Day 2
Array
Reading
https://www.geeksforgeeks.org/introduction-to-arrays/

https://www.cs.cmu.edu/~15122/handouts/03-arrays.pdf

https://ocw.mit.edu/courses/electrical-engineering-and-computer-science/6-096-introduction-to-c-january-iap-2011/lecture-notes/MIT6_096IAP11_lec04.pdf

https://ocw.mit.edu/courses/civil-and-environmental-engineering/1-00-introduction-to-computers-and-engineering-problem-solving-spring-2012/lecture-notes/MIT1_00S12_Lec_11.pdf

YouTube
https://www.youtube.com/watch?v=pmN9ExDf3yQ

https://www.youtube.com/watch?v=NptnmWvkbTw

https://www.youtube.com/watch?v=a7D77DdhlFc&list=PLamzFoFxwoNjw4EpaVZzP-8lqWA9hOmnD

https://www.youtube.com/watch?v=HGgdcKbC5ro&list=PLNmW52ef0uwvmnS0UQU4Qf3NvsEREGWoK

Day 3
Practice Array
https://leetcode.com/problems/two-sum/

https://leetcode.com/problems/3sum/

https://leetcode.com/problems/next-permutation/

https://leetcode.com/problems/first-missing-positive/

https://leetcode.com/problems/first-missing-positive/

https://leetcode.com/problems/plus-one/

https://leetcode.com/problems/merge-sorted-array/

https://leetcode.com/problems/contains-duplicate/

https://leetcode.com/problems/friends-of-appropriate-ages/

Day 4

Linked List

Reading

https://www.geeksforgeeks.org/data-structures/linked-list/

https://www.cs.cmu.edu/~adamchik/15-121/lectures/Linked%20Lists/linked%20lists.html

http://www.cse.iitm.ac.in/~cs2110/Lab_3/LinkedListIntro.pdf

YouTube

https://www.youtube.com/watch?v=njTh_OwMljA

https://www.youtube.com/watch?v=WwfhLC16bis

https://www.youtube.com/watch?v=i7v1UWlaYrI&list=PLNmW52ef0uwsqn4haINljAFDivH1zhqxF

https://www.youtube.com/watch?v=kBwUoWpeH_Q

Day 5

Practice Linked List

https://leetcode.com/problems/remove-nth-node-from-end-of-list/

https://leetcode.com/problems/intersection-of-two-linked-lists/

https://leetcode.com/problems/merge-two-sorted-lists/

https://leetcode.com/problems/merge-k-sorted-lists/

https://leetcode.com/problems/delete-node-in-a-linked-list/

https://leetcode.com/problems/design-linked-list/

https://leetcode.com/problems/add-two-numbers/

https://leetcode.com/problems/linked-list-cycle/

https://leetcode.com/problems/reverse-linked-list/

https://leetcode.com/problems/copy-list-with-random-pointer/

Day 6

Recursion , Backtracking

Reading

https://www.sparknotes.com/cs/recursion/whatisrecursion/section2/

https://www.byte-by-byte.com/recursion/

https://medium.com/leetcode-patterns/leetcode-pattern-3-backtracking-5d9e5a03dc26

https://www.geeksforgeeks.org/recursion/

https://realpython.com/python-thinking-recursively/

https://www.topcoder.com/community/competitive-programming/tutorials/an-introduction-to-recursion-part-2/

http://web.mit.edu/6.005/www/fa15/classes/10-recursion/

YouTube

https://www.youtube.com/playlist?list=PL2_aWCzGMAwLz3g66WrxFGSXvSsvyfzCO

https://www.youtube.com/playlist?list=PLDN4rrl48XKpZkf03iYFl-O29szjTrs_O

https://www.youtube.com/watch?v=B0NtAFf4bvU

https://www.youtube.com/watch?v=KEEKn7Me-ms

Day 7

Recursion , Backtracking practice

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

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

https://leetcode.com/problems/word-search/

https://leetcode.com/problems/subsets/

https://leetcode.com/problems/additive-number/

https://leetcode.com/problems/combination-sum/

https://leetcode.com/problems/permutations/

https://leetcode.com/problems/combinations/

https://leetcode.com/problems/letter-tile-possibilities/

https://leetcode.com/problems/word-search-ii/

Day 8

Stacks and Queues

Reading

https://www.cs.cmu.edu/~adamchik/15-121/lectures/Stacks%20and%20Queues/Stacks%20and%20Queues.html

