**Tutorial/Lab 9**

Q1 Implement the stack specification given below using a linked list.

struct node{ float data;

struct node\* next; };

struct stack { struct node\* sp; };

int push(struct stack \*s, float item);

float pop(struct stack \*s);

float top(struct stack \*s);

int init(struct stack \* s); // set sp

int full(struct stack \* s); // return 1 if full

int empty(struct stack \* s); // return 1 if empty

Q2 Evaluate the asymptotic time complexity of each of the functions above in terms of the Big-O notation.