CS102 - Lab 7 - 14/06/2023

problem1

Write a C program to create a doubly linked list of integers and perform the following operations:

- Insert a node at the beginning
- Insert a node at the end
- Insert a node after a given position
- Delete a node at the beginning
- Delete a node at the end
- Delete a node at a given position
- Display the elements of the list in forward and reverse order

problem2

Write a C program to implement a stack using a doubly linked list. Perform the following operations:

- Push an element onto the stack
- Pop an element from the stack
- Display the elements of the stack

problem3

Write a C program to implement a queue using a doubly linked list. Perform the following operations:

- Enqueue an element into the queue
- Dequeue an element from the queue
- Display the elements of the queue

problem4

Write a C program to find the maximum and minimum elements in a doubly linked list.