

DSA Sheet by FRAZ (https://www.youtube.com/c/FrazMohammad)
CHECKOUT DSA Channel (https://www.youtube.com/c/LeadCodingbyFRAZ)
JOIN TELEGRAM CHANNEL FOR UPDATES https://t.me/LeadCoding
Arrays
EASY
https://leetcode.com/problems/two-sum/
https://leetcode.com/problems/best-time-to-buy-and-sell-stock/
https://leetcode.com/problems/plus-one/
https://leetcode.com/problems/move-zeroes/
https://leetcode.com/problems/best-time-to-buy-and-sell-stock-ii/
https://leetcode.com/problems/running-sum-of-1d-array/
https://leetcode.com/problems/find-pivot-index/
https://leetcode.com/problems/majority-element/
https://leetcode.com/problems/fibonacci-number/
https://leetcode.com/problems/squares-of-a-sorted-array/
https://leetcode.com/problems/pascals-triangle/
https://leetcode.com/problems/remove-duplicates-from-sorted-array/
MEDIUM
https://leetcode.com/problems/merge-intervals/
https://leetcode.com/problems/3sum/
https://leetcode.com/problems/product-of-array-except-self/
https://leetcode.com/problems/insert-delete-getrandom-o1/
https://leetcode.com/problems/subarray-sum-equals-k/
https://leetcode.com/problems/next-permutation/
https://leetcode.com/problems/spiral-matrix/
https://leetcode.com/problems/container-with-most-water/
https://leetcode.com/problems/rotate-image/
https://leetcode.com/problems/word-search/
https://leetcode.com/problems/3sum-closest/
https://leetcode.com/problems/game-of-life/

https://leetcode.com/problems/pairs-of-songs-with-total-durations-divisible-by-60/
https://leetcode.com/problems/4sum/
https://leetcode.com/problems/find-the-duplicate-number/
https://leetcode.com/problems/combination-sum/
https://leetcode.com/problems/jump-game-ii/
https://leetcode.com/problems/maximum-points-you-can-obtain-from-cards/
https://leetcode.com/problems/maximum-area-of-a-piece-of-cake-after-horizontal-and-vertical-cuts/
https://leetcode.com/problems/max-area-of-island/
https://leetcode.com/problems/find-all-duplicates-in-an-array/
https://leetcode.com/problems/k-diff-pairs-in-an-array/
https://leetcode.com/problems/subsets/
https://leetcode.com/problems/invalid-transactions/
https://leetcode.com/problems/jump-game/
https://leetcode.com/problems/subarray-sums-divisible-by-k/
HARD
https://leetcode.com/problems/first-missing-positive/
https://leetcode.com/problems/largest-rectangle-in-histogram/
https://leetcode.com/problems/insert-delete-getrandom-o1-duplicates-allowed/
https://leetcode.com/problems/best-time-to-buy-and-sell-stock-iii/
https://leetcode.com/problems/max-value-of-equation/
RECURSION
1- What is recursion
2- How Recursion Works
3- What is a recursion tree
4- https://leetcode.com/problems/powx-n/
5- https://leetcode.com/problems/valid-palindrome/
6- General Steps to recursion problems
7- https://leetcode.com/problems/subsets/
8- https://leetcode.com/problems/permutations/
9- https://leetcode.com/problems/permutations-ii/
10- https://leetcode.com/problems/subsets-ii/
11- https://leetcode.com/problems/combinations/
12- https://leetcode.com/problems/combination-sum/
13- https://leetcode.com/problems/combination-sum-ii/
14- https://leetcode.com/problems/combination-sum-iii/
15- https://leetcode.com/problems/letter-combinations-of-a-phone-number/

