substring Without Repeating Characters
340	Longest Substring with At Most K Distinct Characters
395	Longest Substring with At Least K Repeating Characters
159	Longest Substring with At Most Two Distinct Characters
76	Minimum Window Substring

32: dp解决最长子串问题

CS301B Chapter 2	
巩固练习	
1004	Max Consecutive Ones
811	Subdomain Visit Count
761	Special Binary String
981	Time Based Key-Value Store

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Binary Search

CS301B Chapter 1	
704	Binary Search
278	First Bad Version
35	Search Insert Position
33	Search in Rotated Sorted Array
81	Search in Rotated Sorted Array
153	Find Minimum in Rotated Sorted Array
154	Find Minimum in Rotated Sorted Array
528	Random Pick with Weight
162	Find Peak Element
34	Search for a Range
349	Intersection of Two Arrays
350	Intersection of Two Arrays
410	Split Array Largest Sum
658	Find K Closest Elements
1060	Missing Element in Sorted Array
1011	Capacity To Ship Packages Within D Days
315	Count of Smaller Numbers After Self
875	Koko Eating Bananas

LinkedList

CS301A Chapter 3 & CS301B Chapter 3	
876	Middle of the Linked List
2	Add Two Numbers
445	Add Two Numbers
21	Merge Two Sorted Lists
369	Plus One Linked List
160	Intersection of Two Linked Lists
24	Swap Nodes in Pairs
328	Odd Even Linked List
206	Reverse Linked List
92	Reverse Linked List
141	Linked List Cycle
61	Rotate List
19	Remove Nth Node from End of List
708	Insert into a Sorted Circular Linked List
234	Palindrome Linked List
138	Copy List with Random Pointer
237	Delete Node in a Linked List
86	Partition List
430	Flatten a Multilevel Doubly Linked List
23	Merge K Sorted Lists
25	Reverse Nodes in k-Group

Matrix

48	Rotate Image
54	Spiral Matrix
59	Spiral Matrix
74	Search a 2D Matrix
240	Search a 2D Matrix
498	Diagonal Traverse
311	Sparse Matrix Multiplication
79	Word Search
36	Valid Sudoku
37	Sudoku Solver

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Math

1	Two sum
167	Two Sum II - Input array is sorted
15	3Sum
16	3Sum Closest
259	3Sum Smaller
18	4Sum
560	Subarray Sum Equals K
525	Contiguous Array
523	Continuous Subarray Sum
412	Fizz Buzz
7	Reverse Integer
165	Compare Version Numbers
66	Plus One
8	String to Integer (atoi)
258	Add Digits
67	Add Binary
43	Multiply Strings
29	Divide Two Integers
69	Sqrt(x)
50	Pow(x,n)
204	Count Primes
836	Rectangle Overlap
414	Third Maximum Number
593	Valid Square
892	Surface Area of 3D Shapes
390	Elimination Game
628	Maximum Product of Three Numbers
780	Reaching Points
829	Consecutive Numbers Sum
991	Broken Calculator
1041	Robot Bounded In Circle

Array

CS301A Chapter 2	
27	Remove Element
26	Remove Duplicate from Sorted Array
80	Remove Duplicate from Sorted Array
316	Remove Duplicate Letters
442	Find All Duplicates in an Array
448	Find All Numbers Disappeared in an Array
325	Maximum Size Subarray Sum Equals k
581	Shortest Unsorted Continuous Subarray
277	Find the Celebrity
189	Rotate Array
384	Shuffle an Array
hard41	First Missing Positive
299	Bulls and Cows
845	Longest Mountain in Array
134	Gas Station
118	Pascal's Triangle
119	Pascal's Triangle
169	Majority Element
229	Majority Element
274	H-Index
275	H-Index
243	Shortest Word Distance
244	Shortest Word Distance
245	Shortest Word Distance
217	Contains Duplicate
219	Contains Duplicate
220	Contains Duplicate
55	Jump Game
45	Jump Game
307	Range Sum Query - Mutable
308	Range Sum Query 2D - Mutable
121	Best Time to Buy and Sell Stock
122	Best Time to Buy and Sell Stock
123	Best Time to Buy and Sell Stock
188	Best Time to Buy and Sell Stock IV

