Lab Assignment 7

Program:

a. Implement a menu-driven Circular Linked List using structure for following operations:
   i. Insert an element
      1. At the beginning
      2. At the end
      3. At the specific position
   ii. Traverse a list
   iii. Delete the element
      1. At the beginning
      2. At the end
      3. Specific element
   iv. Count the number of elements in a list
   v. Search an element in list
   vi. Traverse the element in reverse order.

b. Implement a menu-driven Doubly Linked List using structure for following operations:
   i. Insert an element
      1. At the beginning
      2. At the end
      3. At the specific position
   ii. Traverse a list
   iii. Delete the element
      1. At the beginning
      2. At the end
      3. Specific element
   iv. Count the number of elements in a list
   v. Search an element in list
   vi. Traverse the element in reverse order.

Lab File Writing:

1. Circular linked list with diagram
   a. Representation of circular linked list using Array and structure.
   b. Algorithm
   c. Time complexity of each operation
2. Doubly Linked List with diagram
   a. Representation of circular linked list using Array and structure.
   b. Algorithm
   c. Time complexity of each operation
3. Conclusion

Note:

Upload the zip file of .c and screenshot. Code should be modular and add necessary comments.