

Categories:

catbegin

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catlist

1111 | pr21. Merge Two Sorted Lists, Easy.  
0111 | pr23. Merge k Sorted Lists, Hard  
0111 | pr148. Sort List, Medium  
0111 | pr147. Insertion Sort List, Medium  
1111 | pr206. Reverse Linked List, Easy  
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0111 | pr25. Reverse Nodes in k-Group, Hard.  
0111 | pr234. Palindrome Linked List, Easy  
1111 | pr143. Reorder List, Medium.  
1111 | pr61. Rotate List, Medium.  
1111 | pr141. Linked List Cycle, Medium  
0111 | pr142. Linked List Cycle II, Medium  
0111 | pr138. Copy List with Random Pointer, Hard.  
1111 | pr83. Remove Duplicates from Sorted List, Easy  
0111 | pr82. Remove Duplicates from Sorted List II, Medium  
0111 | pr86. Partition List, Medium  
0111 | pr24. Swap Nodes in Pairs, Medium  
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1111 | pr160. Intersection of Two Linked Lists, Easy  
1111 | pr203. Remove Linked List Elements, Easy  
0111 | pr237. Delete Node in a Linked List, Easy

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cattree

0011 | pr94. Binary Tree Inorder Traversal, Medium  
0111 | pr144. Binary Tree Preorder Traversal, Medium  
0001 | pr145. Binary Tree Postorder Traversal, Hard  
0111 | pr102. Binary Tree Level Order Traversal, Easy  
0111 | pr107. Binary Tree Level Order Traversal II, Easy  
0111 | pr103. Binary Tree Zigzag Level Order Traversal, Medium  
1111 | pr100. Same Tree, Easy.  
0111 | pr101. Symmetric Tree, Easy  
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0011 | pr117. Populating Next Right Pointers in Each Node II, Hard.  
1111 | pr104. Maximum Depth of Binary Tree, Easy.  
1111 | pr111. Minimum Depth of Binary Tree, Easy.

0111 | pr156. Binary Tree Upside Down, Medium  
011 | pr199. Binary Tree Right Side View, Medium  
111 | pr226. Invert Binary Tree, Easy  
001 | pr129. Sum Root to Leaf Numbers, Medium.  
111 | pr112. Path Sum, Easy.  
011 | pr113. Path Sum II, Medium.  
000 | pr124. Binary Tree Maximum Path Sum, Hard. 題意節點的值可為負數.  
011 | pr110. Balanced Binary Tree, Easy.  
001 | pr114. Flatten Binary Tree to Linked List, Medium. 題意 flatten 後每個節點的左兒子為 null, 若不弄成 null, 則通不過或報超時.  
011 | pr105. Construct Binary Tree from Preorder and Inorder Traversal, Medium  
011 | pr106. Construct Binary Tree from Inorder and Postorder Traversal, Medium  
011 | pr222. Count Complete Tree Nodes, Medium  
--0 | pr298. Binary Tree Longest Consecutive Sequence, Medium. 題意是最長序列要是遞增的.  
--0 | pr314. Binary Tree Vertical Order Traversal, Medium

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catbst

0111 | pr230. Kth Smallest Element in a BST, Medium  
000 | pr99. Recover Binary Search Tree, Hard.  
011 | pr235. Lowest Common Ancestor of a Binary Search Tree, Easy  
011 | pr236. Lowest Common Ancestor of a Binary Tree, Medium. 題意輸入的樹中可能有相同值的節點.  
010 | pr96. Unique Binary Search Trees. Medium.  
010 | pr95. Unique Binary Search Trees II, Medium.  
011 | pr173. Binary Search Tree Iterator, Medium.  
001 | pr98. Validate Binary Search Tree, Medium. 題意 root 為 null 時, 也算 BST.  
011 | pr108. Convert Sorted Array to Binary Search Tree, Medium  
001 | pr109. Convert Sorted List to Binary Search Tree, Medium  
--1 | pr255. Verify Preorder Sequence in Binary Search Tree, Medium

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cattrie

0111 | pr208. Implement Trie (Prefix Tree), Medium  
010 | pr211. Add and Search Word - Data structure design, Medium  
001 | pr79. Word Search, Medium. 不是 Trie 題  
000 | pr212. Word Search II, Hard. 題意結果要 sort.  
--1 | pr422. Valid Word Square, Easy.  
--1 | pr425. Word Squares, Hard. 輸入數組中的單詞可以重複使用.

