1. **Write a program in C to create and display Singly Linked List. Go to the editor**

Test Data :
Input the number of nodes : 3
Input data for node 1 : 5
Input data for node 2 : 6
Input data for node 3 : 7
Expected Output :

Data entered in the list :
Data = 5
Data = 6
Data = 7

2. **Write a program in C to create a singly linked list of n nodes and display it in reverse order.**

Test Data :
Input the number of nodes : 3
Input data for node 1 : 5
Input data for node 2 : 6
Input data for node 3 : 7
Expected Output :

Data entered in the list are :
Data = 5
Data = 6
Data = 7

The list in reverse are :
Data = 7
Data = 6
Data = 5

3. **Write a program in C to insert a new node at the beginning of a Singly Linked List.**

Test Data and Expected Output :

Input the number of nodes : 3
Input data for node 1 : 5
Input data for node 2 : 6
Input data for node 3 : 7

Data entered in the list are :
Data = 5
Data = 6
Data = 7

Input data to insert at the beginning of the list : 4

Data after inserted in the list are :
Data = 4
Data = 5
Data = 6
Data = 7

4. **Write a program in C to insert a new node at the middle of Singly Linked List.**

Test Data and Expected Output :

Input the number of nodes (3 or more) : 4

Input data for node 1 : 1
Input data for node 2 : 2
Input data for node 3 : 3
Input data for node 4 : 4

Data entered in the list are :
Data = 1
Data = 2
Data = 3
Data = 4

Input data to insert in the middle of the list : 5
Input the position to insert new node : 3

Insertion completed successfully.

The new list are :
Data = 1
Data = 2
Data = 5
Data = 3
Data = 4

## 5. Write a program in C to delete first node of Singly Linked List.

Test Data :
Input the number of nodes : 3
Input data for node 1 : 2
Input data for node 2 : 3
Input data for node 3 : 4
Expected Output :

Data entered in the list are :
Data = 2
Data = 3
Data = 4

Data of node 1 which is being deleted is : 2

Data, after deletion of first node :
Data = 3
Data = 4

## 6. Write a program in C to delete a node from the middle of Singly Linked List.

Test Data and Expected Output :

Input the number of nodes : 3
Input data for node 1 : 2
Input data for node 2 : 5
Input data for node 3 : 8

Data entered in the list are :
Data = 2
Data = 5
Data = 8

Input the position of node to delete : 2

Deletion completed successfully.

The new list are :
Data = 2
Data = 8

## 7. Write a program in C to search an existing element in a singly linked list.

Test Data and Expected Output :

Input the number of nodes : 3

Input data for node 1 : 2
Input data for node 2 : 5
Input data for node 3 : 8

Data entered in the list are :
Data = 2
Data = 5
Data = 8

Input the element to be searched : 5
Element found at node 2