

## Assignment 4 – Stacks

**Problem 1.** Write a program to implement a stack using a linked list which can do:

- a) Convert the expression “a+b” into “ab+”.
- b) Convert the expression “a+b” into “+ab”.
- c) Compute the value of the expression in the case  $a = 3$ ,  $b = 5$ .

**Problem 2.** Write a program that converts an integer number  $n$  to a binary number by using stack. For example, 1101 is the binary number of 13.

**Problem 3.** Write a program to reverse a string using two different techniques: stack and recursion. For example, “hello” is converted to “olleh”.