16- https://leetcode.com/problems/partition-to-k-equal-sum-subsets/
17- https://leetcode.com/problems/maximum-length-of-a-concatenated-string-with-unique-characters/
18- https://leetcode.com/problems/flood-fill/
19- https://leetcode.com/problems/word-search/
20- Rat in a Maze
21- https://leetcode.com/problems/n-queens/
DYNAMIC PROGRAMING
EASY
https://leetcode.com/problems/maximum-subarray/
https://leetcode.com/problems/climbing-stairs
https://leetcode.com/problems/divisor-game/
https://leetcode.com/problems/counting-bits/
MEDIUM
https://leetcode.com/problems/decode-ways/
https://leetcode.com/problems/word-break/
https://leetcode.com/problems/delete-and-earn/
https://leetcode.com/problems/maximal-square/
https://leetcode.com/problems/coin-change/
https://leetcode.com/problems/maximum-product-subarray/
https://leetcode.com/problems/maximum-length-of-repeated-subarray/
https://leetcode.com/problems/palindromic-substrings/
https://leetcode.com/problems/house-robber/
https://leetcode.com/problems/continuous-subarray-sum/
https://leetcode.com/problems/knight-dialer/
https://leetcode.com/problems/longest-increasing-subsequence/
https://leetcode.com/problems/unique-paths/
https://leetcode.com/problems/count-square-submatrices-with-all-ones/
https://leetcode.com/problems/range-sum-query-2d-immutable/
https://leetcode.com/problems/longest-arithmetic-subsequence/
HARD
https://leetcode.com/problems/trapping-rain-water/
https://leetcode.com/problems/word-break-ii/
https://leetcode.com/problems/regular-expression-matching/
https://leetcode.com/problems/maximal-rectangle/

<https://leetcode.com/problems/longest-valid-parentheses/>

<https://leetcode.com/problems/edit-distance/>

<https://leetcode.com/problems/minimum-difficulty-of-a-job-schedule/>

<https://leetcode.com/problems/frog-jump/>

<https://leetcode.com/problems/best-time-to-buy-and-sell-stock-iv/>

<https://leetcode.com/problems/burst-balloons/>

<https://leetcode.com/problems/minimum-cost-to-merge-stones/>

<https://leetcode.com/problems/minimum-insertion-steps-to-make-a-string-palindrome/>

<https://leetcode.com/problems/super-egg-drop/>

<https://leetcode.com/problems/count-different-palindromic-subsequences/>

<https://leetcode.com/problems/minimum-cost-to-cut-a-stick/>

STRINGS

EASY

<https://leetcode.com/problems/add-strings/>

<https://leetcode.com/problems/longest-common-prefix/>

<https://leetcode.com/problems/valid-palindrome-ii/>

<https://leetcode.com/problems/roman-to-integer/>

<https://leetcode.com/problems/implement-strstr/>

MEDIUM

<https://leetcode.com/problems/longest-substring-without-repeating-characters/>

<https://leetcode.com/problems/minimum-remove-to-make-valid-parentheses/>

<https://leetcode.com/problems/longest-palindromic-substring/>

<https://leetcode.com/problems/group-anagrams/>

<https://leetcode.com/problems/generate-parentheses/>

<https://leetcode.com/problems/basic-calculator-ii/>

<https://leetcode.com/problems/integer-to-roman/>

<https://leetcode.com/problems/reverse-words-in-a-string/>

<https://leetcode.com/problems/simplify-path/>

<https://leetcode.com/problems/zigzag-conversion/>

HARD

<https://leetcode.com/problems/text-justification/>

<https://leetcode.com/problems/integer-to-english-words/>

<https://leetcode.com/problems/minimum-window-substring/>

<https://leetcode.com/problems/valid-number/>

<https://leetcode.com/problems/distinct-subsequences/>

<https://leetcode.com/problems/smallest-range-covering-elements-from-k-lists/>

<https://leetcode.com/problems/substring-with-concatenation-of-all-words/>

MATHS

EASY

<https://leetcode.com/problems/reverse-integer/>

<https://leetcode.com/problems/add-binary/>

<https://leetcode.com/problems/palindrome-number/>

<https://leetcode.com/problems/minimum-moves-to-equal-array-elements/>

<https://leetcode.com/problems/happy-number/>

<https://leetcode.com/problems/excel-sheet-column-title/>

<https://leetcode.com/problems/missing-number/>

<https://leetcode.com/problems/maximum-product-of-three-numbers/>

<https://leetcode.com/problems/power-of-two/>

MEDIUM

<https://leetcode.com/problems/encode-and-decode-tinyurl/>

<https://leetcode.com/problems/string-to-integer-atoi/>

<https://leetcode.com/problems/multiply-strings/>

<https://leetcode.com/problems/angle-between-hands-of-a-clock/>

<https://leetcode.com/problems/integer-break/>

<https://leetcode.com/problems/valid-square/>

<https://leetcode.com/problems/the-kth-factor-of-n/>

HARD

<https://leetcode.com/problems/basic-calculator/>

<https://leetcode.com/problems/max-points-on-a-line/>

<https://leetcode.com/problems/permutation-sequence/>

<https://leetcode.com/problems/number-of-digit-one/>

GREEDY

EASY

THAT WOULD BE TOO EASY FOR YOU , LETS DO MEDIUM

MEDIUM

<https://leetcode.com/problems/task-scheduler/>

<https://leetcode.com/problems/gas-station/>

<https://leetcode.com/problems/minimum-deletion-cost-to-avoid-repeating-letters/>

