

Assignment 2
CSE225L, Summer'21
Marks: 30

1. Given a singly linked list consisting of N nodes. The task is to remove duplicates (nodes with duplicate values) from the given list (if exists). [The nodes are arranged in a sorted way]. [10]

E.g. LinkedList: 3->3->5->6

Output: 3 5 6

2. Given a queue of integers of even length, rearrange the elements by interleaving the first half of the queue with the second half of the queue. Only a stack can be used as an auxiliary space. Use Linked List to solve the task. [10]

Input : 11 12 13 14 15 16 17 18 19 20

Output : 11 16 12 17 13 18 14 19 15 20

3. Given a singly linked list, delete middle of the linked list. For example, if given linked list is 1->2->3->4->5 then linked list should be modified to 1->2->4->5. If there are even nodes, then there would be two middle nodes, we need to delete the second middle element. For example, if given linked list is 1->2->3->4->5->6 then it should be modified to 1->2->3->5->6. If the input linked list is NULL or has 1 node, then it should return NULL. [10]