**Practice Questions**

**Time Complexity Questions -**

<https://www.geeksforgeeks.org/practice-questions-time-complexity-analysis/>

<https://www.interviewbit.com/courses/programming/time-complexity#problems>

**Array and 2D Array -**

1. <https://www.geeksforgeeks.org/problems/kadanes-algorithm-1587115620/1>
2. <https://leetcode.com/problems/pascals-triangle/description/>
3. <https://leetcode.com/problems/majority-element/description/> (Voting-Algo)
4. <https://leetcode.com/problems/zigzag-conversion/description/> (new)
5. <https://leetcode.com/problems/max-consecutive-ones/>
6. <https://cses.fi/problemset/task/1069>
7. <https://leetcode.com/problems/friends-of-appropriate-ages/> (Frequency Array)
8. <https://leetcode.com/problems/valid-palindrome-ii/description/>
9. <https://leetcode.com/problems/range-sum-query-immutable/>
10. <https://leetcode.com/problems/two-sum/>
11. <https://leetcode.com/problems/two-sum-ii-input-array-is-sorted/>
12. <https://leetcode.com/problems/3sum/description/>
13. <https://leetcode.com/problems/4sum/description/>
14. <https://www.lintcode.com/problem/3691/>
15. <https://leetcode.com/problems/sort-colors/>
16. <https://www.geeksforgeeks.org/first-element-occurring-k-times-array/>
17. <https://practice.geeksforgeeks.org/problems/max-distance-between-same-elements/1>
18. <https://www.geeksforgeeks.org/maximum-difference-between-two-elements/>
19. <https://practice.geeksforgeeks.org/problems/in-first-but-second5423/1>
20. <https://leetcode.com/problems/maximum-product-subarray/>
21. [First element occurring k times in an array - GeeksforGeeks](https://www.geeksforgeeks.org/first-element-occurring-k-times-array/)
22. <https://leetcode.com/problems/move-zeroes/>
23. <https://leetcode.com/problems/best-time-to-buy-and-sell-stock/>
24. <https://leetcode.com/problems/find-pivot-index/description/>
25. <https://leetcode.com/problems/running-sum-of-1d-array/>
26. <https://www.geeksforgeeks.org/problems/longest-distinct-characters-in-string5848/1>
27. <https://www.geeksforgeeks.org/problems/union-of-two-sorted-arrays-1587115621/1> (new)
28. <https://leetcode.com/problems/rotate-array/description/> (new)
29. <https://leetcode.com/problems/rearrange-array-elements-by-sign/description/>
30. <https://leetcode.com/problems/next-permutation/description/> (new) (Imp)
31. <https://www.geeksforgeeks.org/problems/leaders-in-an-array-1587115620/1>
32. <https://leetcode.com/problems/set-matrix-zeroes/description/>
33. <https://leetcode.com/problems/rotate-image/description/>
34. <https://leetcode.com/problems/missing-number/description/>
35. <https://leetcode.com/problems/number-of-sub-arrays-of-size-k-and-average-greater-than-or-equal-to-threshold/description/>
36. <https://leetcode.com/problems/find-pivot-index/description/>
37. <https://leetcode.com/problems/maximal-rectangle/description/>
38. <https://leetcode.com/problems/greatest-sum-divisible-by-three/description/>
39. <https://leetcode.com/problems/first-missing-positive/description/>
40. <https://leetcode.com/problems/find-all-duplicates-in-an-array/description/>
41. <https://leetcode.com/problems/find-all-numbers-disappeared-in-an-array/description/>
42. <https://leetcode.com/problems/container-with-most-water/description/>
43. <https://leetcode.com/problems/product-of-array-except-self/description/>
44. <https://www.geeksforgeeks.org/problems/queries-on-a-matrix0443/1>
45. <https://leetcode.com/problems/trapping-rain-water/>
46. <https://leetcode.com/problems/maximum-sum-circular-subarray/description/>