https://www.hackerearth.com/practice/notes/stacks-and-queues/

https://introcs.cs.princeton.edu/java/43stack/

https://www.geeksforgeeks.org/stack-data-structure/

https://www.interviewbit.com/courses/programming/topics/stacks-and-queues/

YouTube

https://www.youtube.com/watch?v=wjI1WNcIntg

https://www.youtube.com/watch?v=Wg8IiY1LbII

https://www.youtube.com/watch?v=vZEuSFXSMDI&list=PLqM7alHXFySF7Lap-wi5qlaD8OEBx9RMV

https://www.youtube.com/watch?v=0bpDvc2VjPU&list=PLNmW52ef0uwuvEW2yg2PxErsLF9ldA1WP

Day 9
Practice stacks and queues

https://leetcode.com/problems/design-circular-queue/

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

https://leetcode.com/problems/valid-parentheses/

https://leetcode.com/problems/open-the-lock/

https://leetcode.com/problems/implement-queue-using-stacks/

https://leetcode.com/problems/min-stack/

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

https://leetcode.com/problems/minimum-add-to-make-parentheses-valid/

https://leetcode.com/problems/number-of-recent-calls/

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

Day 10

Bfs, Dfs-1

Reading

https://medium.com/leetcode-patterns/leetcode-pattern-1-bfs-dfs-25-of-the-problems-part-1-519450a84353

https://medium.com/leetcode-patterns/leetcode-pattern-2-dfs-bfs-25-of-the-problems-part-2-a5b269597f52

https://www.geeksforgeeks.org/bfs-vs-dfs-binary-tree/

https://www.ics.uci.edu/~eppstein/161/960215.html

YouTube

https://www.youtube.com/watch?v=7fujbpJ0LB4

https://www.youtube.com/watch?v=zaBhtODEL0w

https://www.youtube.com/watch?v=TIbUeeksXcI

Day 11

Bfs, Dfs-2

Reading

https://www.techiedelight.com/depth-first-search-dfs-vs-breadth-first-search-bfs/

https://cs.stanford.edu/people/abisee/gs.pdf

https://workshape.github.io/visual-graph-algorithms/

http://web.mit.edu/6.034/wwwbob/search-notes-f11.pdf

YouTube

https://www.youtube.com/watch?v=oDqjPvD54Ss

https://www.youtube.com/watch?v=oDqjPvD54Ss

https://www.youtube.com/watch?v=pcKY4hjDrxk

Day 12

Practice Dfs and Bfs

https://leetcode.com/problems/flood-fill/

https://leetcode.com/problems/number-of-islands/

https://leetcode.com/problems/course-schedule/

https://leetcode.com/problems/friend-circles/

https://leetcode.com/problems/01-matrix/

https://www.geeksforgeeks.org/detect-cycle-undirected-graph/

https://leetcode.com/problems/perfect-squares/

https://leetcode.com/problems/word-ladder/

https://leetcode.com/problems/rotting-oranges/

https://leetcode.com/problems/perfect-squares/

Day 13

Trees

Reading

https://www.freecodecamp.org/news/all-you-need-to-know-about-tree-data-structures-bceacb85490c/

https://www.cs.cmu.edu/~clo/www/CMU/DataStructures/Lessons/lesson4_1.htm

http://www.bowdoin.edu/~ltoma/teaching/cs210/spring09/Slides/210-Trees.pdf

https://www.tutorialspoint.com/data_structures_algorithms/tree_data_structure.htm

https://www.ideserve.co.in/learn/tree-interview-questions

https://medium.com/@codingfreak/binary-tree-interview-questions-and-practice-problems-439df7e5ea1f

