ADS - Lab 1.

Batch - B1

Akanksha Laddha
1BM18CS007

Date:
P. No:

Program 1 : Implementing memory efficient ~~of~~ double linked list ; insert at end, insert at beginning ;.

i) // insert at beginning

// create a new node

new_node → ~~dot~~ value = data
// insert data.

// if its the first node to be inserted ;

new_node → npx = XOR (head, NULL)
↓
will be also NULL initially.

// if there are more than 1 node

p= XOR the ~~*~~ head → npx with NULL
and update npx of head
head → npx = XOR (new_node, p).

at the end update newnode as head.

ii) insert at the end.

// create a new node and insert data.

// if its first node to be inserted

Akanksha Maddhy
1BM18CS007
Date:
P. No:

new_node → npx = XOR (head , NULL)
& make it the head.

else

run a loop till XOR (prev, curr → next) != NULL

where

next = XOR (prev, curr → npx) ;
prev = curr
curr = prev .

Update new_node → npx = curr
and
curr → npx → XOR (prev, new_node)