<https://leetcode.com/problems/maximum-number-of-events-that-can-be-attended/>

<https://leetcode.com/problems/minimum-deletions-to-make-character-frequencies-unique/>

<https://leetcode.com/problems/remove-k-digits/>

<https://leetcode.com/problems/restore-the-array-from-adjacent-pairs/>

<https://leetcode.com/problems/non-overlapping-intervals/>

HARD

<https://leetcode.com/problems/candy/>

<https://leetcode.com/problems/minimum-number-of-taps-to-open-to-water-a-garden/>

<https://leetcode.com/problems/create-maximum-number/>

DFS

MEDIUM

<https://leetcode.com/problems/letter-combinations-of-a-phone-number/>

<https://leetcode.com/problems/course-schedule-ii/>

<https://leetcode.com/problems/decode-string/>

<https://leetcode.com/problems/number-of-provinces/>

<https://leetcode.com/problems/clone-graph/>

<https://leetcode.com/problems/shortest-bridge/>

<https://leetcode.com/problems/all-paths-from-source-to-target/>

<https://leetcode.com/problems/surrounded-regions/>

<https://leetcode.com/problems/house-robber-iii/>

HARD

<https://leetcode.com/problems/critical-connections-in-a-network/>

<https://leetcode.com/problems/remove-invalid-parentheses/>

<https://leetcode.com/problems/longest-increasing-path-in-a-matrix/>

<https://leetcode.com/problems/concatenated-words/>

<https://leetcode.com/problems/making-a-large-island/>

<https://leetcode.com/problems/contain-virus/>

<https://leetcode.com/problems/24-game/>

<https://leetcode.com/problems/remove-boxes/>

TREE

EASY

<https://leetcode.com/problems/diameter-of-binary-tree/>

<https://leetcode.com/problems/invert-binary-tree/>

<https://leetcode.com/problems/subtree-of-another-tree/>

<https://leetcode.com/problems/range-sum-of-bst/>

<https://leetcode.com/problems/symmetric-tree/>

<https://leetcode.com/problems/convert-sorted-array-to-binary-search-tree/>

<https://leetcode.com/problems/merge-two-binary-trees/>

<https://leetcode.com/problems/maximum-depth-of-binary-tree/>

<https://leetcode.com/problems/binary-tree-paths/>

<https://leetcode.com/problems/same-tree/>

<https://leetcode.com/problems/lowest-common-ancestor-of-a-binary-search-tree/>

<https://leetcode.com/problems/path-sum/>

<https://leetcode.com/problems/minimum-absolute-difference-in-bst/>

<https://leetcode.com/problems/sum-of-left-leaves/>

<https://leetcode.com/problems/balanced-binary-tree/>

<https://leetcode.com/problems/binary-tree-inorder-traversal/> (USING STACK TOO)

MEDIUM

<https://leetcode.com/problems/count-good-nodes-in-binary-tree/>

<https://leetcode.com/problems/lowest-common-ancestor-of-a-binary-tree/>

<https://leetcode.com/problems/binary-tree-right-side-view/>

<https://leetcode.com/problems/all-nodes-distance-k-in-binary-tree/>

<https://leetcode.com/problems/validate-binary-search-tree/>

<https://leetcode.com/problems/binary-tree-zigzag-level-order-traversal/>

<https://leetcode.com/problems/binary-search-tree-iterator/>

<https://leetcode.com/problems/binary-tree-level-order-traversal/>

<https://leetcode.com/problems/path-sum-iii/>

<https://leetcode.com/problems/construct-binary-tree-from-preorder-and-postorder-traversal/>