CS301A Chapter 2	
309	Best Time to Buy and Sell Stock with Cooldown
11	Container With Most Water
42	Trapping Rain Water
334	Increasing Triplet Subsequence
128	Longest Consecutive Sequence
287	Find the Duplicate Number
611	Valid Triangle Number
239	Sliding Window Maximum
295	Find Median from Data Stream
53	Maximum Subarray
325	Maximum Size Subarray Sum Equals k
209	Minimum Size Subarray Sum
238	Product of Array Except Self
152	Maximum Product Subarray
228	Summary Ranges
巩固练习	
532	K-diff Pairs in an Array
713	Subarray Product Less Than K
974	Subarray Sums Divisible by K
945	Minimum Increment to Make Array Unique
406	Queue Reconstruction by Height
621	Task Scheduler
321	Create Maximum Number
403	Frog Jump
289	Game of Life
1029	Two City Scheduling
1052	Grumpy Bookstore Owner
755	Pour Water
986	Interval List Intersections
953	Verifying an Alien Dictionary
939	Minimum Area Rectangle
733	Flood Fill
697	Degree of an Array
723	Candy Crush
957	Prison Cells After N Days
1031	Maximum Sum of Two Non-Overlapping Subarrays
1007	Minimum Domino Rotations For Equal Row

CS301A Chapter 2	
1167	Minimum Cost to Connect Sticks
1010	Pairs of Songs With Total Durations Divisible by 60
4	Median of Two Sorted Arrays
Array类之Interval	
56	Merge Intervals
252	Meeting Rooms
253	Meeting Rooms
57	Insert Interval
Array类之Sort	
88	Merge Sorted Array
75	Sort Colors
283	Move Zeros
280	Wiggle Sort
324	Wiggle Sort

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Tree

CS301A Chapter 6 & CS301B Chapter 9	
94	Binary Tree Inorder Traversal
95	Unique Binary Search Trees
144	Binary Tree Preorder Traversal
145	Binary Tree Postorder Traversal
314	Binary Tree Vertical Order Traversal
366	Find Leaves of Binary Tree
333	Largest BST Subtree
Tree类之“人字形”（第一类）	
104	Maximum Depth of Binary Tree
111	Minimum Depth of Binary Tree
543	Diameter of Binary Tree
572	Subtree of Another Tree
110	Balanced Binary Tree
250	Count Univalued Subtrees
124	Binary Tree Maximum Path Sum
235	Lowest Common Ancestor of a Binary Search Tree
236	Lowest Common Ancestor of a Binary Tree
98	Validate Binary Search Tree
270	Closest Binary Search Tree Value
Tree类之“前缀路径问题”（第二类）	
112	Path Sum
113	Path Sum
437	Path Sum
129	Sum Root to Leaf Numbers
257	Binary Tree Paths
298	Binary Tree Longest Consecutive Sequence
Tree类之“BST中的Inorder, Successor, Predecessor问题”（第三类）	
285	Inorder Successor in BST
510	Inorder Successor in BST
272	Closest Binary Search Tree Value
230	Kth Smallest Element in a BST
173	Binary Search Tree Iterator
450	Delete a Node in a BST
99	Recover Binary Search Tree
114	Flatten Binary Tree to Linked List

CS301A Chapter 6 & CS301B Chapter 9	
Tree类之“序列化Serialization”（第四类）	
105	Construct Binary Tree from Preorder and Inorder Traversal
106	Construct Binary Tree from Inorder and Postorder Traversal
538	Convert BST to Greater Tree
108	Convert Sorted Array to Binary Search Tree
109	Convert Sorted List to Binary Search Tree
297	Serialize and Deserialize Binary Tree
Tree类之“去序列化Deserialization”（第五类）	
449	Serialize and Deserialize Binary Search Tree
428	Serialize and Deserialize N-ary Tree
Tree类之“Level Order”（第六类）	
107	Binary Tree Level Order Traversal
103	Binary Tree Zigzag Level Order Traversal
199	Binary Tree Right Side View
222	Count Complete Tree Nodes
102	Binary Tree Level Order Traversal
巩固练习	
100	Same Tree
101	Symmetric Tree
226	Invert Binary Tree
255	Verify Preorder Sequence in Binary Search Tree
116	Populating Next Right Pointers in Each Node
117	Populating Next Right Pointers in Each Node
426	Convert Binary Search Tree to Sorted Doubly Linked List
958	Check Completeness of a Binary Tree
637	Average of Levels in Binary Tree
96	Unique Binary Search Trees
1130	Minimum Cost Tree From Leaf Values
1110	Delete Nodes And Return Forest
987	Vertical Order Traversal of a Binary Tree
545	Boundary of Binary Tree
742	Closest Leaf in a Binary Tree
156	Interleaving String