**Recursion And Backtracking -**

1. <https://leetcode.com/problems/power-of-four/description/>
2. <https://leetcode.com/problems/power-of-two/description/>
3. <https://leetcode.com/problems/powx-n/description/>
4. <https://leetcode.com/problems/valid-palindrome/description/>
5. <https://leetcode.com/problems/combination-sum/>
6. <https://leetcode.com/problems/generate-parentheses/>
7. <https://practice.geeksforgeeks.org/problems/subset-sums2234/1>
8. <https://leetcode.com/problems/combination-sum-ii/description/>
9. <https://leetcode.com/problems/combination-sum-iii/description/>
10. <https://www.geeksforgeeks.org/problems/tower-of-hanoi-1587115621/1>
11. <https://www.lintcode.com/problem/169/> (Return tower of hanoi)
12. <https://leetcode.com/problems/permutations/>  (Must try)
13. <https://leetcode.com/problems/subsets/>
14. <https://leetcode.com/problems/letter-combinations-of-a-phone-number/>
15. <https://leetcode.com/problems/sum-of-all-subset-xor-totals/>
16. <https://www.geeksforgeeks.org/problems/subset-sums2234/1>
17. <https://leetcode.com/problems/combination-sum-iv/description/> (DP)
18. <https://leetcode.com/problems/sudoku-solver/> (hard)
19. <https://leetcode.com/problems/find-the-winner-of-the-circular-game/description/>
20. <https://leetcode.com/problems/n-queens/description/>
21. <https://leetcode.com/problems/palindrome-partitioning/description/>
22. <https://www.geeksforgeeks.org/problems/rat-in-a-maze-problem/1>
23. <https://leetcode.com/problems/word-search/description/>
24. <https://leetcode.com/problems/subsets-ii/description/>
25. <https://leetcode.com/problems/n-queens-ii/description/>
26. <https://leetcode.com/problems/count-good-numbers/>
27. <https://www.geeksforgeeks.org/problems/sort-a-stack/1>
28. <https://leetcode.com/problems/string-to-integer-atoi/description/> (good implementation)
29. <https://www.interviewbit.com/problems/all-unique-permutations/>
30. <https://www.interviewbit.com/problems/kth-permutation-sequence/>
31. <https://leetcode.com/problems/restore-ip-addresses/description/>
32. <https://leetcode.com/problems/word-break-ii/description/>
33. <https://leetcode.com/problems/count-numbers-with-unique-digits/>

**Sorting -**

1. <https://leetcode.com/problems/squares-of-a-sorted-array/description/>
2. <https://leetcode.com/problems/merge-sorted-array/>
3. <https://leetcode.com/problems/merge-intervals/description/>
4. <https://leetcode.com/problems/sort-characters-by-frequency/description/>
5. <https://leetcode.com/problems/largest-number/description/>
6. <https://leetcode.com/problems/how-many-numbers-are-smaller-than-the-current-number/>
7. <https://www.hackerearth.com/practice/algorithms/sorting/insertion-sort/practice-problems/algorithm/monk-and-nice-strings-3/>
8. <https://leetcode.com/problems/sort-an-array/description/>
9. <https://www.geeksforgeeks.org/problems/inversion-of-array-1587115620/1>
10. <https://www.hackerearth.com/practice/algorithms/sorting/merge-sort/practice-problems/algorithm/maximum-sum-of-building-speed-00ab8996/>
11. <https://leetcode.com/problems/kth-largest-element-in-an-array/>
12. <https://www.geeksforgeeks.org/sorting-2d-vector-in-c-set-1-by-row-and-column/>
13. <https://practice.geeksforgeeks.org/problems/rotate-array-by-n-elements-1587115621/1>
14. <https://leetcode.com/problems/reverse-pairs/description/>
15. <https://codeforces.com/problemset/problem/632/C> (largest number variation)