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## catgraph

0101 | pr133. Clone Graph, Medium.  
0101 | pr127. Word Ladder, Medium.  
0101 | pr126. Word Ladder II, Hard.  
001 | pr207. Course Schedule, Medium.  
010 | pr210. Course Schedule II, Medium. 注意本題只是 Medium.  
--1 | pr261. Graph Valid Tree, Medium. 若輸入 edges=[]: 則 n=1 時返回 true, n!=1 時返回 false.  
--0 | pr332. Reconstruct Itinerary, Medium.

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## catstring

0111 | pr8. String to Integer (atoi), Easy  
0111 | pr14. Longest Common Prefix, Easy  
1111 | pr38. Count and Say, Easy  
0111 | pr28. Implement strStr(), Easy.  
111 | pr242. Valid Anagram, Easy. Anagram : 单词里的字母的种类和数目没有改变, 只是改变了字母的排列顺序。  
011 | pr49. Group Anagrams, Medium  
011 | pr68. Text Justification, Hard. [""], 0 -> [""]. [""], 2 -> [" "]  
--0 | pr418. Sentence Screen Fitting, Medium.  
011 | pr71. Simplify Path, Medium.  
011 | pr43. Multiply Strings, Medium  
011 | pr6. ZigZag Conversion, Easy  
111 | pr58. Length of Last Word, Easy. "a " -> 1  
011 | pr157. Read N Characters Given Read4, Easy. 題意: read4(buffer)作用從文件中讀入到 buffer 中, read(buf, n)作用是從文件中讀入到 buf 中. buffer 和 buf 不是同一個數組, buf 是從 buffer 中讀入的. read4 中已實現文件 offset: 比如第一次調用 read4 時, read4 讀到文件中的 a 處, 第二次調用 read4 時, read4 就從文件中 a 的下一個字符開始讀. Reader4 這個類我 E3 已經寫好了, 直接調用就是. 測試時注意文件末尾都有一個 ascii=10 的 newline 符作為結束符.  
011 | pr158. Read N Characters Given Read4 II - Call multiple times, Hard  
011 | pr3. Longest Substring Without Repeating Characters, Medium  
001 | pr159. Longest Substring with At Most Two Distinct Characters, Hard. 題目中即 e 和 c 為那兩個 distinct characters. 注意題目是說 at most 2 distinct characters, 而不是 at most 2 repeating characters.  
--1 | pr340. Longest Substring with At Most K Distinct Characters, Hard.  
111 | pr165. Compare Version Numbers, Easy. 輸入的 version 有可能為 "1", "1.0", "0.0.1"  
011 | pr179. Largest Number, Medium  
011 | pr9. Palindrome Number, Easy  
011 | pr125. Valid Palindrome, Easy  
011 | pr5. Longest Palindromic Substring, Medium

010 | pr214. Shortest Palindrome, Hard

011 | pr131. Palindrome Partitioning, Medium. II 要比本題簡單些, 但本題也不難, 所以還是先做本題

001 | pr132. Palindrome Partitioning II, Hard

011 | pr249. Group Shifted Strings, Easy

000 | pr30. Substring with Concatenation of All Words, Hard.

011 | pr186. Reverse Words in a String II, Medium. 本題其實比 151 題簡單

011 | pr151. Reverse Words in a String, Medium. 本題與 186 題的題意不同之處: 本題的 input 可有 leading or trailing spaces, input 可有 multiple spaces between two words, 本題空簡複雜度可以為  $O(n)$ , 而 186 題要求為  $O(1)$ .

011 | pr246. Strobogrammatic Number, Easy.

011 | pr247. Strobogrammatic Number II, Medium. 文件 correct-output-for-check 中有正確輸出, 以供檢查.

011 | pr248. Strobogrammatic Number III, Hard. 文件 correct-output-for-check 中有正確輸出, 以供檢查.