DFS & BFS

CS301B Chapter 5	
DFS类之“0/1 DFS”（第一类）	
78	Subsets
77	Combinations
40	Combination Sum
216	Combination Sum
DFS类之“多叉DFS”（第二类）	
39	Combination Sum
254	Factor Combinations
322	Coin Change
90	Subsets
DFS类之“Selecting DFS”（第三类）	
46	Permutations
47	Permutations
31	Next Permutation
DFS类之“连通分量搜索”（第四类）	
200	Number of Islands
305	Number of Islands
286	Walls and Gates
130	Surrounded Regions
695	Max Area of Island
巩固练习	
547	Friend Circles
529	Mine Sweeper
306	Additive Number
337	House Robber
425	Word Squares
339	Nested List Weight Sum
341	Flatten Nested List Iterator
364	Nested List Weight Sum
51	N-Queens
79	Word Search
140	Word Break
131	Palindrome Partitioning
267	Palindrome Partitioning

CS301B Chapter 5	
17	Letter Combinations of a Phone Number
93	Restore IP Addresses
694	Number of Distinct Islands
698	Partition to K Equal Sum Subsets
863	All Nodes Distance K in Binary Tree
721	Accounts Merge
797	All Paths From Source to Target
1096	Brace Expansion
329	Longest Increasing Path in a Matrix
351	Android Unlock Patterns
212	Word Search try to write
BFS CS301B Chapter 5	
785	Is Graph Bipartite?
958	Check Completeness of a Binary Tree
127	Word Ladder
126	Word Ladder
210	Course Schedule
490	The Maze
784	Letter Case Permutation
417	Pacific Atlantic Water Flow
317	Shortest Distance from All Buildings
909	Snakes and Ladders
994	Rotting Oranges

Stack

CS301A Chapter 5 & CS301B Chapter 7	
225	Implement Stack using Queues
232	Implement Queue using stacks
150	Evaluate Reverse Polish Notation
155	Min Stack
716	Max Stack
636	Exclusive Time of Functions
1047	Remove All Adjacent Duplicates in String
402	Remove K Digits
71	Simplify Path
224	Basic Calculator
227	Basic Calculator II
739	Daily Temperatures
735	Asteroid Collision
772	Basic Calculator III

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PriorityQueue

CS301B Chapter 7	
332	Reconstruct Itinerary
347	Top K Frequent Elements
692	Top K Frequent Words
973	K Closest Points to Origin 从底层实现priority queue
373	Find K Pairs with Smallest Sums
215	Kth Largest Element in an Array 空了做一下
218	The Skyline Problem
414	Third Maximum Number
787	Cheapest Flights Within K Stops
378	Kth Smallest Element in a Sorted Matrix
759	Employee Free Time

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DP

CS205 DP专题	
62	Unique Paths
63	Unique Paths
70	Climbing Stairs
120	Triangle
321	Create Maximum Number
518	Coin Change 2 背包问题!!
139	Word Break
279	Perfect Squares
64	Minimum Path Sum
256	Paint House
718	Maximum Length of Repeated Subarray
416	Partition Equal Subset Sum
304	Range Sum Query 2D - Immutable
486	Predict the Winner 博弈论问题 same 877 石子游戏
312	Burst Balloons 分组dp
72	Edit Distance
221	Maximal Square
85	Maximal Rectangle
276	Paint Fence
198	House Robber
213	House Robber
53	Maximum Subarray
152	Maximum Product Subarray
1027	Longest Arithmetic Sequence
1048	Longest String Chain
10	Regular Expression Matching
740	Delete and Earn
97	Interleaving String

Bit Manipulation

421	Maximum XOR of Two Numbers in an Array
89	Gray Code
190	Reverse Bits
191	Number of 1 Bits
201	Bitwise AND of Numbers Range 布赖恩·克尼根算法 汉明距离

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Design

380	Insert Delete GetRandom O(1)
346	Moving Average from Data Stream
622	Design Circular Queue
641	Design Circular Deque
705	Design HashSet
706	Design HashMap
353	Design Snake Game
348	Design Tic-Tac-Toe
362	Design Hit Counter
379	Design Phone Directory
381	Insert Delete GetRandom O(1) - Duplicates Allowed
359	Logger Rate Limiter
170	Two Sum - Data structure Design
207	Course Schedule
208	Implement Trie(Prefix Tree)
211	Add and Search Word - Data structure design
251	Flatten 2D Vector
1188	Design Bounded Blocking Queue
472	Concatenated Words 2
1114	Print in Order
146	LRU Cache
460	LFU Cache
642	Design Search Autocomplete System
281	Zigzag Iterator
284	Peeking Iterator
269	Alien Dictionary

Graph

785	Is Graph Bipartite?
323	Number of Connected Components in an Undirected Graph
261	Graph Valid Tree
399	Evaluate Division 有时间看看交并集!

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