YouTube

https://www.youtube.com/watch?v=oSWTXtMglKE

https://www.youtube.com/watch?v=ZNH0MuQ51m4

https://www.youtube.com/watch?v=qH6yxkw0u78

https://www.youtube.com/watch?v=BHB0B1jFKQc

https://www.youtube.com/watch?v=suj1ro8TIVY&list=PLiQ766zSC5jND9vxch5-zT7GuMigiWaV_

https://www.youtube.com/watch?v=9Jry5-82I68

Day 14

Practice Tree

https://leetcode.com/problems/binary-tree-preorder-traversal/

https://leetcode.com/problems/binary-tree-inorder-traversal/

https://leetcode.com/problems/binary-tree-postorder-traversal/

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

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

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

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

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

https://leetcode.com/problems/serialize-and-deserialize-bst/

https://leetcode.com/problems/serialize-and-deserialize-binary-tree/

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

https://leetcode.com/problems/vertical-order-traversal-of-a-binary-tree/

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

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

Day 15

Graphs

Reading

https://www.freecodecamp.org/news/a-gentle-introduction-to-data-structures-how-graphs-work-a223d9ef8837/

https://medium.com/basecs/a-gentle-introduction-to-graph-theory-77969829ead8

https://www.geeksforgeeks.org/graph-and-its-representations/

https://cse.iitkgp.ac.in/~pallab/graph-theory.htm

https://leetcode.com/tag/graph/

YouTube

https://www.youtube.com/playlist?list=PLDV1Zeh2NRsDGO4--qE8yH72HFL1Km93P

https://www.youtube.com/watch?v=gXgEDyodOJU

https://www.youtube.com/watch?v=RqQBh_Wbcu4

https://ocw.mit.edu/courses/electrical-engineering-and-computer-science/6-042j-mathematics-for-computer-science-fall-2010/video-lectures/lecture-6-graph-theory-and-coloring/

https://ocw.mit.edu/courses/mathematics/18-085-computational-science-and-engineering-i-fall-2008/video-lectures/lecture-12-graphs-and-networks/

https://www.youtube.com/channel/UCj10vpqn1SaP12F4ZngeJbg

Day 16

Dynamic Programming

Reading

https://leetcode.com/discuss/general-discussion/458695/dynamic-programming-patterns

https://leetcode.com/discuss/general-discussion/475924/my-experience-and-notes-for-learning-dp

https://www.hackerearth.com/practice/algorithms/dynamic-programming/introduction-to-dynamic-programming-1/tutorial/

https://www.cs.cmu.edu/~avrim/451f09/lectures/lect1001.pdf

https://www.cs.cmu.edu/~fp/courses/15122-f10/lectures/23-dynprog.pdf

http://web.mit.edu/15.053/www/AMP-Chapter-11.pdf

https://www.geeksforgeeks.org/dynamic-programming/

YouTube

https://www.youtube.com/watch?v=OQ5jsbhAv_M&list=PLcDimPvbmfT8qAxD6JH_kmXiQwTNcoK78

https://www.youtube.com/playlist?list=PLrmLmBdmIlpsHaNTPP_jHHDx_os9ItYXr

https://www.youtube.com/watch?v=J0zrZN-7uQs&list=PLcBc1Yp8mZQdFzQ0H2bvyiJ35fwVX0pl4

Day 17

Practice DP

https://leetcode.com/problems/climbing-stairs/

https://leetcode.com/problems/min-cost-climbing-stairs/

https://leetcode.com/problems/coin-change/

https://leetcode.com/problems/minimum-falling-path-sum/

https://leetcode.com/problems/minimum-cost-for-tickets/

https://leetcode.com/problems/2-keys-keyboard/

https://leetcode.com/problems/maximum-product-subarray/

https://leetcode.com/problems/triangle/

https://leetcode.com/problems/ones-and-zeroes/

https://leetcode.com/problems/longest-arithmetic-sequence/

https://leetcode.com/problems/maximal-square/

https://leetcode.com/problems/arithmetic-slices/

https://leetcode.com/problems/partition-equal-subset-sum/

Day 18

Practice DP -2

https://leetcode.com/problems/house-robber/

https://leetcode.com/problems/house-robber-ii/

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

https://www.programcreek.com/2014/05/leetcode-paint-house-java/

https://leetcode.com/problems/is-subsequence/

https://leetcode.com/problems/number-of-dice-rolls-with-target-sum/

https://leetcode.com/problems/maximum-subarray/

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

https://leetcode.com/problems/decode-ways/

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

https://leetcode.com/problems/best-time-to-buy-and-sell-stock-ii/

https://leetcode.com/problems/best-time-to-buy-and-sell-stock-iii/

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

https://leetcode.com/problems/word-break/

https://leetcode.com/problems/longest-increasing-subsequence/

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

Day 19

Sorting Algorithms

Reading

https://www.toptal.com/developers/sorting-algorithms

https://www.cs.cmu.edu/~adamchik/15-121/lectures/Sorting%20Algorithms/sorting.html