011 | pr93. Restore IP Addresses, Medium. 一個有效的 IP 地址由 4 個數字(我給每個這樣數字叫 vrangh)組成, 每個 vrangh 在 0 到 255 之間 inclusively. 若 vrangh 只有一位數, 則它可以為 0; 否則若 vrangh 位數大於一, 則不能以 0 開頭.

0111 | pr139. Word Break, Medium

0111 | pr140. Word Break II, Hard

011 | pr22. Generate Parentheses, Medium

011 | pr241. Different Ways to Add Parentheses, Medium, 輸入可能只有一個數, 沒有運算符

011 | pr20. Valid Parentheses, Easy

000 | pr32. Longest Valid Parentheses, Hard.

011 | pr17. Letter Combinations of a Phone Number, Medium

011 | pr97. Interleaving String, Hard. 輸入 String 中任何一個都有可能長度為 0.

010 | pr115. Distinct Subsequences, Hard

011 | pr91. Decode Ways, Medium

0001 | pr44. Wildcard Matching, Hard.

010 | pr10. Regular Expression Matching, Hard. 題意不清楚, 可見 key 首.

011 | pr161. One Edit Distance, Medium. OJ 中題目沒講 Edit Distance 意思, 可先看 72 題題目.

011 | pr72. Edit Distance, Hard.

010 | pr76. Minimum Window Substring, Hard

101 | pr205. Isomorphic Strings, Easy

011 | pr187. Repeated DNA Sequences, Medium

010 | pr87. Scramble String, Hard. 若兩個輸入 String 是一樣的(如  $s1 = \text{"helo"}$ ,  $s2 = \text{"helo"}$ ), 則它們也算是互為 scramble 的.

--1 | pr257. Binary Tree Paths, Easy.

--0 | pr388. Longest Absolute File Path, Medium. 輸入 "a", 輸出 0, 因為是找 file, 必須有點.

--1 | pr394. Decode String, Medium.

--0 | pr471. Encode String with Shortest Length, Hard. 本題是上題反過來.

--0 | pr271. Encode and Decode Strings, Medium. 本題跟 394 和 471 無關. 本題考查的不是壓縮空間, 而是如何將一群 string 連接好後再將它們分開.

--1 | pr288. Unique Word Abbreviation, Easy.

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catarray

0111 | pr1. Two Sum, Medium.

1111 | pr167. Two Sum II - Input array is sorted, Medium

011 | pr170. Two Sum III - Data structure design, Easy.

001 | pr15. 3Sum, Medium

011 | pr16. 3Sum Closest, Medium

--1 | pr259. 3Sum Smaller, Medium

001 | pr18. 4Sum, Medium

011 | pr88. Merge Sorted Array, Easy

011 | pr41. First Missing Positive, Hard. 題目中的 positive integer 是指從 1 開始的. 非 in-place 的也可通過(Easy 級別). 盡量寫成 in-place 的. 注意題目要求 constant space. 若輸入[], 則要求返回 1.

111 | pr59. Spiral Matrix II, Medium. 本題本質就是旋轉遍歷一個正方形數組. 本題是 I 的特殊情況, 先做本題, 可以幫助推出 I 中的公式等.

011 | pr54. Spiral Matrix, Medium. 本題本質就是旋轉遍歷一個任意數組.

111 | pr48. Rotate Image, Medium

011 | pr11. Container With Most Water, Medium. 返回的是面積.

000 | pr42. Trapping Rain Water, Hard. 求整個數組中的總水量, 而不是單個坑中能放的最大水量

111 | pr73. Set Matrix Zeroes, Medium

011 | pr31. Next Permutation, Medium. 题目的意思是: 123 的全排列按字典顺序為: 123 132 213 231 312 321. 即將 123 當作一個單詞, 132 當作另一個單詞, 則 123 在字典中是排在 132 前面的

111 | pr27. Remove Element, Easy

111 | pr26. Remove Duplicates from Sorted Array, Easy

011 | pr80. Remove Duplicates from Sorted Array II, Medium

011 | pr75. Sort Colors, Medium

111 | pr169. Majority Element, Easy, 爭取不用 Map.