<https://leetcode.com/problems/unique-binary-search-trees/>

<https://leetcode.com/problems/recover-binary-search-tree/>

<https://leetcode.com/problems/populating-next-right-pointers-in-each-node/>

<https://leetcode.com/problems/flatten-binary-tree-to-linked-list/>

<https://leetcode.com/problems/maximum-width-of-binary-tree/>

<https://leetcode.com/problems/unique-binary-search-trees-ii/>

<https://leetcode.com/problems/kth-smallest-element-in-a-bst/>

<https://leetcode.com/problems/redundant-connection/>

HARD<https://leetcode.com/problems/serialize-and-deserialize-binary-tree/><https://leetcode.com/problems/binary-tree-maximum-path-sum/><https://leetcode.com/problems/vertical-order-traversal-of-a-binary-tree/><https://leetcode.com/problems/binary-tree-cameras/><https://leetcode.com/problems/sum-of-distances-in-tree/><https://leetcode.com/problems/number-of-ways-to-reconstruct-a-tree/><https://leetcode.com/problems/redundant-connection-ii/>**HASH TABLE****EASY**<https://leetcode.com/problems/verifying-an-alien-dictionary/><https://leetcode.com/problems/design-hashmap/>**MEDIUM**<https://leetcode.com/problems/top-k-frequent-elements/><https://leetcode.com/problems/design-twitter/>**BINARY SEARCH****EASY**<https://leetcode.com/problems/sqrtx/><https://leetcode.com/problems/binary-search/><https://leetcode.com/problems/count-negative-numbers-in-a-sorted-matrix/><https://leetcode.com/problems/peak-index-in-a-mountain-array/>**MEDIUM**<https://leetcode.com/problems/time-based-key-value-store/><https://leetcode.com/problems/search-in-rotated-sorted-array/><https://leetcode.com/problems/powx-n/><https://leetcode.com/problems/find-first-and-last-position-of-element-in-sorted-array/><https://leetcode.com/problems/find-peak-element/><https://leetcode.com/problems/search-a-2d-matrix/><https://leetcode.com/problems/divide-two-integers/><https://leetcode.com/problems/capacity-to-ship-packages-within-d-days/><https://leetcode.com/problems/minimum-limit-of-balls-in-a-bag/>

HARD<https://leetcode.com/problems/median-of-two-sorted-arrays/><https://leetcode.com/problems/count-of-smaller-numbers-after-self/><https://leetcode.com/problems/max-sum-of-rectangle-no-larger-than-k/><https://leetcode.com/problems/split-array-largest-sum/><https://leetcode.com/problems/shortest-subarray-with-sum-at-least-k/>**BFS****MEDIUM**<https://leetcode.com/problems/number-of-islands/><https://leetcode.com/problems/rotting-oranges/><https://leetcode.com/problems/snakes-and-ladders/><https://leetcode.com/problems/is-graph-bipartite/><https://leetcode.com/problems/minimum-jumps-to-reach-home/>**HARD**<https://leetcode.com/problems/word-ladder/><https://leetcode.com/problems/word-ladder-ii/><https://leetcode.com/problems/cut-off-trees-for-golf-event/><https://leetcode.com/problems/reachable-nodes-in-subdivided-graph/>**TWO POINTER****MEDIUM / HARD**<https://leetcode.com/problems/partition-labels/><https://leetcode.com/problems/sort-colors/><https://leetcode.com/problems/longest-repeating-character-replacement/><https://leetcode.com/problems/maximum-number-of-visible-points/><https://leetcode.com/problems/subarrays-with-k-different-integers/>**STACK****EASY**<https://leetcode.com/problems/min-stack/><https://leetcode.com/problems/next-greater-element-i/><https://leetcode.com/problems/backspace-string-compare/><https://leetcode.com/problems/implement-queue-using-stacks/>

