# **DSA Practice List**

#### Cakewalk

- 1. <a href="https://leetcode.com/problems/palindrome-number">https://leetcode.com/problems/palindrome-number</a>
- 2. https://leetcode.com/problems/sort-an-array

# **Binary Search Problems**

- 1. <a href="https://leetcode.com/problems/divide-two-integers">https://leetcode.com/problems/divide-two-integers</a> Medium
- 2. <a href="https://leetcode.com/problems/powx-n">https://leetcode.com/problems/powx-n</a> Medium
- 3. <a href="https://leetcode.com/problems/sqrtx">https://leetcode.com/problems/sqrtx</a> Medium
- 4. <a href="https://leetcode.com/problems/find-minimum-in-rotated-sorted-array">https://leetcode.com/problems/find-minimum-in-rotated-sorted-array</a> Medium
- 5. <a href="https://leetcode.com/problems/first-bad-version">https://leetcode.com/problems/first-bad-version</a> Medium

6.

### **Sliding Window & Two Pointer**

- 1. <a href="https://leetcode.com/problems/longest-repeating-character-replacement">https://leetcode.com/problems/longest-repeating-character-replacement</a>
- 2. https://leetcode.com/problems/longest-substring-without-repeating-characters
- 3. https://leetcode.com/problems/grumpy-bookstore-owner
- 4. https://leetcode.com/problems/implement-strstr
- 5. <a href="https://leetcode.com/problems/minimum-size-subarray-sum">https://leetcode.com/problems/minimum-size-subarray-sum</a>

6.

### **Arrays / Ad Hoc / Sorting Problems**

- 1. <a href="https://leetcode.com/problems/remove-duplicates-from-sorted-array">https://leetcode.com/problems/remove-duplicates-from-sorted-array</a> Easy
- 2. <a href="https://leetcode.com/problems/next-permutation">https://leetcode.com/problems/next-permutation</a> Medium
- 3. <a href="https://leetcode.com/problems/sort-colors">https://leetcode.com/problems/sort-colors</a> Medium
- 4. https://leetcode.com/problems/merge-sorted-array Easy
- 5. https://leetcode.com/problems/maximum-subarray Medium
- 6. <a href="https://leetcode.com/problems/plus-one">https://leetcode.com/problems/plus-one</a> Easy
- 7. https://leetcode.com/problems/add-binary Easy
- 8. https://leetcode.com/problems/spiral-matrix-ii
- 9. https://leetcode.com/problems/best-time-to-buy-and-sell-stock
- 10. https://leetcode.com/problems/majority-element
- 11. https://leetcode.com/problems/product-of-array-except-self
- 12. https://leetcode.com/problems/move-zeroes
- 13. https://leetcode.com/problems/intersection-of-two-arrays
- 14. https://leetcode.com/problems/sort-characters-by-frequency
- 15. <a href="https://leetcode.com/problems/k-diff-pairs-in-an-array">https://leetcode.com/problems/k-diff-pairs-in-an-array</a>
- 16. https://leetcode.com/problems/kth-largest-element-in-an-array
- 17. https://leetcode.com/problems/top-k-frequent-elements

#### **Stack Problems**

- 1. <a href="https://leetcode.com/problems/valid-parentheses">https://leetcode.com/problems/valid-parentheses</a> Easy
- 2. <a href="https://leetcode.com/problems/trapping-rain-water">https://leetcode.com/problems/trapping-rain-water</a> Medium/Hard
- 3. <a href="https://leetcode.com/problems/maximal-rectangle">https://leetcode.com/problems/maximal-rectangle</a> Medium / Hard
- 4. https://leetcode.com/problems/largest-rectangle-in-histogram Hard
- 5. <a href="https://leetcode.com/problems/evaluate-reverse-polish-notation">https://leetcode.com/problems/evaluate-reverse-polish-notation</a> Medium
- 6. https://leetcode.com/problems/min-stack

7. <a href="https://leetcode.com/problems/next-greater-element-i">https://leetcode.com/problems/next-greater-element-i</a>

#### **Linked List Problems**

- 1. https://leetcode.com/problems/swap-nodes-in-pairs Medium
- 2. https://leetcode.com/problems/linked-list-cycle Medium
- 3. https://leetcode.com/problems/linked-list-cycle-ii Medium
- 4. <a href="https://leetcode.com/problems/lru-cache">https://leetcode.com/problems/lru-cache</a> Medium
- 5. <a href="https://leetcode.com/problems/copy-list-with-random-pointer">https://leetcode.com/problems/copy-list-with-random-pointer</a> Medium
- 6. <a href="https://leetcode.com/problems/intersection-of-two-linked-lists">https://leetcode.com/problems/intersection-of-two-linked-lists</a> Easy
- 7. <a href="https://leetcode.com/problems/delete-node-in-a-linked-list">https://leetcode.com/problems/delete-node-in-a-linked-list</a> Easy
- 8. https://leetcode.com/problems/odd-even-linked-list

