Donbly linked list:

insert-front (head, data)

node new = new node ()

new -> data = data

new -> ptodiff = head

if (head! = null)

head -> ptodiff = head -> ptodiff *XOR new

kead = new

return head;

insert_rear (head, data)

node new = new node()

new -> data = data

if (head == NULL)

new -> ptrdiff = NULL

return new

temp = head; prev = NULL

while (temp! = NULL)

next = prev xoR temp -> ptrdiff

prev = temp

temp = next

prev -> ptrdiff = prev -> ptrdiff xor new

new -> ptrdiff = prev

rew -> ptrdiff = prev

LAND!