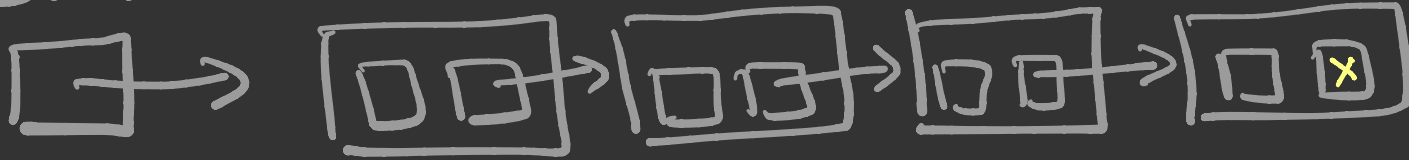# DSA through C++

Circular linked list

Saurabh Shukla (MySirG)

Agenda

1. Not utilizing next pointer of last node in SLL
2. Circular linked list
3. Comparison of CLL with SLL
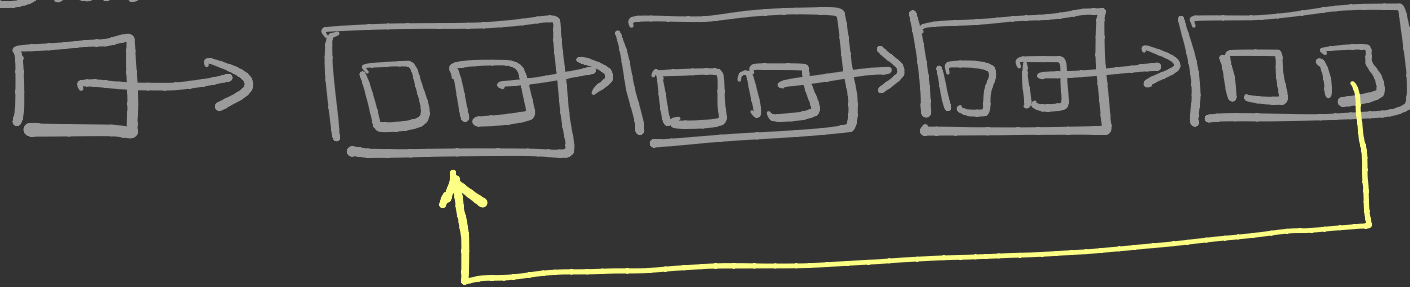4. Small change big difference
5. Insertion and Deletion in CLL

