**1. use comparator**

253. Meeting Rooms II

56. Merge Intervals

642. Design Search Autocomplete System

215. Kth Largest Element in an Array

239. Sliding Window Maximum

**2. In linkList, use two pointers: fast and slow**

141. Linked List Cycle

**3. Binary Search**

33. Search in Rotated Sorted Array

528. Random Pick with Weight

**4. DFS**

269. Alien Dictionary

200. Number of Islands

695. Max Area of Island

17. Letter Combinations of a Phone Number

46. Permutations

79. Word Search

124. Binary Tree Maximum Path Sum

98. Validate Binary Search Tree

**5. BFS**

200. Number of Islands

127. Word Ladder

**6. topological sort**

269. Alien Dictionary

**7. dynamic programming**

322. Coin Change

10. Regular Expression Matching (关注小fu讲解 youtube)

91. Decode Ways

560. Subarray Sum Equals K

139. Word Break

72. Edit Distance

**8. sorting makes problem easier**

15. 3Sum

49. Group Anagrams

**9. tricky algorithm and solution**

42. Trapping Rain Water

41. First Missing Positive

621. Task Scheduler

**10. Sliding Window Approach**

(https://leetcode.com/problems/longest-substring-with-at-most-two-distinct-characters/discuss/49708/Sliding-Window-algorithm-template-to-solve-all-the-Leetcode-substring-search-problem.)

159. Longest Substring with At Most Two Distinct Characters

76. Minimum Window Substring

**11.** **Recursive && Iterative**

206. Reverse Linked List

98. Validate Binary Search Tree

21. Merge Two Sorted Lists

**12. Union Find**

399. Evaluate Division

**13. Greedy**

621. Task Scheduler

**14. Bit vector**

289. Game of Life

393. UTF-8 Validation

**15 Recursion**

236. Lowest Common Ancestor of a Binary Tree

22. Generate Parentheses

297. Serialize and Deserialize Binary Tree

46. Permutations

79. Word Search

124. Binary Tree Maximum Path Sum

**16. Stack (data structure)**

224. Basic Calculator

**17 Parentheses match**

301. Remove Invalid Parentheses

**18 Min Heap && Max Heap && Priority Queue (data structure)**

295. Find Median from Data Stream

**19 trick usage of stack**

84. Largest Rectangle in Histogram

25. Reverse Nodes in k-Group (leetcode cannot pass, memory exceed)

173. Binary Search Tree Iterator

394. Decode String

**20 BST**

173. Binary Search Tree Iterator

**21. Two Pointers**

283. Move Zeroes

**22 Sort Algorithm**

41. First Missing Positive (**Bucket Sort**)

215. Kth Largest Element in an Array (**Quick Sort**)

**23 useful API**

151. Reverse Words in a String

**24 LinkedList**

25. Reverse Nodes in k-Group

**25. Deque (data structure, in Java: Deque: LinkedList)**

239. Sliding Window Maximum

**26. Create random number (using Random class in java)**

528. Random Pick with Weight

**27. Palindrome**

336. Palindrome Pairs