PRE , POST , INORDER TRAVERSALS OF BINARY TREE

<https://leetcode.com/problems/implement-stack-using-queues/>

MEDIUM

<https://leetcode.com/problems/remove-all-adjacent-duplicates-in-string-ii/>

<https://leetcode.com/problems/daily-temperatures/>

<https://leetcode.com/problems/flatten-nested-list-iterator/>

<https://leetcode.com/problems/online-stock-span/>

<https://leetcode.com/problems/minimum-cost-tree-from-leaf-values/>

<https://leetcode.com/problems/sum-of-subarray-minimums/>

<https://leetcode.com/problems/evaluate-reverse-polish-notation/>

DESIGN

MEDIUM / HARD

<https://leetcode.com/problems/lru-cache/>

<https://leetcode.com/problems/find-median-from-data-stream/>

<https://leetcode.com/problems/design-underground-system/>

<https://leetcode.com/problems/lfu-cache/>

<https://leetcode.com/problems/tweet-counts-per-frequency/>

<https://leetcode.com/problems/all-oone-data-structure/>

<https://leetcode.com/problems/design-browser-history/>

GRAPH

EASY

<https://leetcode.com/problems/employee-importance/>

<https://leetcode.com/problems/find-the-town-judge/>

MEDIUM

<https://leetcode.com/problems/evaluate-division/>

<https://leetcode.com/problems/accounts-merge/>

<https://leetcode.com/problems/network-delay-time/>

<https://leetcode.com/problems/find-eventual-safe-states/>

<https://leetcode.com/problems/keys-and-rooms/>

<https://leetcode.com/problems/possible-bipartition/>

<https://leetcode.com/problems/most-stones-removed-with-same-row-or-column/>

<https://leetcode.com/problems/regions-cut-by-slashes/>

<https://leetcode.com/problems/satisfiability-of-equality-equations/>

<https://leetcode.com/problems/as-far-from-land-as-possible/>

<https://leetcode.com/problems/number-of-closed-islands/>

https://leetcode.com/problems/number-of-operations-to-make-network-connected/
https://leetcode.com/problems/find-the-city-with-the-smallest-number-of-neighbors-at-a-threshold-distance/
https://leetcode.com/problems/time-needed-to-inform-all-employees/
BIT MANIPULATION
https://leetcode.com/problems/sum-of-two-integers/discuss/84278/A-summary%3A-how-to-use-bit-manipulation-to-solve-problems-easily-and-efficiently
LINKED LIST
1- Uses of Linked List (Real Life)
2- Representation of Linked List
3- https://leetcode.com/problems/delete-node-in-a-linked-list/
4- Arrays vs Linked List
5- https://leetcode.com/problems/middle-of-the-linked-list/
6- https://leetcode.com/problems/convert-binary-number-in-a-linked-list-to-integer/
7- Doubly Linked List and STLs
8- https://leetcode.com/problems/design-hashset/
9- https://leetcode.com/problems/design-hashmap/
10- https://leetcode.com/problems/reverse-linked-list/
11- Reverse Nodes in k-Group [https://leetcode.com/problems/reverse-nodes-in-k-group/]
12- Reverse Nodes in k-Group (NO EXTRA SPACE)
13- https://leetcode.com/problems/merge-two-sorted-lists/
14- https://leetcode.com/problems/merge-k-sorted-lists/
15- https://leetcode.com/problems/remove-duplicates-from-sorted-list/
16- https://leetcode.com/problems/linked-list-cycle/
17- https://leetcode.com/problems/linked-list-cycle-ii/
18- https://leetcode.com/problems/intersection-of-two-linked-lists/
19- https://leetcode.com/problems/palindrome-linked-list/
20- https://leetcode.com/problems/remove-linked-list-elements/
21- https://leetcode.com/problems/design-browser-history/
22- https://leetcode.com/problems/lru-cache/
23- Copy List with Random Pointer (with extra space) [https://leetcode.com/problems/copy-list-with-random-pointer/]
24- Copy List with Random Pointer (NO extra space)
HEAP

MEDIUM<https://leetcode.com/problems/k-closest-points-to-origin/><https://leetcode.com/problems/kth-largest-element-in-an-array/><https://leetcode.com/problems/reorganize-string/><https://leetcode.com/problems/furthest-building-you-can-reach/><https://leetcode.com/problems/kth-smallest-element-in-a-sorted-matrix/><https://leetcode.com/problems/cheapest-flights-within-k-stops/><https://leetcode.com/problems/find-the-most-competitive-subsequence/><https://leetcode.com/problems/ugly-number-ii/>**HARD**<https://leetcode.com/problems/merge-k-sorted-lists/><https://leetcode.com/problems/sliding-window-maximum/><https://leetcode.com/problems/the-skyline-problem/><https://leetcode.com/problems/trapping-rain-water-ii/><https://leetcode.com/problems/minimum-number-of-refueling-stops/><https://leetcode.com/problems/swim-in-rising-water/><https://leetcode.com/problems/shortest-path-to-get-all-keys/><https://leetcode.com/problems/minimum-cost-to-hire-k-workers/><https://leetcode.com/problems/k-th-smallest-prime-fraction/>**SLIDING WINDOW****MEDIUM/HARD**<https://leetcode.com/problems/longest-substring-with-at-least-k-repeating-characters/><https://leetcode.com/problems/max-consecutive-ones-iii/><https://leetcode.com/problems/grumpy-bookstore-owner/><https://leetcode.com/problems/sliding-window-median/>**TRIE**<https://leetcode.com/explore/learn/card/trie/>**SEGMENT TREE**<https://leetcode.com/articles/a-recursive-approach-to-segment-trees-range-sum-queries-lazy-propagation/>

