LAB 7

Q.1 Implement stack using array.

principle operations in the stack are −

- Push - This adds a data value to the top of the stack.
- Pop - This removes the data value on top of the stack.
- Peek - This returns the top data value of the stack.
- Isfull- This function check whether the stack is full or not.
- Isempty- This function check whether the stack is empty or not.

Q.2 Implement stack using Linkedlist.

Principle operations in the stack are −

- Push - This adds a data value to the top of the stack.
- Pop - This removes the data value on top of the stack.
- Peek - This returns the top data value of the stack.
- Isempty- This function check whether the stack is empty or not.

Q.3 Implement queue using linked list

Principle operations in the queue are –

a) Enqueue- This adds a data value in the queue.
b) Dequeue- This removes the data value from the queue.
c) Isempty- This function check whether the queue is empty or not.

Q.4 Write a program to convert infix to postfix expression. Also, evaluate the expression using stack. (Take input from the user)

General note: Also add required functions to validate the operations performed.