#### **Hash Table Problems**

- 1. <a href="https://leetcode.com/problems/two-sum">https://leetcode.com/problems/two-sum</a> Easy
- 2. https://leetcode.com/problems/3sum Medium
- 3. <a href="https://leetcode.com/problems/4sum">https://leetcode.com/problems/4sum</a> Medium
- 4. https://leetcode.com/problems/longest-consecutive-sequence Medium
- 5. <a href="https://leetcode.com/problems/single-number">https://leetcode.com/problems/single-number</a> Easy
- 6. <a href="https://leetcode.com/problems/valid-anagram">https://leetcode.com/problems/valid-anagram</a> Easy

7.

### **Priority Queue / Heap**

- 1. <a href="https://leetcode.com/problems/median-of-two-sorted-arrays">https://leetcode.com/problems/median-of-two-sorted-arrays</a> Hard
- 2. <a href="https://leetcode.com/problems/merge-k-sorted-lists">https://leetcode.com/problems/merge-k-sorted-lists</a> Hard
- 3. https://leetcode.com/problems/gas-station/ Hard
- 4. <a href="https://leetcode.com/problems/find-median-from-data-stream">https://leetcode.com/problems/find-median-from-data-stream</a>
- 5. https://leetcode.com/problems/kth-largest-element-in-an-array/

### **Dynamic Programming**

- 1. https://leetcode.com/problems/longest-palindromic-substring Medium
- 2. <a href="https://leetcode.com/problems/edit-distance">https://leetcode.com/problems/edit-distance</a> Medium
- 3. https://leetcode.com/problems/decode-ways Medium
- 4. <a href="https://leetcode.com/problems/climbing-stairs">https://leetcode.com/problems/climbing-stairs</a> Easy
- 5. <a href="https://leetcode.com/problems/triangle">https://leetcode.com/problems/triangle</a> Easy
- 6. <a href="https://leetcode.com/problems/word-break">https://leetcode.com/problems/word-break</a> Medium
- 7. https://leetcode.com/problems/house-robber Medium
- 8. https://leetcode.com/problems/perfect-squares/ Medium
- 9. <a href="https://leetcode.com/problems/longest-increasing-subsequence">https://leetcode.com/problems/longest-increasing-subsequence</a> Medium
- 10. <a href="https://leetcode.com/problems/coin-change">https://leetcode.com/problems/coin-change</a> Medium
- 11. https://leetcode.com/problems/integer-break Medium
- 12. https://leetcode.com/problems/longest-palindromic-subsequence

13.

#### **Graphs**

1. <a href="https://leetcode.com/problems/number-of-islands">https://leetcode.com/problems/number-of-islands</a> - Medium

- 2. <a href="https://leetcode.com/problems/minesweeper">https://leetcode.com/problems/minesweeper</a> Medium
- 3. https://leetcode.com/problems/flood-fill
- 4. <a href="https://leetcode.com/problems/is-graph-bipartite">https://leetcode.com/problems/is-graph-bipartite</a>
- 5. <a href="https://leetcode.com/problems/coloring-a-border/">https://leetcode.com/problems/coloring-a-border/</a>
- 6. https://leetcode.com/problems/escape-a-large-maze/
- 7. https://leetcode.com/problems/check-if-there-is-a-valid-path-in-a-grid
- 8. <a href="https://leetcode.com/problems/course-schedule">https://leetcode.com/problems/course-schedule</a>
- 9. https://leetcode.com/problems/course-schedule-ii
- 10. https://leetcode.com/problems/number-of-provinces
- 11. <a href="https://leetcode.com/problems/employee-importance/">https://leetcode.com/problems/employee-importance/</a>
- 12. https://leetcode.com/problems/accounts-merge/
- 13. <a href="https://leetcode.com/problems/swim-in-rising-water">https://leetcode.com/problems/swim-in-rising-water</a> Hard (Priority Queue)
- 14. https://leetcode.com/problems/snakes-and-ladders Medium
- 15. <a href="https://leetcode.com/problems/shortest-bridge">https://leetcode.com/problems/shortest-bridge</a>
- 16. https://leetcode.com/problems/rotting-oranges
- 17. https://leetcode.com/problems/detect-cycles-in-2d-grid
- 18. https://leetcode.com/problems/path-with-minimum-effort
- 19. <a href="https://leetcode.com/problems/nearest-exit-from-entrance-in-maze">https://leetcode.com/problems/nearest-exit-from-entrance-in-maze</a>
- 20. https://leetcode.com/problems/detonate-the-maximum-bombs