101 | pr229. Majority Element II, Medium. 題目中沒說一定有 majority, 或多少個 majority. 169 題說的一定有.

010 | pr189. Rotate Array, Easy

010 | pr238. Product of Array Except Self, Medium. 注意 output array 和 input array 是不同的數組. The output array does not count as extra space. 即不要求 in-place.

011 | pr243. Shortest Word Distance, Easy

011 | pr244. Shortest Word Distance II, Medium

011 | pr245. Shortest Word Distance III, Medium

001 | pr251. Flatten 2D Vector, Medium  
011 | pr240. Search a 2D Matrix II. Medium. 本題跟 I 沒甚麼卵關係.  
011 | pr217. Contains Duplicate, Easy  
111 | pr219. Contains Duplicate II, Easy  
011 | pr220. Contains Duplicate III, Medium. 輸入數組的元素可能為 2147483647  
000 | pr4. Median of Two Sorted Arrays, Hard. Median 的定義為(參考了 wiki): 若總共有奇數個數, 則取中間那個數; 若總共有偶數個數, 則取中間的兩個數的平均值. 所以本題返回的是一個 double.  
111 | pr198. House Robber, Easy  
011 | pr213. House Robber II, Medium  
011 | pr135. Candy, Hard. 注意是 neighbors, 即只要和自己左右相鄰的比較就可以了(即按 local 的順序給糖, 而不是按 global 的順序給糖)  
011 | pr134. Gas Station, Medium. 題目中 travel around the circuit 意思是回到最初的出發點上.  
011 | pr55. Jump Game, Medium. 本題是判斷能否跳完.  
001 | pr45. Jump Game II, Hard. 本題是返回跳完所需最少步數.  
011 | pr121. Best Time to Buy and Sell Stock, Medium.  
011 | pr122. Best Time to Buy and Sell Stock II, Medium  
001 | pr188. Best Time to Buy and Sell Stock IV, Hard. 先做 IV, 再做 III. III 就是 IV 的特列. 有一個 test case 的 k 遠大於數組長度一半, 要先特殊處理. 要時間  $O(N^2)$  才能通過.  
111 | pr123. Best Time to Buy and Sell Stock III, Hard  
010 | pr53. Maximum Subarray, Medium. 要返回的結果是 largest sum, 而不是這個 subarray. 網上表明, 本題不存在好的 divide and conquer 方法, 不要再浪費時間去想 divide and conquer, 而用標準的  $O(N)$  方法即可.  
011 | pr152. Maximum Product Subarray, Medium  
1111 | pr35. Search Insert Position, Medium. 題意是若找不到, 則返回 'target 插入後, target 在數組中的位置'  
011 | pr34. Search for a Range, Medium.  
011 | pr33. Search in Rotated Sorted Array, Hard. 本題的元素無重復, 本題的 II 即元素有重復的情況  
011 | pr81. Search in Rotated Sorted Array II, Medium. 注意本題只要求判斷 target 在不在數組中, 沒要求返回其位置(本題的 I 要求返回位置).  
111 | pr153. Find Minimum in Rotated Sorted Array, Medium. 本題中的元素是沒有重復的, 本題的 II 即元素有重復之情況  
011 | pr154. Find Minimum in Rotated Sorted Array II, Hard.  
011 | pr162. Find Peak Element, Medium  
011 | pr209. Minimum Size Subarray Sum, Medium.  
010 | pr128. Longest Consecutive Sequence, Hard. 沒有 consecutive sequence 時, 返回 1, 如 [3,8,29]  
011 | pr239. Sliding Window Maximum, Hard.  
000 | pr215. Kth Largest Element in an Array, Medium. 注意不是 Kth smallest.  
--1 | pr256. Paint House, Medium.

