

Day 9:

1. Reverse K alternative nodes in a linked list **[Hard]** **[Amazon, Microsoft, Facebook, Apple]**

<https://interviewprep.appliedroots.com/lecture/2/interview-preparation-course/809/reverse-k-alternative-nodes-in-a-linked-list/18/module-5-problem-solving>

2. Merge Two Sorted Linked Lists **[Easy]** **[Amazon, Microsoft, Adobe, Bloomberg, Facebook, Uber]**

<https://interviewprep.appliedroots.com/lecture/2/interview-preparation-course/765/merge-two-sorted-linked-lists/18/module-5-problem-solving>

3. Flattening a Linked List **[Hard]** **[Paytm, Flipkart, Amazon, Microsoft, Snapdeal]**

<https://interviewprep.appliedroots.com/lecture/2/interview-preparation-course/401/flattening-a-linked-list/18/module-5-problem-solving>

4. Merge sort for Linked List **[Medium]** **[Facebook, Adobe, Yahoo, Microsoft]**

<https://interviewprep.appliedroots.com/lecture/2/interview-preparation-course/394/merge-sort-for-linked-list/18/module-5-problem-solving>

5. Union and Intersection of two Linked Lists **[Medium]** **[VMWare, Flipkart, Accolite, Amazon, Microsoft]**

<https://interviewprep.appliedroots.com/lecture/2/interview-preparation-course/395/union-and-intersection-of-two-linked-lists/18/module-5-problem-solving>

Practice questions:

6. Given a linked list, swap every two adjacent nodes and return its head. You must solve the problem without modifying the values in the list's nodes (i.e., only nodes themselves may be changed.) **[Medium]**
[Microsoft, eBay, Amazon]

Practice link: <https://leetcode.com/problems/swap-nodes-in-pairs/>

7. You are given the head of a linked list, and an integer k.

Return the head of the linked list after swapping the values of the kth node from the beginning and the kth node from the end (the list is 1-indexed). **[Medium]** **[Amazon]**

Practice Link:

<https://leetcode.com/problems/swapping-nodes-in-a-linked-list/>

8. Given the head of a singly linked list, sort the list using insertion sort, and return the sorted list's head.

The steps of the insertion sort algorithm:

Insertion sort iterates, consuming one input element each repetition and growing a sorted output list.

At each iteration, insertion sort removes one element from the input data, finds the location it belongs within the sorted list and inserts it there.

It repeats until no input elements remain. **[Medium]** **[Apple]**

Practice link : <https://leetcode.com/problems/insertion-sort-list/>