Assignment 4

LE

1.

Write a menu driven program to perform the following operations in a single linked list by using suitable user defined functions for each case.

a) Traversal of the list

b) Check if the list is empty

c) Insert a node at the certain position (at beginning/end/any position)

d) Delete a node at the certain position (at beginning/end/any position)

e) Delete a node for the given key

f) Count the total number of nodes

g) Search for an element in the linked list

Verify & validate each function from main method.

2 WAP to display the contents of a linked list in reverse order.

3 WAP to print m^{th} node from the last of a linked list of n nodes.

HE

1. WAP to search an element in a simple linked list, if found delete that node and insert that node at beginning. Otherwise display an appropriate message.
2. WAP to count the number of occurrences of an element in a linked list of n nodes.
3. WAP to reverse the first m elements of a linked list of n nodes.
4. WAP to remove duplicates from a linked list of n nodes.
5. Given a linked list which is sorted, WAP to insert an element into the linked list in sorted way.

6	WAP to find number of occurrences of all elements in a linked list.
7	WAP to modify the linked list such that all even numbers appear before all the odd numbers in the modified linked list.
8	WAP to check whether a singly linked list is a palindrome or not.