--0 | pr303. Range Sum Query - Immutable, Easy.  
--1 | pr304. Range Sum Query 2D - Immutable, Medium.  
--0 | pr307. Range Sum Query - Mutable, Medium. 這個係列的四道題, 就本題最難.  
--1 | pr308. Range Sum Query 2D - Mutable, Hard.  
--0 | pr406. Queue Reconstruction by Height, Medium.  
--0 | pr361. Bomb Enemy, Medium.  
--1 | pr281. Zigzag Iterator, Medium.  
--1 | pr373. Find K Pairs with Smallest Sums, Medium. 注意輸入數組已經是排好序的.  
--1 | pr346. Moving Average from Data Stream, Easy. 注意題目要求結果是 double, 而不是 int.  
--1 | pr283. Move Zeroes, Easy.

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catboard

1111 | pr36. Valid Sudoku, Easy.  
011 | pr51. N-Queens, Hard. 規則就是要求 每個皇后所在的橫豎斜上(不只是一步, 而是整個橫豎斜大直線上)都沒有其它皇后.  
011 | pr52. N-Queens II, Hard  
010 | pr37. Sudoku Solver, Hard. 按 9\*9 的 board 寫, 也能通過.  
011 | pr200. Number of Islands, Medium. 盡量用 BFS, 不要用 DFS.  
001 | pr305. Number of Islands II, Hard.  
000 | pr130. Surrounded Regions, Medium. 題意是大寫字母 O, 不是數字 0, 也不是小寫字母 o.  
011 | pr120. Triangle, Medium. 題目中的 adjacent number 是這麼個意思: 設 i 為行, j 為列, 則 triangle[i][j]在下一行的 adjacent number 為 triangle[i+1][j]和 triangle[i+1][j+1]兩個.  
011 | pr62. Unique Paths, Medium. 注意 m 為行數, n 為列數.  
011 | pr63. Unique Paths II, Medium  
011 | pr64. Minimum Path Sum, Medium. 本題要返回的是 path sum 最小的那條路徑之 path sum  
011 | pr174. Dungeon Game, Hard  
011 | pr74. Search a 2D Matrix, Medium. 本題做完後移到本題 II 前面去.  
011 | pr149. Max Points on a Line, Hard. 輸入的點中可能有重合的點, 比如一個可能的輸入為: [[1,1],[1,1],[2,2],[2,2]]  
000 | pr84. Largest Rectangle in Histogram, Hard. 本題被我評為 Leetcode 第一難題.  
011 | pr85. Maximal Rectangle, Hard. 本題要緊跟 84 題, 不要分開.  
011 | pr221. Maximal Square, Medium. 給的是正方形數組, 要求的是正方形. 注意 matrix 的元素是 char, 而不是 int.  
--0 | pr289. Game of Life, Medium.  
--0 | pr317. Shortest Distance from All Buildings, Hard.

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catcombinatorics

注意本類題目不是所有題都用 item-res 遞歸法, 甚至可能可以不用遞歸法.

0111 | pr46. Permutations, Medium

011 | pr47. Permutations II, Hard

011 | pr60. Permutation Sequence, Medium. 題意: 排列順序是按數字大小排的, 例如 132 比 123 大, 故 132 在 123 之後.

111 | pr77. Combinations, Medium

011 | pr254. Factor Combinations, Medium. 更多 test case(答案代碼算出的), 按(n, res.size()): (1200, 97), (34500, 197), (80000, 521),

011 | pr39. Combination Sum, Medium. 本題輸入數組中的元素可以重複選. 輸入數組中的元素既然可以重複選, 那麼輸入數組中的元素就沒必需重複了, 所以可以 assume 輸入數組中的元素無重複. 本題的二與本題正好相反, 輸入數組中的元素既然不能重複選, 所以輸入數組中的元素是可以重複的. 本題及 II, III 可以算 k-sum 係列中的.

011 | pr40. Combination Sum II, Medium. 本題輸入數組中的元素不可以重複選.

011 | pr216. Combination Sum III, Medium. 本題題目跟 I 和 II 關係不大.

011 | pr78. Subsets, Medium.

011 | pr90. Subsets II, Medium

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catinterval

0111 | pr56. Merge Intervals, Hard

011 | pr57. Insert Interval, Hard. overlap 的 convention 和 56 題一樣.

011 | pr252. Meeting Rooms, Easy

010 | pr253. Meeting Rooms II, Medium

010 | pr223. Rectangle Area, Easy. 注意本題是求並集, 而不是求交集. rectilinear: 直線的.