#### **Trees**

- 1. <a href="https://leetcode.com/problems/binary-tree-inorder-traversal">https://leetcode.com/problems/binary-tree-inorder-traversal</a> Easy
- 2. <a href="https://leetcode.com/problems/unique-binary-search-trees">https://leetcode.com/problems/unique-binary-search-trees</a>
- 3. https://leetcode.com/problems/same-tree
- 4. <a href="https://leetcode.com/problems/validate-binary-search-tree">https://leetcode.com/problems/validate-binary-search-tree</a>
- 5. https://leetcode.com/problems/symmetric-tree
- 6. <a href="https://leetcode.com/problems/binary-tree-level-order-traversal">https://leetcode.com/problems/binary-tree-level-order-traversal</a>
- 7. https://leetcode.com/problems/binary-tree-zigzag-level-order-traversal
- 8. <a href="https://leetcode.com/problems/maximum-depth-of-binary-tree">https://leetcode.com/problems/maximum-depth-of-binary-tree</a>
- 9. <a href="https://leetcode.com/problems/construct-binary-tree-from-preorder-and-inorder-traver">https://leetcode.com/problems/construct-binary-tree-from-preorder-and-inorder-traver</a> sal
- 10. <a href="https://leetcode.com/problems/construct-binary-tree-from-inorder-and-postorder-trave-rsal">https://leetcode.com/problems/construct-binary-tree-from-inorder-and-postorder-trave-rsal</a>
- 11. https://leetcode.com/problems/convert-sorted-array-to-binary-search-tree
- 12. <a href="https://leetcode.com/problems/balanced-binary-tree">https://leetcode.com/problems/balanced-binary-tree</a>
- 13. <a href="https://leetcode.com/problems/path-sum">https://leetcode.com/problems/path-sum</a>
- 14. https://leetcode.com/problems/flatten-binary-tree-to-linked-list
- 15. https://leetcode.com/problems/sum-root-to-leaf-numbers
- 16. https://leetcode.com/problems/binary-tree-right-side-view
- 17. https://leetcode.com/problems/lowest-common-ancestor-of-a-binary-search-tree
- 18. <a href="https://leetcode.com/problems/sum-of-left-leaves">https://leetcode.com/problems/sum-of-left-leaves</a>
- 19. <a href="https://leetcode.com/problems/path-sum-iii">https://leetcode.com/problems/path-sum-iii</a>
- 20. <a href="https://leetcode.com/problems/delete-node-in-a-bst">https://leetcode.com/problems/delete-node-in-a-bst</a>
- 21. https://leetcode.com/problems/diameter-of-binary-tree
- 22. <a href="https://leetcode.com/problems/kth-smallest-element-in-a-bst">https://leetcode.com/problems/kth-smallest-element-in-a-bst</a>
- 23. https://leetcode.com/problems/inorder-successor-in-bst

# **Backtracking Problems**

- 1. <a href="https://leetcode.com/problems/next-permutation">https://leetcode.com/problems/next-permutation</a> Medium
- 2. <a href="https://leetcode.com/problems/combination-sum-ii">https://leetcode.com/problems/combination-sum-ii</a> Medium
- 3. <a href="https://leetcode.com/problems/permutations">https://leetcode.com/problems/permutations</a> Medium
- 4. <a href="https://leetcode.com/problems/permutations-ii">https://leetcode.com/problems/permutations-ii</a> Medium
- 5. https://leetcode.com/problems/combinations Medium
- 6. <a href="https://leetcode.com/problems/subsets">https://leetcode.com/problems/subsets</a> Medium
- 7. <a href="https://leetcode.com/problems/n-queens">https://leetcode.com/problems/n-queens</a> Hard
- 8. <a href="https://leetcode.com/problems/gray-code-">https://leetcode.com/problems/gray-code-</a> Hard

# Queue/Deque

- 1. https://leetcode.com/problems/sliding-window-maximum Hard
- 2. <a href="https://leetcode.com/problems/implement-queue-using-stacks">https://leetcode.com/problems/implement-queue-using-stacks</a> Easy

# **Bitwise Operators**

1. <a href="https://leetcode.com/problems/maximum-xor-of-two-numbers-in-an-array">https://leetcode.com/problems/maximum-xor-of-two-numbers-in-an-array</a>