Linked List -

1. <https://practice.geeksforgeeks.org/problems/linked-list-insertion-1587115620/1>
2. <https://www.geeksforgeeks.org/problems/count-nodes-of-linked-list/1>
3. <https://leetcode.com/problems/middle-of-the-linked-list/>
4. <https://leetcode.com/problems/reverse-linked-list/>
5. <https://leetcode.com/problems/remove-nth-node-from-end-of-list/>
6. <https://leetcode.com/problems/delete-node-in-a-linked-list/>
7. <https://leetcode.com/problems/linked-list-cycle/>
8. <https://leetcode.com/problems/linked-list-cycle-ii/>
9. <https://practice.geeksforgeeks.org/problems/add-two-numbers-represented-by-linked-lists/1>
10. <https://leetcode.com/problems/merge-two-sorted-lists/>
11. <https://leetcode.com/problems/palindrome-linked-list/>
12. <https://leetcode.com/problems/reorder-list/>
13. <https://leetcode.com/problems/add-two-numbers-ii/>
14. <https://leetcode.com/problems/intersection-of-two-linked-lists>
15. <https://www.geeksforgeeks.org/remove-duplicates-from-a-sorted-linked-list/>
16. <https://leetcode.com/problems/swap-nodes-in-pairs/>
17. <https://leetcode.com/problems/odd-even-linked-list/>
18. <https://leetcode.com/problems/sort-list/>
19. <https://practice.geeksforgeeks.org/problems/flattening-a-linked-list/1>
20. <https://leetcode.com/problems/reverse-nodes-in-k-group/>
21. <https://www.geeksforgeeks.org/problems/linked-list-matrix/1>
22. <https://leetcode.com/problems/merge-k-sorted-lists/description/> (Heap)
23. <https://www.geeksforgeeks.org/problems/deletion-and-reverse-in-linked-list/1> (new)
24. <https://www.geeksforgeeks.org/problems/reverse-a-doubly-linked-list/1>
25. <https://www.geeksforgeeks.org/problems/find-length-of-loop/1>
26. <https://www.geeksforgeeks.org/problems/delete-all-occurrences-of-a-given-key-in-a-doubly-linked-list/1>
27. <https://leetcode.com/problems/rotate-list/description/>
28. <https://www.geeksforgeeks.org/problems/find-pairs-with-given-sum-in-doubly-linked-list/1>
29. <https://leetcode.com/problems/lru-cache/>
30. <https://leetcode.com/problems/copy-list-with-random-pointer/>

Stacks -

1. <https://leetcode.com/problems/remove-all-adjacent-duplicates-in-string-ii/>
2. <https://leetcode.com/problems/remove-all-adjacent-duplicates-in-string/>
3. <https://leetcode.com/problems/daily-temperatures/>
4. <https://www.geeksforgeeks.org/problems/next-larger-element-1587115620/1>
5. <https://www.geeksforgeeks.org/previous-greater-element/>
6. <https://www.geeksforgeeks.org/problems/smallest-number-on-left3403/1?itm_source=geeksforgeeks&itm_medium=article&itm_campaign=bottom_sticky_on_article>
7. <https://leetcode.com/problems/valid-parentheses/>
8. <https://leetcode.com/problems/maximum-nesting-depth-of-the-parentheses/>
9. <https://leetcode.com/problems/next-greater-element-i/>
10. <https://leetcode.com/problems/next-greater-element-ii/>
11. <https://www.interviewbit.com/problems/nearest-smaller-element/>
12. <https://leetcode.com/problems/min-stack/>
13. <https://leetcode.com/problems/backspace-string-compare/>
14. <https://leetcode.com/problems/asteroid-collision/>
15. <https://leetcode.com/problems/evaluate-reverse-polish-notation/description/>
16. <https://leetcode.com/problems/sum-of-subarray-minimums/description/>
17. <https://leetcode.com/problems/maximal-rectangle/description/>
18. <https://www.geeksforgeeks.org/problems/the-celebrity-problem/1>
19. <https://www.lintcode.com/problem/1908/?showListFe=true&page=1&problemTypeId=2&tagIds=373&ordering=-level&pageSize=50>
20. <https://leetcode.com/problems/remove-k-digits/description/>
21. <https://leetcode.com/problems/design-a-stack-with-increment-operation/description/?envType=daily-question&envId=2024-09-30>
22. <https://www.geeksforgeeks.org/problems/stock-span-problem-1587115621/1?itm_source=geeksforgeeks&itm_medium=article&itm_campaign=practice_card>
23. <https://leetcode.com/problems/online-stock-span/>
24. <https://www.geeksforgeeks.org/problems/postfix-to-infix-conversion/1>
25. <https://leetcode.com/problems/largest-rectangle-in-histogram/>
26. <https://leetcode.com/problems/find-the-town-judge/>

