

Day 10:

1. Find Middle Element in a linked list **[Easy]** **[Microsoft, Amazon, Apple]**

<https://interviewprep.appliedroots.com/lecture/2/interview-preparation-course/1232/find-middle-element-in-a-linked-list/18/module-5-problem-solving>

2. Reverse a linked list (Iterative Approach) **[Easy]** **[Amazon, Adobe, Microsoft, Apple, Uber, Yandex, Google, Qualcomm, Facebook]**

<https://interviewprep.appliedroots.com/lecture/2/interview-preparation-course/1233/reverse-a-linked-list-iterative-approach/18/module-5-problem-solving>

3. Remove Duplicates from Sorted linked list **[Medium]** **[Amazon, Bloomberg]**

<https://interviewprep.appliedroots.com/lecture/2/interview-preparation-course/1234/remove-duplicates-from-sorted-linked-list/18/module-5-problem-solving>

4. Odd Even Linked list **[Medium]** **[Facebook, Microsoft, Amazon, VMware]**

<https://interviewprep.appliedroots.com/lecture/2/interview-preparation-course/1235/odd-even-linked-list/18/module-5-problem-solving>

5. Inserted Into a sorted circular linked list **[Medium]** **[Facebook, Microsoft, Amazon]**

<https://interviewprep.appliedroots.com/lecture/2/interview-preparation-course/1237/inserted-into-a-sorted-circular-linked-list/18/module-5-problem-solving>

Practice Questions

6. We are given a linked list with head as the first node. Let's number the nodes in the list: node_1, node_2, node_3, ... etc.

Each node may have a next larger value: for node_i, next_larger(node_i) is the node_j.val such that $j > i$, node_j.val > node_i.val, and j is the smallest possible choice. If such a j does not exist, the next larger value is 0.

Return an array of integers answer, where answer[i] = next_larger(node_{i+1}).

Note that in the example inputs (not outputs) below, arrays such as [2,1,5] represent the serialization of a linked list with a head node value of 2, second node value of 1, and third node value of 5.

[Medium] [Google, Amazon, Adobe]

Practice Link:

<https://leetcode.com/problems/next-greater-node-in-linked-list/>

7. Given the head of a singly linked list and two integers left and right where $\text{left} \leq \text{right}$, reverse the nodes of the list from position left to position right, and return the reversed list. **[Medium] [Microsoft, Amazon, Facebook, Bloomberg]**

Practice link: <https://leetcode.com/problems/reverse-linked-list-ii/>

8. Given the head of a linked list, find all the values that appear more than once in the list and delete the nodes that have any of those values.

Return the linked list after the deletions. **[Medium] [Goldman Sachs]**

Practice link:

<https://leetcode.com/problems/remove-duplicates-from-an-unsorted-linked-list/>