https://www.geeksforgeeks.org/sorting-algorithms/

https://levelup.gitconnected.com/a-sort-of-all-sorting-algorithms-506cbc76d47

https://www.cs.cmu.edu/~fp/courses/15122-f10/lectures/23-dynprog.pdf

http://web.mit.edu/15.053/www/AMP-Chapter-11.pdf

https://www.geeksforgeeks.org/dynamic-programming/

YouTube

https://www.youtube.com/watch?v=HqPJF2L5h9U&list=PLDN4rrl48XKpZkf03iYFl-O29szjTrs_O&index=32

(32-37)

https://www.youtube.com/watch?v=pkkFqlG0Hds&list=PL2_aWCzGMAwKedT2KfDMB9YA5DgASZb3U

https://www.youtube.com/watch?v=MtQL_ll5KhQ&list=PLqM7alHXFySHrGIxeBOo4-mKO4H8j2knW

Day 20

Time Complexity , Big O

Reading

https://www.geeksforgeeks.org/understanding-time-complexity-simple-examples/

https://www.bigocheatsheet.com/

https://www.freecodecamp.org/news/time-complexity-of-algorithms/

https://levelup.gitconnected.com/a-sort-of-all-sorting-algorithms-506cbc76d47

http://www.cs.cmu.edu/~tcortina/15110f11/Unit04PtC.pdf

YouTube

https://www.youtube.com/playlist?list=PLDN4rrl48XKpZkf03iYFl-O29szjTrs_O

(1-16)

https://www.youtube.com/watch?v=D6xkbGLQesk

Day 21

Binary Search

Learn

https://ocw.mit.edu/courses/electrical-engineering-and-computer-science/6-006-introduction-to-algorithms-fall-2011/lecture-videos/lecture-5-binary-search-trees-bst-sort/

https://www.geeksforgeeks.org/binary-search/

https://www.youtube.com/watch?v=P3YID7liBug

https://www.youtube.com/watch?v=j5uXyPJ0Pew&list=PL2_aWCzGMAwL3ldWlrii6YeLszojgH77j

https://www.youtube.com/watch?v=GU7DpgHINWQ

Practice

https://leetcode.com/problems/binary-search/

https://leetcode.com/problems/search-in-rotated-sorted-array/

https://leetcode.com/problems/first-bad-version/

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

https://leetcode.com/problems/find-peak-element/

https://leetcode.com/problems/intersection-of-two-arrays/

https://leetcode.com/problems/arranging-coins/

https://leetcode.com/problems/split-array-largest-sum/

Day 22

Revision

https://www.youtube.com/watch?v=RBSGKlAvoiM

https://www.youtube.com/watch?v=92S4zgXN17o&list=PL2_aWCzGMAwI3W_JlcBbtYTwiQSsOTa6P

https://www.youtube.com/watch?v=XCyuHSJS7XE&list=PLIY8eNdw5tW_zX3OCzX7NJ8bL1p6pWfgG

https://www.youtube.com/watch?v=92S4zgXN17o&list=PL2_aWCzGMAwI3W_JlcBbtYTwiQSsOTa6P

https://www.youtube.com/watch?v=HtSuA80QTyo&list=PLUl4u3cNGP61Oq3tWYp6V_F-5jb5L2iHb

https://www.youtube.com/watch?v=09_LlHjoEiY

https://www.youtube.com/watch?v=ddTC4Zovtbc&list=PLrmLmBdmIlpu2f2g8ltqaaCZiq6GJvl1j