Queue + Deque -

1. <https://www.geeksforgeeks.org/problems/queue-using-two-stacks/1?page=1&category=Queue&sortBy=submissions>
2. <https://leetcode.com/problems/design-front-middle-back-queue/description/>
3. [https://practice.geeksforgeeks.org/problems/first-negative-integer-in-every-window-of-size-k3345/1#](https://practice.geeksforgeeks.org/problems/first-negative-integer-in-every-window-of-size-k3345/1)
4. <https://www.geeksforgeeks.org/problems/first-non-repeating-character-in-a-stream1216/1>
5. <https://leetcode.com/problems/max-consecutive-ones-iii/>
6. <https://www.geeksforgeeks.org/problems/longest-k-unique-characters-substring0853/1>
7. <https://www.geeksforgeeks.org/problems/length-of-the-longest-substring3036/1> [IMP]
8. <https://leetcode.com/problems/rotting-oranges/>
9. <https://leetcode.com/problems/snakes-and-ladders/>
10. <https://leetcode.com/problems/sliding-window-maximum/description/>
11. <https://www.lintcode.com/problem/3662/>
12. <https://www.lintcode.com/problem/642/>
13. <https://leetcode.com/problems/number-of-substrings-containing-all-three-characters/>
14. <https://codedrills.io/drills/queue/problems/sliding-window-minimum>
15. <https://leetcode.com/problems/task-scheduler-ii/description/> (new)
16. <https://leetcode.com/problems/minimum-size-subarray-sum/>
17. <https://leetcode.com/problems/longest-substring-without-repeating-characters/description/>

HashMap

1. <https://www.geeksforgeeks.org/problems/largest-subarray-with-0-sum/1>
2. <https://www.geeksforgeeks.org/problems/longest-sub-array-with-sum-k0809/1>
3. <https://leetcode.com/problems/subarray-sum-equals-k/description/>
4. <https://www.interviewbit.com/problems/subarray-with-given-xor/>
5. <https://leetcode.com/problems/group-anagrams/description/>
6. <https://leetcode.com/problems/find-occurrences-of-an-element-in-an-array/description/>
7. <https://www.geeksforgeeks.org/problems/subarray-with-0-sum-1587115621/1?itm_source=geeksforgeeks&itm_medium=article&itm_campaign=practice_card>
8. <https://www.geeksforgeeks.org/problems/non-repeating-character-1587115620/1?itm_source=geeksforgeeks&itm_medium=article&itm_campaign=practice_card>
9. <https://leetcode.com/problems/number-of-submatrices-that-sum-to-target/description/>
10. <https://leetcode.com/problems/longest-consecutive-sequence/description/>

Strings -

1. <https://leetcode.com/problems/palindromic-substrings/>
2. <https://leetcode.com/problems/reverse-words-in-a-string-iii/>
3. <https://leetcode.com/problems/sort-characters-by-frequency/>
4. <https://www.geeksforgeeks.org/remove-characters-from-the-first-string-which-are-present-in-the-second-string/>
5. <https://leetcode.com/problems/remove-k-digits/>
6. <https://www.geeksforgeeks.org/problems/last-match1928/1>
7. <https://leetcode.com/problems/find-the-index-of-the-first-occurrence-in-a-string/description/>
8. <https://leetcode.com/problems/find-all-anagrams-in-a-string/description/>

