



ACADEMY OF TECHNOLOGY
Lab Assignment (Assignment 23)

Paper name: Data Structure and Algorithm
Code: PCC-CS391
Discipline: CSE

Semester: 3rd
Time: 2 Hours

Date: December 21, 2020

1. Write a menu driven program in C or C++ to implement a linked list and perform the following operations.
 - a. insert new node at the beginning of the list.
 - b. insert new node at the end of the list.
 - c. display the list.
 - d. delete a node at the beginning of the list.
 - e. delete a node at the end of the list.
 - f. delete an item from the list.
 - g. reverse the list.
 2. Write a program in C or C++ to create two sorted linked lists L_1 and L_2 , then merge these two sorted lists into a third list L_3 such that L_3 should also be sorted. For example if the first linked list L_1 is $5 \rightarrow 10 \rightarrow 15$ and the second linked list L_2 is $2 \rightarrow 3 \rightarrow 20$, the third merged list L_3 is $2 \rightarrow 3 \rightarrow 5 \rightarrow 10 \rightarrow 15 \rightarrow 20$.
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