Not utilizing next pointer of last node in SLL
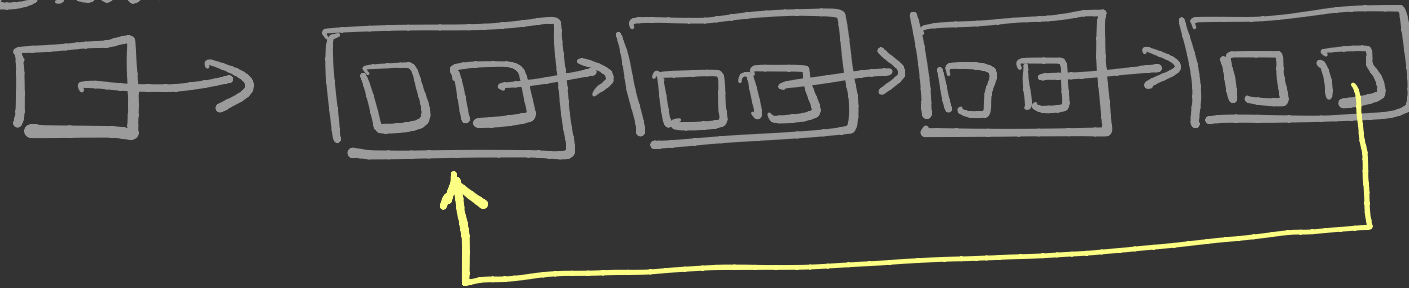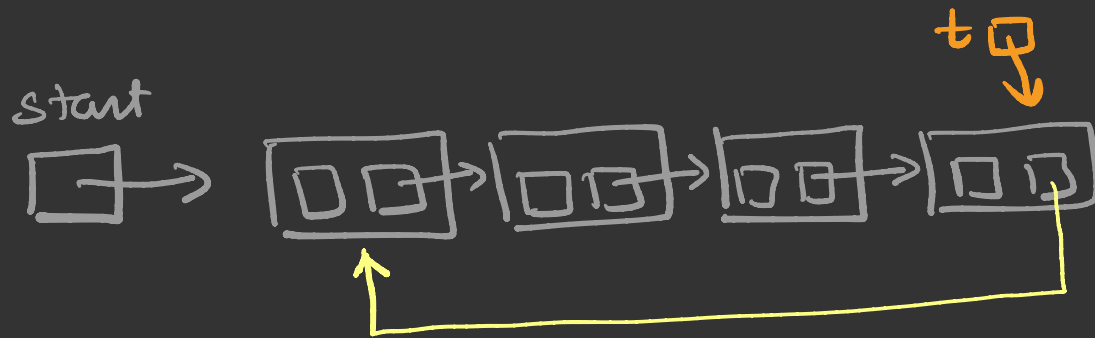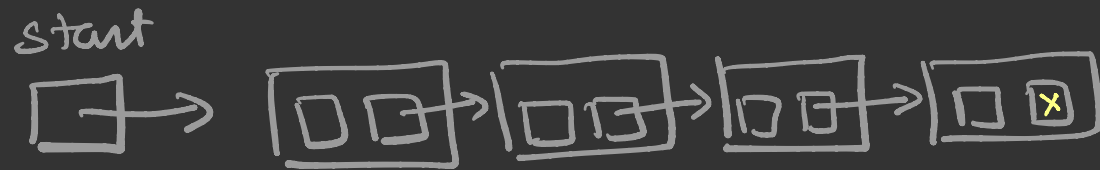
start

Solution

start

t

if(t->next==start)

t is pointing to last node

Circular linked list

Comparison of CLL with SLL

start

$\square \rightarrow$ $\boxed{\square\ \square} \rightarrow \boxed{\square\ \square} \rightarrow \boxed{\square\ \square} \rightarrow \boxed{\square\ \square\ \times}$

Insertion

① First   No Traversing

② Last   Traversing

Deletion

① First   No traversing

② Last   Traversing

t $\square$

start

$\square \rightarrow$ $\boxed{\square\ \square} \rightarrow \boxed{\square\ \square} \rightarrow \boxed{\square\ \square} \rightarrow \boxed{\square\ \square}$

Insertion

① First   Traversing

② Last   Traversing

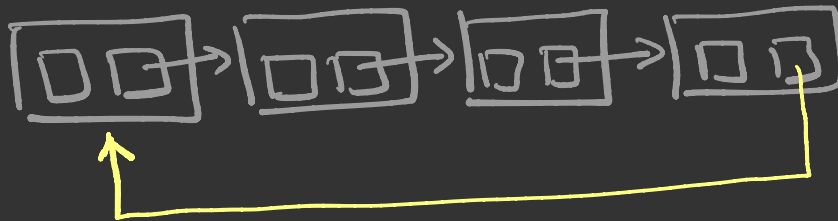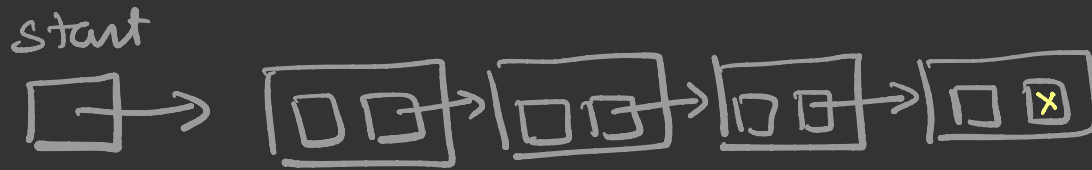Deletion

① First   Traversing

② Last   Traversing

Small Change, Big Difference

start

last

Insertion
① First   no traversing
② Last   Traversing

Deletion
① First   no traversing
② Last   Traversing

Insertion
① First   no traversing
② Last   no traversing

Deletion
① First no traversing
② Last   traversing

Insertion in CLL

Deletion in CLL