Binary Search -

1. <https://leetcode.com/problems/sqrtx/description/>
2. <https://leetcode.com/problems/find-first-and-last-position-of-element-in-sorted-array/>
3. <https://www.geeksforgeeks.org/problems/floor-in-a-sorted-array-1587115620/1> (lower bound)
4. <https://www.geeksforgeeks.org/problems/ceil-the-floor2802/1> (upper bound)
5. <https://www.hackerrank.com/challenges/cpp-lower-bound/problem>
6. <https://www.geeksforgeeks.org/problems/number-of-occurrence2259/1>
7. <https://leetcode.com/problems/search-a-2d-matrix/>
8. <https://leetcode.com/problems/search-a-2d-matrix-ii/>  (Staircase search)
9. <https://www.geeksforgeeks.org/problems/row-with-max-1s0023/1> (Staircase search)
10. <https://leetcode.com/problems/search-in-rotated-sorted-array/>
11. <https://leetcode.com/problems/find-minimum-in-rotated-sorted-array/description/>
12. <https://www.geeksforgeeks.org/problems/rotation4723/1> (kth rotation)
13. <https://leetcode.com/problems/guess-number-higher-or-lower/>
14. <https://leetcode.com/problems/find-peak-element/> (Using Binary Search)
15. <https://leetcode.com/problems/single-element-in-a-sorted-array/>
16. <https://practice.geeksforgeeks.org/problems/the-painters-partition-problem1535/1>
17. <https://www.spoj.com/problems/AGGRCOW/>
18. <https://leetcode.com/problems/minimum-limit-of-balls-in-a-bag/>
19. <https://leetcode.com/problems/koko-eating-bananas/>
20. <https://leetcode.com/problems/minimum-number-of-days-to-make-m-bouquets/description/>
21. <https://www.interviewbit.com/problems/allocate-books/>
22. <https://leetcode.com/problems/find-the-smallest-divisor-given-a-threshold/description/>
23. <https://leetcode.com/problems/minimum-window-substring/description/>
24. <https://leetcode.com/problems/median-of-two-sorted-arrays/description/> (Hard)
25. <https://www.geeksforgeeks.org/problems/k-th-element-of-two-sorted-array1317/1>
26. <https://www.lintcode.com/problem/1522/> (Infinite Binary search)
27. <https://www.lintcode.com/problem/586/> (Decimal Binary search)

Maths/ Number theory -

1. <https://leetcode.com/problems/count-primes/description/>
2. <https://www.spoj.com/problems/DIVSUM/>
3. <https://leetcode.com/problems/four-divisors/description/>
4. <https://leetcode.com/problems/find-greatest-common-divisor-of-array/description/>
5. <https://codeforces.com/problemset/problem/26/A>
6. <https://codeforces.com/problemset/problem/1294/C>
7. <https://cses.fi/problemset/task/1617>

Trees (Binary + BST) -

1. <https://www.geeksforgeeks.org/tree-traversals-inorder-preorder-and-postorder/>
2. [https://www.geeksforgeeks.org/problems/preorder-traversal/1](https://www.geeksforgeeks.org/problems/preorder-traversal/1?utm_source=geeksforgeeks&utm_medium=ml_article_practice_tab&utm_campaign=article_practice_tab)
3. Tree traversal Iterative (Pre, Post, In)
4. <https://www.geeksforgeeks.org/level-order-tree-traversal/>
5. <https://leetcode.com/problems/binary-tree-zigzag-level-order-traversal/>
6. <https://www.geeksforgeeks.org/check-for-children-sum-property-in-a-binary-tree/>
7. <https://leetcode.com/problems/same-tree/>
8. <https://leetcode.com/problems/symmetric-tree/>
9. <https://www.geeksforgeeks.org/write-a-c-program-to-find-the-maximum-depth-or-height-of-a-tree/>
10. <https://www.geeksforgeeks.org/problems/left-view-of-binary-tree/1>
11. <https://leetcode.com/problems/invert-binary-tree/>
12. <https://leetcode.com/problems/binary-tree-maximum-path-sum/>
13. <https://www.geeksforgeeks.org/problems/check-for-balanced-tree/1>
14. <https://leetcode.com/problems/subtree-of-another-tree/>
15. <https://leetcode.com/problems/diameter-of-binary-tree/description/>
16. <https://practice.geeksforgeeks.org/problems/top-view-of-binary-tree/1>
17. <https://leetcode.com/problems/lowest-common-ancestor-of-a-binary-tree/description/>
18. <https://practice.geeksforgeeks.org/problems/right-view-of-binary-tree/1>
19. <https://www.geeksforgeeks.org/print-all-internal-nodes-of-a-binary-tree/>
20. <https://leetcode.com/problems/sum-root-to-leaf-numbers/>
21. <https://leetcode.com/problems/range-sum-of-bst/description/>
22. <https://leetcode.com/problems/minimum-absolute-difference-in-bst/description/>
23. <https://leetcode.com/problems/kth-smallest-element-in-a-bst/>
24. <https://leetcode.com/problems/construct-binary-tree-from-preorder-and-inorder-traversal/>
25. <https://leetcode.com/problems/pseudo-palindromic-paths-in-a-binary-tree/>
26. <https://leetcode.com/problems/binary-search-tree-iterator/>
27. <https://leetcode.com/problems/two-sum-iv-input-is-a-bst/>
28. <https://leetcode.com/problems/all-nodes-distance-k-in-binary-tree/>
29. <https://leetcode.com/problems/unique-binary-search-trees/>
30. <https://leetcode.com/problems/n-ary-tree-preorder-traversal/description/>
31. <https://leetcode.com/problems/n-ary-tree-postorder-traversal/>
32. <https://leetcode.com/problems/average-of-levels-in-binary-tree/>
33. [https://www.geeksforgeeks.org/problems/print-a-binary-tree-in-vertical-order/](https://www.geeksforgeeks.org/problems/print-a-binary-tree-in-vertical-order/1?utm_source=geeksforgeeks&utm_medium=ml_article_practice_tab&utm_campaign=article_practice_tab)
34. <https://leetcode.com/problems/lowest-common-ancestor-of-a-binary-search-tree/description/>
35. <https://leetcode.com/problems/validate-binary-search-tree/>

