

最近完成了[www.leetcode.com](http://www.leetcode.com)的online judge中150道算法题目。除各个题目有特殊巧妙的解法以外，大部分题目都是经典的算法或者数据结构，因此做了如下小结，具体的解题思路可以搜索我的博客。

Questions	Algorithm	DataStructure	注意事项
Clone Graph	BFS	HashTable	
Word Ladder II	BFS	HashTable	
Surrounded Regions	BFS	Matrix	
Word Ladder	BFS	N/A	
Binary Tree Level Order Traversal	BFS/前序遍历	Queue	
Binary Tree Level Order Traversal II	BFS/前序遍历	Queue	
Binary Tree Zigzag Level Order Traversal	BFS/前序遍历	Queue	每一层顺序分别对待
Implement strStr()	KMP算法	N/A	
Copy List with Random Pointer	N/A	HashTable	
Remove Duplicates from Sorted Array	N/A	HashTable	
Remove Duplicates from Sorted Array II	N/A	HashTable	
Set Matrix Zeroes	N/A	HashTable	
Anagrams	N/A	HashTable	
First Missing Positive	N/A	HashTable	
Two Sum	N/A	HashTable	
Evaluate Reverse Polish Notation	N/A	Stack/heap	
Largest Rectangle in Histogram	N/A	Stack/heap	记录重要位置
Minimum Window Substring	N/A	Stack/heap	
Simplify Path	N/A	Stack/heap	
Longest Valid Parentheses	N/A	Stack/heap	
Valid Parentheses	N/A	Stack/heap	词法分析
Container With Most Water	N/A	Stack/heap	记录重要位置
Best Time to Buy and Sell Stock	N/A	Array	
Best Time to Buy and Sell Stock II	N/A	Array	
Best Time to Buy and Sell Stock III	N/A	Array	
Length of Last Word	N/A	Array	
Search Insert Position	N/A	Array	
Search for a Range	N/A	Array	
Spiral Matrix	N/A	矩阵	简化为子问题
Spiral Matrix II	N/A	矩阵	简化为子问题
LRU Cache	N/A	LinkedList	
Reorder List	N/A	LinkedList	快慢指针&链表倒序
Linked List Cycle	N/A	LinkedList	快慢指针
Linked List Cycle II	N/A	LinkedList	快慢指针
Reverse Linked List II	N/A	LinkedList	
Partition List	N/A	LinkedList	
Remove Duplicates from Sorted List	N/A	LinkedList	
Remove Duplicates from Sorted List II	N/A	LinkedList	
Merge Two Sorted Lists	N/A	LinkedList	
Rotate List	N/A	LinkedList	快慢指针
Reverse Nodes in k-Group	N/A	LinkedList	
.....	.....	.....	

Swap Nodes in Pairs	N/A	LinkedList	
Remove Nth Node From End of List	N/A	LinkedList	快慢指针
Text Justification	N/A	队 列	
Candy	N/A	N/A	简化为子问题
Valid Palindrome	N/A	N/A	首尾指针
Plus One	N/A	N/A	模拟加法运算
Valid Number	N/A	N/A	词法分析
Add Binary	N/A	N/A	模拟加法运算
Insert Interval	N/A	N/A	
Merge Intervals	N/A	N/A	
Multiply Strings	N/A	N/A	模拟乘法运算
Trapping Rain Water	N/A	N/A	
Valid Sudoku	N/A	N/A	
Roman to Integer	N/A	N/A	
Integer to Roman	N/A	N/A	
Palindrome Number	N/A	N/A	
Reverse Integer	N/A	N/A	
ZigZag Conversion	N/A	N/A	
Add Two Numbers	N/A	N/A	模拟加法运算
Median of Two Sorted Arrays	N/A	N/A	
String to Integer (atoi)	STL函数	N/A	
Next Permutation	STL经典算法	N/A	
Recover Binary Search Tree	中序遍历	二叉树	
3Sum	二分查找	N/A	
3Sum Closest	二分查找	N/A	
4Sum	二分查找	N/A	
Single Number	位运算	N/A	
Single Number II	位运算	N/A	
Construct Binary Tree from Preorder and Inorder Traversal	前序中序遍历	N/A	
Binary Tree Preorder Traversal	前序遍历	二叉树	
Flatten Binary Tree to Linked List	前序遍历	二叉树	
Interleaving String	动态规划	二叉树	
Unique Binary Search Trees	动态规划	二叉树	
Word Break	动态规划	N/A	
Word Break II	动态规划	N/A	
Palindrome Partitioning	动态规划	N/A	
Palindrome Partitioning II	动态规划	N/A	
Triangle	动态规划	N/A	
Distinct Subsequences	动态规划	N/A	
Decode Ways	动态规划	N/A	
Scramble String	动态规划	N/A	
Maximal Rectangle	动态规划	N/A	
Edit Distance	动态规划	N/A	
Climbing Stairs	动态规划	N/A	
Minimum Path Sum	动态规划	N/A	
Unique Paths	动态规划	N/A	
Unique Paths II	动态规划	N/A	
Jump Game	动态规划	N/A	

