# Assignment- Expression Evaluation Deadline: 04-12-2023

1. Create a doubly linked list class that uses supports the following functions
2. Constructor
3. Copy Constructor
4. Assignment Operator Overload
5. Destructor
6. Swap
7. Insert (Inserts a value at the end)
8. InsertAtHead
9. Remove (Removes a value if exists)
10. RemoveFromHead (Returns the value of HeadNode)
11. Search
12. Use the created doubly Linked list to create a Stack. It should have DoublyLinkedList Object as a private data member, and it should support following functions:
    1. Constructor
    2. Copy Constructor
    3. Assignment Operator Overload
    4. Destructor
    5. Push
    6. Pop
    7. IsEmpty
    8. IsFull
13. Use the stack you just created to implement a function that takes a infix expression as a cstring and converts it into postfix expression. You can create other functions that you require
14. Use the postfix expression you just converted to evaluate the expression and display the result.
15. **Bonus Part**: Convert your LinkedList and Stack to templated class that could be used with any type.