# **Programming**

Monday, January 27, 2020 10:51 PM

1. Pattern: Sliding window, 滑动窗口类型

## 经典题目:

Maximum Sum Subarray of Size K (easy) Smallest Subarray with a given sum (easy)

Longest Substring with K Distinct Characters (medium)

Fruits into Baskets (medium)

No-repeat Substring (hard)

Longest Substring with Same Letters after Replacement (hard)

Longest Subarray with Ones after Replacement (hard)

2. Pattern: two points, 双指针类型

# 经典题目:

Pair with Target Sum (easy) Remove Duplicates (easy) Squaring a Sorted Array (easy)

Triplet Sum to Zero (medium)

Triplet Sum Close to Target (medium)

Triplets with Smaller Sum (medium)

Subarrays with Product Less than a Target (medium)

Dutch National Flag Problem (medium)

3. Pattern: Fast & Slow pointers, 快慢指针类型

## 经典题目:

LinkedList Cycle (easy)

Start of LinkedList Cycle (medium)

Happy Number (medium)

Middle of the LinkedList (easy)

4. Pattern: Merge Intervals, 区间合并类型

## 经典题目:

Merge Intervals (medium)
Insert Interval (medium)

Intervals Intersection (medium)

Conflicting Appointments (medium)

5. Pattern: Cyclic Sort, 循环排序

## 经典题目:

Cyclic Sort (easy)

Find the Missing Number (easy)

Find all Missing Numbers (easy)

Find the Duplicate Number (easy)

Find all Duplicate Numbers (easy)

6. Pattern: In-place Reversal of a LinkedList, 链表翻转

#### 经典题目:

Reverse a LinkedList (easy)

Reverse a Sub-list (medium)

Reverse every K-element Sub-list (medium)

7. Pattern: Tree Breadth First Search, 树上的BFS

## 经典题目:

Binary Tree Level Order Traversal (easy)

Reverse Level Order Traversal (easy)

Zigzag Traversal (medium)

Level Averages in a Binary Tree (easy)

Minimum Depth of a Binary Tree (easy)

Level Order Successor (easy)

Connect Level Order Siblings (medium)

8. Pattern: Tree Depth First Search, 树上的DFS

#### 经典题目:

Binary Tree Path Sum (easy)

All Paths for a Sum (medium)

Sum of Path Numbers (medium)

Path With Given Sequence (medium)

Count Paths for a Sum (medium)

9. Pattern: Two Heaps, 双堆类型

#### 经典题目:

Find the Median of a Number Stream (medium)

Sliding Window Median (hard)

Maximize Capital (hard)

10. Pattern: Subsets, 子集类型, 一般都是使用多重DFS

#### 经典题目:

Subsets (easy)

Subsets With Duplicates (easy)

Permutations (medium)

String Permutations by changing case (medium)

Balanced Parentheses (hard)

Unique Generalized Abbreviations (hard)

11. Pattern: Modified Binary Search, 改造过的二分

#### 经典题目:

Order-agnostic Binary Search (easy)

Ceiling of a Number (medium)

Next Letter (medium)

Number Range (medium)

Search in a Sorted Infinite Array (medium)

Minimum Difference Element (medium)

Bitonic Array Maximum (easy)

12. Pattern: Top 'K' Elements, 前K个系列

## 经典题目:

Top 'K' Numbers (easy)

Kth Smallest Number (easy)

'K' Closest Points to the Origin (easy)

Connect Ropes (easy)

Top 'K' Frequent Numbers (medium)

Frequency Sort (medium)

Kth Largest Number in a Stream (medium)

'K' Closest Numbers (medium)

Maximum Distinct Elements (medium)

Sum of Elements (medium)

Rearrange String (hard)

13. Pattern: K-way merge, 多路归并

## 经典题目:

Merge K Sorted Lists (medium)

Kth Smallest Number in M Sorted Lists (Medium)

Kth Smallest Number in a Sorted Matrix (Hard)

Smallest Number Range (Hard)

14. Pattern: 0/1 Knapsack (Dynamic Programming), 0/1背包类型

## 经典题目:

0/1 Knapsack (medium)

Equal Subset Sum Partition (medium)

Subset Sum (medium)

Minimum Subset Sum Difference (hard)

15. Pattern: Topological Sort (Graph), 拓扑排序类型

## 经典题目:

Topological Sort (medium)

Tasks Scheduling (medium)

Tasks Scheduling Order (medium)

All Tasks Scheduling Orders (hard)

Alien Dictionary (hard)

大家好好练练这些题目,面试中遇到高等难度的题目,应该就能解得不错了

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