BIT Manipulation -

1. <https://leetcode.com/problems/single-number/description/>
2. <https://www.geeksforgeeks.org/problems/bits-basic-operations/1>
3. <https://www.geeksforgeeks.org/check-if-a-number-is-odd-or-even-using-bitwise-operators/>
4. <https://leetcode.com/problems/sort-integers-by-the-number-of-1-bits/>
5. <https://leetcode.com/problems/single-number-ii/>
6. <https://practice.geeksforgeeks.org/problems/find-first-repeated-character4108/1> (Must try)
7. <https://leetcode.com/problems/counting-bits/>
8. <https://leetcode.com/problems/find-the-duplicate-number/description/> (Tricky)
9. <https://leetcode.com/problems/gray-code/description/>
10. <https://leetcode.com/problems/convert-a-number-to-hexadecimal/description/>
11. <https://leetcode.com/problems/base-7/description/>
12. <https://leetcode.com/problems/minimum-bit-flips-to-convert-number/>
13. <https://practice.geeksforgeeks.org/problems/finding-the-numbers0215/1>
14. <https://www.geeksforgeeks.org/problems/set-bits0143/1?utm_source=geeksforgeeks&utm_medium=article_practice_tab&utm_campaign=article_practice_tab>
15. <https://leetcode.com/problems/sum-of-all-subset-xor-totals/description/>
16. <https://cses.fi/problemset/task/1628> (Meet in the middle technique)
17. <https://www.spoj.com/problems/SUBSUMS/>
18. <https://codeforces.com/problemset/problem/1006/F>
19. <https://cses.fi/problemset/task/2205>

Greedy -

1. <https://www.geeksforgeeks.org/problems/activity-selection-1587115620/1>
2. <https://www.spoj.com/problems/BUSYMAN/>
3. <https://practice.geeksforgeeks.org/problems/n-meetings-in-one-room-1587115620/1>
4. <https://www.interviewbit.com/problems/meeting-rooms/>
5. <https://www.lintcode.com/problem/920/> (meeting room - 1)
6. <https://www.lintcode.com/problem/919/> (meeting room - 2)
7. <https://practice.geeksforgeeks.org/problems/minimum-platforms-1587115620/1>
8. [https://practice.geeksforgeeks.org/problems/job-sequencing-problem-1587115620/1#](https://practice.geeksforgeeks.org/problems/job-sequencing-problem-1587115620/1) (new)
9. <https://leetcode.com/problems/max-chunks-to-make-sorted/>
10. <https://leetcode.com/problems/next-permutation/>
11. <https://leetcode.com/problems/maximum-performance-of-a-team/>
12. <https://leetcode.com/problems/find-the-duplicate-number/description/>

