acm - CEG
Student Chapter

C.O.D.E

INTERNSHIP AND PLACEMENT PREPARATION MATERIAL

LINKED LIST

       From an Intern and placement perspective, the Linked list is one of the important topics to be covered. Most companies will ask for linked list problems in easy and medium sections.

Note:

       If you have no idea in doing such problems, try to explore the below problems for each day otherwise you can be done by your own.

       There will be a contest on the Linked list at the end of the 2nd day.

       For the linked list and doubly linked list, first practice the basic problems like insertion, deletion, traversing, etc., and then work out the problems.

       Don't stick only to these questions for preparations. Keep this doc as a kind of guide! You might have seen these problems somewhere already because these are the most standard ones.

       We have also attached the links for quantitative and technical aptitude. Try to explore that also.

SinglyLinkedList:
- https://www.geeksforgeeks.org/linked-list-set-1-introduction/
- https://www.geeksforgeeks.org/linked-list-set-2-inserting-a-node/
- https://www.geeksforgeeks.org/linked-list-set-3-deleting-node/
- https://www.geeksforgeeks.org/find-length-of-a-linked-list-iterative-and-recursive/

Doubly Linked List:
- https://www.geeksforgeeks.org/doubly-linked-list/

Circular Linked List:
- https://www.geeksforgeeks.org/circular-linked-list/
- https://www.geeksforgeeks.org/circular-linked-list-set-2-traversal/

DAY 1:

Easy:

       https://practice.geeksforgeeks.org/problems/delete-without-head-pointer/1

       https://practice.geeksforgeeks.org/problems/reverse-a-linked-list/1

       https://practice.geeksforgeeks.org/problems/occurence-of-an-integer-in-a-linked-list/1

       https://practice.geeksforgeeks.org/problems/union-of-two-linked-list/1

       https://leetcode.com/problems/remove-duplicates-from-sorted-list

       https://practice.geeksforgeeks.org/problems/circular-linked-list/1

Medium:

https://practice.geeksforgeeks.org/problems/intersection-point-in-y-shapped-linked-lists/1
https://leetcode.com/problems/reverse-nodes-in-k-group
https://leetcode.com/problems/odd-even-linked-list
https://practice.geeksforgeeks.org/problems/length-of-longest-palindrome-in-linked-list/1

Hard:

https://leetcode.com/problems/copy-list-with-random-pointer
https://leetcode.com/problems/next-greater-node-in-linked-list/

DAY 2:

Easy:

https://www.geeksforgeeks.org/find-minimum-and-maximum-elements-in-singly-circular-linked-list/
https://practice.geeksforgeeks.org/problems/merge-two-sorted-linked-lists/1
https://leetcode.com/problems/swapping-nodes-in-a-linked-list/
https://practice.geeksforgeeks.org/problems/rotate-doubly-linked-list-by-p-nodes/1
https://practice.geeksforgeeks.org/problems/nth-node-from-end-of-linked-list/1
https://practice.geeksforgeeks.org/problems/detect-loop-in-linked-list/1

Medium:

https://practice.geeksforgeeks.org/problems/flattening-a-linked-list/1
https://practice.geeksforgeeks.org/problems/remove-loop-in-linked-list/1
https://leetcode.com/problems/add-two-numbers/
https://leetcode.com/problems/reorder-list/

Hard:

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

Additional Problems:

Easy:

- https://practice.geeksforgeeks.org/problems/xor-linked-list/1
- https://practice.geeksforgeeks.org/problems/find-length-of-loop/1
- https://practice.geeksforgeeks.org/problems/linked-list-in-zig-zag-fashion/1
- https://practice.geeksforgeeks.org/problems/deletion-and-reverse-in-linked-list/1

Medium:

- https://practice.geeksforgeeks.org/problems/merge-k-sorted-linked-lists/1
- https://practice.geeksforgeeks.org/problems/given-a-linked-list-reverse-alternate-nodes-and-append-at-the-end/1
- https://www.geeksforgeeks.org/exchange-first-last-node-circular-linked-list/

NOTE:

If you are interested try to explore these links

- https://www.geeksforgeeks.org/must-do-coding-questions-for-companies-like-amazon-microsoft-adobe/#LinkedList
- https://www.geeksforgeeks.org/data-structures/linked-list/
- https://leetcode.com/explore/learn/card/linked-list/
- https://leetcode.com/problemset/all/?topicSlugs=linked-list

QUANTITATIVE APTITUDE :

https://www.indiabix.com/aptitude/time-and-work/
https://www.geeksforgeeks.org/work-and-wages/

TECHNICAL APTITUDE :

https://www.geeksforgeeks.org/data-structure-gq/linked-list-gq/