CL-210
Data Structures Lab
Lab # 3

Objectives:

- Linked List(insertion)
- Linked List(deletion)
- Linked List(searching)
- Linked List(Traversal)

Note: Carefully read the following instructions (*Each instruction contains a weightage*)

1. There must be a block of comments at start of every question's code by students; the block should contain brief description about functionality of code.
2. Comment on every function and about its functionality.
3. Mention comments where necessary such as comments with variables, loop, classes etc to increase code understandability.
4. Use understandable name of variables.
5. Proper indentation of code is essential.
6. Write a code in C++ language.
7. Make a Microsoft Word file and paste all of your C++ code with all possible screenshots of every task **outputs in Microsoft Word and submit word file. Do not submit .cpp file.**
8. First think about statement problems and then write/draw your logic on copy.
9. After copy pencil work, code the problem statement on MS Studio C++ compiler.
10. At the end when you done your tasks, attached C++ created files in MS word file and make your submission on Google Classroom. (Make sure your submission is completed).
11. Please submit your file in this format **19F1234_L4**.
12. Do not submit your assignment after deadline. Late and email submission is not accepted.
13. Do not copy code from any source otherwise you will be penalized with negative marks.

Problem: 1 | Creating Singly Linked List

Write a C++ program to create a Singly Linked List.

Problem: 2 | Singly Linked List

Write a C++ program:

- Insertion at start and print the list
- Insertion at end and print the list
- Deletion at start and print the list
- Deletion at end and print the list

Problem: 3 | Merging Ordered Lists

Write a C++ program:

- Search and update the element in Singly Linked List
- Reverse Linked list and print it
- Add nodes of Singly linked List and print it.

Best of luck