



**Problem Solving with C**  
**LABORATORY MANUAL**  
**Week 14**

Semester: 2

Course Code: UE24CS151B

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<b>To Learn and Solve</b>	Programs on Linked List
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### **1) Program to Create and Manipulate a Singly Linked List (Insert at End)**

Write a C program that performs the following operations on a singly linked list:

1. Prompt the user to input the number of nodes (n).
2. Insert n nodes at the end of the linked list using a function insertLast().
3. Display the contents of the linked list using a function display().
4. Delete the last node of the list using a function deleteLast().
5. Display the linked list again after deletion using the same display() function.
6. Free the entire linked list memory using a function freeList().

### **2. Program to Create and Manipulate a Singly Linked List (Insert at Front)**

Write a C program that performs the following operations on a singly linked list:

1. Prompt the user to input the number of nodes (n).
2. Insert n nodes at the front of the linked list using a function insertFront().
3. Display the contents of the linked list using a function display().
4. Delete the first node of the list using a function deleteFront().
5. Display the linked list again after deletion using the same display() function.
6. Free the entire linked list memory using a function freeList().