CL2001 – Data Structure Lab

Exercise # 05

Note:

- Copied task will be awarded **zero** marks.
- Use comments wherever applicable.
- Note that these lab task marks could be graded through a viva in lab.
- Variables and functions names should be meaningful.

Problem: 1 | Doubly Linked List

Write a menu driven C++ program for following functions of a doubly Linked list.

1. Insert
2. Remove
3. Display

Problem: 2 | Split Doubly Linked List

Create two doubly linked lists out of one doubly linked list such that 1st linked list contains even data and 2nd linked list contains odd data of the provided linked list.

Input:

NULL <– 1 ⇔ 2 ⇔ 3 ⇔ 4 ⇔ 5 ⇔ 6 ⇔ 7 ⇔ 8 ⇔9 –>NULL

Output:

1st: NULL <– 2 ⇔ 4 ⇔ 6 ⇔ 8->NULL

2nd: NULL <– 1 ⇔ 3 ⇔ 5 ⇔ 7 ⇔ 9->NULL

Problem: 3 | Circular Linked List

Write a menu driven C++ program for following functions of a Circular Linked list.

1. InsertAtBegin()
2. DeleteAtEnd()
3. Display()