DP -

1. <https://practice.geeksforgeeks.org/problems/max-sum-without-adjacents2430/1>
2. <https://cses.fi/problemset/task/1068>
3. <https://leetcode.com/problems/min-cost-climbing-stairs/description/>
4. <https://leetcode.com/problems/climbing-stairs/>
5. <https://leetcode.com/problems/house-robber/description/>
6. <https://www.spoj.com/problems/MST1/>
7. <https://leetcode.com/problems/unique-paths/>
8. <https://leetcode.com/problems/partition-equal-subset-sum/>
9. <https://leetcode.com/problems/unique-paths-ii/>
10. <https://leetcode.com/problems/minimum-path-sum/>
11. <https://leetcode.com/problems/target-sum/>
12. <https://leetcode.com/problems/coin-change/>
13. <https://leetcode.com/problems/longest-increasing-subsequence/>
14. LIS 2 (Using Binary search) <https://cp-algorithms.com/sequences/longest_increasing_subsequence.html>
15. <https://cses.fi/problemset/task/1140/>
16. <https://leetcode.com/problems/longest-common-subsequence/>
17. <https://www.geeksforgeeks.org/printing-longest-common-subsequence/>
18. <https://leetcode.com/problems/maximum-height-by-stacking-cuboids/description/>
19. <https://www.geeksforgeeks.org/problems/rod-cutting0840/1>
20. <https://www.interviewbit.com/problems/longest-palindromic-subsequence/>
21. <https://leetcode.com/problems/interleaving-string/>
22. <https://leetcode.com/problems/decode-ways/>
23. <https://www.geeksforgeeks.org/problems/matrix-chain-multiplication0303/1>
24. <https://www.geeksforgeeks.org/problems/boolean-parenthesization5610/1>
25. <https://leetcode.com/problems/palindrome-partitioning-ii/>
26. <https://leetcode.com/problems/best-time-to-buy-and-sell-stock-iv/>
27. <https://www.geeksforgeeks.org/longest-palindrome-substring-set-1/>
28. <https://www.geeksforgeeks.org/shortest-common-supersequence/>
29. <https://leetcode.com/problems/count-square-submatrices-with-all-ones/>
30. DP with space optimization
31. <https://www.geeksforgeeks.org/problems/0-1-knapsack-problem0945/1?utm_source=geeksforgeeks&utm_medium=article_practice_tab&utm_campaign=article_practice_tab>
32. <https://leetcode.com/problems/range-sum-query-2d-immutable/>
33. <https://leetcode.com/problems/count-square-submatrices-with-all-ones/description/>
34. <https://leetcode.com/problems/maximal-rectangle/description/>

Heaps -

1. <https://www.geeksforgeeks.org/problems/does-array-represent-heap4345/1>
2. <https://leetcode.com/problems/kth-largest-element-in-an-array/>
3. <https://leetcode.com/problems/top-k-frequent-elements/>
4. <https://leetcode.com/problems/top-k-frequent-words/description/>
5. <https://leetcode.com/problems/k-closest-points-to-origin/>
6. <https://www.interviewbit.com/problems/maximum-sum-combinations/>
7. <https://practice.geeksforgeeks.org/problems/merge-k-sorted-arrays/1>
8. <https://practice.geeksforgeeks.org/problems/merge-k-sorted-linked-lists/1>
9. <https://practice.geeksforgeeks.org/problems/minimum-cost-of-ropes-1587115620/1>
10. <https://leetcode.com/problems/maximum-score-from-removing-stones/description/>
11. <https://leetcode.com/problems/task-scheduler/description/>
12. <https://leetcode.com/problems/hand-of-straights/description/>
13. <https://leetcode.com/problems/find-median-from-data-stream/> (Hard)
14. Priority queue custom comparator (We do it via operator overloading with class)

class myCompare{

public:

bool operator()(Person A, Person B)

{ return A.age < B.age; }

};