Jump Game II	动态规划	N/A	
Maximum Subarray	动态规划	N/A	
Wildcard Matching	动态规划	N/A	
Substring with Concatenation of All Words	动态规划	N/A	
Sort List	合并排序	链表	快慢指针
Merge Sorted Array	合并排序	N/A	
Construct Binary Tree from Inorder and Postorder Traversal	后序中序遍历	N/A	
Binary Tree Postorder Traversal	后续遍历	二叉树	
Combinations	回溯	N/A	
Permutation Sequence	回溯	N/A	
N-Queens	回溯	N/A	
N-Queens II	回溯	N/A	
Permutations	回溯	N/A	
Permutations II	回溯	N/A	
Combination Sum	回溯	N/A	
Combination Sum II	回溯	N/A	
Sudoku Solver	回溯	N/A	
Longest Substring Without Repeating Characters	回溯	N/A	
Max Points on a Line	循环遍历	N/A	排除相同的点
Longest Common Prefix	循环遍历	N/A	
Longest Palindromic Substring	循环遍历	N/A	
Insertion Sort List	插入排序	LinkedList	
Rotate Image	矢量旋转与平移	N/A	
Longest Consecutive Sequence	类BFS	HashTable	
Search in Rotated Sorted Array	类二分查找	N/A	
Search in Rotated Sorted Array II	类二分查找	N/A	特殊考虑相等数据
Sqrt(x)	类二分查找	N/A	
Pow(x, n)	类二进制	N/A	
Divide Two Integers	类二进制	N/A	
Gas Station	类合并排序	N/A	
Merge k Sorted Lists	类外排序	N/A	
Sort Colors	类快速排序	N/A	
Remove Element	类快速排序	N/A	
Search a 2D Matrix	类杨氏矩阵	N/A	
Restore IP Addresses	背包问题	N/A	
Sum Root to Leaf Numbers	Recursion	Binary Tree	
Binary Tree Maximum Path Sum	Recursion	Binary Tree	
Populating Next Right Pointers in Each Node	Recursion	Binary Tree	
Populating Next Right Pointers in Each Node II	Recursion	Binary Tree	
Path Sum	Recursion	Binary Tree	
Path Sum II	Recursion	Binary Tree	
Maximum Depth of Binary Tree	Recursion	Binary Tree	
Minimum Depth of Binary Tree	Recursion	Binary Tree	
Balanced Binary Tree	Recursion	Binary Tree	
Symmetric Tree	Recursion	Binary Tree	
Same Tree	Recursion	Binary Tree	

Validate Binary Search Tree	Recursion	Binary Tree	
Unique Binary Search Trees II	Recursion	Binary Tree	
Binary Tree Inorder Traversal	Recursion	Binary Tree	
Pascal's Triangle	Recursion	N/A	
Pascal's Triangle II	Recursion	N/A	
Convert Sorted List to Binary Search Tree	Recursion	N/A	快慢指针&反中序遍历
Convert Sorted Array to Binary Search Tree	Recursion	N/A	反中序遍历
Subsets	Recursion	N/A	
Subsets II	Recursion	N/A	
Gray Code	Recursion	N/A	
Word Search	Recursion	N/A	
Count and Say	Recursion	N/A	
Generate Parentheses	Recursion	N/A	
Letter Combinations of a Phone Number	Recursion	N/A	
Regular Expression Matching	Recursion	N/A	