010 | pr218. The Skyline Problem, Hard. buildings[i][j]的 i 表示第 i 個 building, 即 building[i]. 而 building[i]是一個有三個元素的數組, 比如 building[i] = {Li, Ri, Hi}.

111 | pr228. Summary Ranges, Easy

011 | pr163. Missing Ranges, Medium. 輸入數組所有元素應該都在[lower, upper]這個範圍內.

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catarithmetics

0111 | pr7. Reverse Integer, Easy

1111 | pr66. Plus One, Easy. 題目的意思是 輸入數組代表的數 是十進制的, 不是二進制. digit[0]是最高位.

000 | pr65. Valid Number, Hard

111 | pr70. Climbing Stairs, Easy. 題意是樓梯共有 n 階, 而不是說人總共必須跨 n 次.

111 | pr13. Roman to Integer, Easy

010 | pr12. Integer to Roman, Medium



011 | pr29. Divide Two Integers, Medium.  $5/0 = \text{Integer.MAX\_VALUE}$ ,  $-5/0 = \text{Integer.MIN\_VALUE}$   
011 | pr166. Fraction to Recurring Decimal, Medium.  $5/0$  返回"2147483647",  $-5/0$  返回"-2147483648". 本題代碼中可以用除法(a/b)運算, 只是 a 和 b 都是 int, (a/b)也是 int, 而我們要做的就是算出小數結果.  
111 | pr118. Pascal's Triangle, Easy  
011 | pr119. Pascal's Triangle II, Easy. 此題的 row convention 與數組是一樣的: [1]為第 0 行.  
011 | pr67. Add Binary, Easy.  
011 | pr2. Add Two Numbers, Medium. 2->4->3 表示 342(三百四十二).  
111 | pr171. Excel Sheet Column Number, Easy. 26 進製, 先做此題, 再做下題  
111 | pr168. Excel Sheet Column Title, Easy. 26 進製  
011 | pr172. Factorial Trailing Zeroes, Easy. 題目的意思是找 n!的右起連續 0 的個數, 如若  $n!=23050078000$ , 則 Trailing Zeroes 為 3 個.  
111 | pr204. Count Primes, Easy. 最小的素數是 2, 而不是 1.  
010 | pr233. Number of Digit One, Medium  
000 | pr164. Maximum Gap, Hard. 題目的意思是找輸入數組被排序後的最大跳躍, 這裡的跳躍是指 '排序後的數組' 中相鄰兩個數的差. 注意輸入數組是 unsorted.  
011 | pr50. Pow(x, n), Medium. n 可為負  
111 | pr231. Power of Two, Easy. 0 和負數都不算 power of two.  
111 | pr69. Sqrt(x), Medium.  
111 | pr150. Evaluate Reverse Polish Notation, Medium  
011 | pr224. Basic Calculator, Medium. 有括號, 無乘除.  
011 | pr227. Basic Calculator II, Medium. 有乘除, 無括號. 本題與 I 沒有甚麼卵關係.  
011 | pr202. Happy Number, Easy  
--1 | pr258. Add Digits, Easy

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catsystem

0101 | pr146. LRU Cache, Hard.  
0111 | pr232. Implement Queue using Stacks, Easy.  
111 | pr225. Implement Stack using Queues, Easy.  
001 | pr155. Min Stack, Easy. Convention: 若 Min Stack 為空, 則 top()返回 0, pop()直接 return, getMin()返回 0.

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catbit

0101 | pr190. Reverse Bits, Easy.  
111 | pr191. Number of 1 Bits, Easy. n 可為負數.  
011 | pr201. Bitwise AND of Numbers Range, Medium  
011 | pr89. Gray Code, Medium. Convention: Input 0 expected [0]

011 | pr136. Single Number, Medium. 找單身狗.

011 | pr137. Single Number II, Medium. 找單身狗. input [1], output 1. 若想用一個長度為常數 (如 78629)的數組, 是允許的.

--0 | pr260. Single Number III, Medium.

--1 | pr393. UTF-8 Validation, Medium. Leetcode 自推中有對題意的解釋.

catend