Day 23

Practice Questions

https://leetcode.com/problems/loud-and-rich/

https://leetcode.com/problems/combination-sum/

https://leetcode.com/problems/rotate-image/

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

https://leetcode.com/problems/lowest-common-ancestor-of-deepest-leaves/

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

https://leetcode.com/problems/subarray-sum-equals-k/

https://leetcode.com/problems/shortest-unsorted-continuous-subarray/

https://leetcode.com/problems/top-k-frequent-elements/

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

Day 24

Practice Questions

https://leetcode.com/problems/move-zeroes/

https://leetcode.com/problems/best-time-to-buy-and-sell-stock-with-cooldown/

https://leetcode.com/problems/palindrome-linked-list/

https://leetcode.com/problems/kth-largest-element-in-an-array/

https://leetcode.com/problems/majority-element/

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

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

https://leetcode.com/problems/word-pattern/

https://leetcode.com/problems/intersection-of-two-arrays-ii/

Day 25

Practice Questions

https://leetcode.com/problems/h-index/

https://leetcode.com/problems/first-unique-character-in-a-string/

https://leetcode.com/problems/contiguous-array/

https://leetcode.com/problems/jump-game/

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

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

https://leetcode.com/problems/sliding-window-maximum/

https://leetcode.com/problems/minesweeper/

https://leetcode.com/problems/n-ary-tree-level-order-traversal/

https://leetcode.com/problems/check-if-there-is-a-valid-path-in-a-grid/

Day 26

Advance Topic - 1 Tries

Reading

https://www.youtube.com/watch?v=zIjfhVPRZCg

https://www.youtube.com/watch?v=AXjmTQ8LEoI

https://www.geeksforgeeks.org/trie-insert-and-search/

https://algs4.cs.princeton.edu/52trie/

https://www.topcoder.com/community/competitive-programming/tutorials/using-tries/

https://brilliant.org/wiki/tries/

Practice

https://codingcompetitions.withgoogle.com/kickstart/round/000000000019ffc7/00000000001d3ff3

https://leetcode.com/problems/implement-trie-prefix-tree/

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

https://leetcode.com/problems/prefix-and-suffix-search/

https://www.techiedelight.com/trie-interview-questions/

Day 27

Reading

https://github.com/donnemartin/system-design-primer

https://techtakshila.com/system-design-interview/chapter-1

https://www.hiredintech.com/classrooms/system-design/lesson/52

https://hackernoon.com/anatomy-of-a-system-design-interview-4cb57d75a53f

https://github.com/checkcheckzz/system-design-interview

https://www.educative.io/courses/grokking-the-system-design-interview

https://hackernoon.com/how-not-to-design-netflix-in-your-45-minute-system-design-interview-64953391a054

https://hackernoon.com/the-top-10-object-oriented-design-interview-questions-developers-should-know-c7fc2e13ce39

YouTube

https://www.youtube.com/watch?v=xpDnVSmNFX0&list=PLMCXHnjXnTnvo6alSjVkgxV-VH6EPyvoX

https://www.youtube.com/channel/UC9vLsnF6QPYuH51njmIooCQ

https://www.youtube.com/channel/UC_n-A84J0UcU5uq4sEh2CnQ

https://www.youtube.com/watch?v=ZgdS0EUmn70&list=PL73KFetZlkJSZ9vTDSJ1swZhe6ClYkqTL

Day 28

Practice

System Design

https://leetcode.com/discuss/interview-question/system-design?currentPage=1&orderBy=most_votes&query=

https://leetcode.com/tag/design/

http://blog.gainlo.co/index.php/category/system-design-interview-questions/

Day 29

Useful links

https://medium.com/hackernoon/14-patterns-to-ace-any-coding-interview-question-c5bb3357f6ed

https://github.com/khanhnamle1994/technical-interview-prep/blob/master/Technical-Interview-Study-Guide.pdf

https://github.com/kdn251/interviews#articles

https://yangshun.github.io/tech-interview-handbook/introduction/

https://github.com/williamfiset/Algorithms

https://github.com/careercup/CtCI-6th-Edition

https://github.com/mission-peace/interview/tree/master/src/com/interview

https://github.com/mission-peace/interview/tree/master/src/com/interview

https://www.geeksforgeeks.org/must-coding-questions-company-wise/