Trie -

1. <https://leetcode.com/problems/implement-trie-prefix-tree/description/>
2. <https://leetcode.com/problems/find-the-length-of-the-longest-common-prefix/description/>
3. <https://www.geeksforgeeks.org/maximum-xor-of-two-numbers-in-an-array-set-2/>
4. <https://www.spoj.com/problems/SUBXOR/>
5. <https://github.com/apaarkamal/miscellaneous-codes/blob/master/trie%20data%20strcuture%20using%20struct.cpp>
6. <https://leetcode.com/problems/maximum-xor-of-two-numbers-in-an-array/description/>
7. <https://leetcode.com/problems/maximum-xor-with-an-element-from-array/description/>

DSU -

1. <https://www.spoj.com/problems/CLFLARR/>

Graphs -

1. <https://www.geeksforgeeks.org/problems/depth-first-traversal-for-a-graph/1>
2. <https://www.geeksforgeeks.org/problems/bfs-traversal-of-graph/1>
3. <https://leetcode.com/problems/number-of-provinces/description/>
4. <https://leetcode.com/problems/find-if-path-exists-in-graph/description/>
5. <https://leetcode.com/problems/rotting-oranges/description/>
6. <https://leetcode.com/problems/flood-fill/description/>
7. <https://leetcode.com/problems/snakes-and-ladders/description/>
8. <https://www.spoj.com/problems/NAKANJ/>
9. <https://www.geeksforgeeks.org/problems/detect-cycle-in-an-undirected-graph/1>
10. <https://www.geeksforgeeks.org/problems/detect-cycle-in-a-directed-graph/1>
11. <https://leetcode.com/problems/01-matrix/description/>
12. <https://leetcode.com/problems/surrounded-regions/description/>
13. <https://leetcode.com/problems/number-of-enclaves/description/>
14. <https://leetcode.com/problems/word-ladder/description/>
15. <https://leetcode.com/problems/number-of-islands/>
16. <https://leetcode.com/problems/word-ladder-ii/description/>
17. <https://leetcode.com/problems/evaluate-division/description/>
18. <https://leetcode.com/problems/is-graph-bipartite/description/>
19. <https://www.lintcode.com/problem/3663/>
20. <https://leetcode.com/problems/course-schedule-ii/description/>
21. <https://leetcode.ca/2017-11-10-711-Number-of-Distinct-Islands-II/>
22. <https://www.geeksforgeeks.org/problems/topological-sort/1>
23. <https://leetcode.com/problems/find-eventual-safe-states/description/>
24. <https://leetcode.ca/all/269.html>
25. <https://www.geeksforgeeks.org/problems/shortest-path-in-undirected-graph-having-unit-distance/1>
26. <https://www.geeksforgeeks.org/problems/shortest-path-in-undirected-graph/1>
27. <https://www.geeksforgeeks.org/problems/implementing-dijkstra-set-1-adjacency-matrix/1>
28. <https://leetcode.com/problems/largest-divisible-subset/description/>
29. <https://leetcode.com/problems/course-schedule/>
30. <https://leetcode.com/problems/course-schedule-ii/>
31. <https://leetcode.com/problems/clone-graph/>
32. <https://www.geeksforgeeks.org/problems/distance-from-the-source-bellman-ford-algorithm/1>
33. <https://www.geeksforgeeks.org/problems/implementing-floyd-warshall2042/1>
34. <https://leetcode.com/problems/shortest-path-in-binary-matrix/description/>
35. <https://leetcode.com/problems/path-with-minimum-effort/>
36. <https://leetcode.com/problems/cheapest-flights-within-k-stops/>
37. <https://www.geeksforgeeks.org/problems/minimum-multiplications-to-reach-end/1>
38. <https://leetcode.com/problems/champagne-tower/>
39. Single Source Shortest path (Weighted graph) <https://practice.geeksforgeeks.org/problems/implementing-dijkstra-set-1-adjacency-matrix/1>
40. Travelling Salesman Problem **(DP + BITMASK + Graph)**
41. Minimum Cost Path (<https://practice.geeksforgeeks.org/problems/minimum-cost-path3833/1> )
42. <https://leetcode.com/problems/number-of-ways-to-arrive-at-destination/>
43. <https://leetcode.com/problems/network-delay-time/description/>
44. <https://cp-algorithms.com/graph/breadth-first-search.html>