

Practical Assignment

Data Structures and Algorithms Lab (CS 253)

August 24, 2022

Lab Assignment III

Write a C++ program :

- I. To create a singly linked list of the size and data specified by the user.
- II. To delete the entire linked list.
- III. To delete the first or last or mid element from the list.
- IV. To reverse the entire linked list.
- V. To delete 'x' nodes before 'y' nodes in a linked list.
- VI. To merge two linked lists in alternate order.
- VII. To add two polynomials represented by linked lists.
- VIII. To check whether a linked list has a loop.

Lab Assignment III

Write a C++ program :

- IX. To delete duplicate elements from an unsorted linked list.
- X. To check whether a linked list has a palindrome (in constant space complexity).
- XI. To perform union and intersection on two linked lists.
- XII. To reverse a circular linked list.