

Data Structures and Algorithms - Assignment 4

1. Implement a singly linear linked list with head and tail pointer. Implement `addFirst()`, `addLast()`, `delFirst()`, `delLast`, `display()` operations.
2. Implement singly circular linked list using tail pointer (no head pointer). Compare time complexities of all operations.
3. In singly linear list implement following operations. i. insert a new node after a given node ii. insert a new node before a given node
4. Display Singly linear linked list in reverse order.
5. Write a function which will insert values in sorted order into linked list.
- optional
6. Implement menu driven program to maintain linked list of employees and provide below operations. i. Add employee (Perform any add operation) ii. Display all employees iii. Search employee by name iv. Delete employee by empid v. Update salary of employee