

DSA through C++

Circular linked list



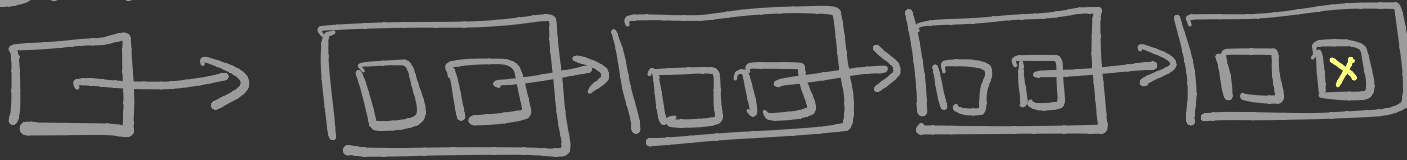
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Agenda

- 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

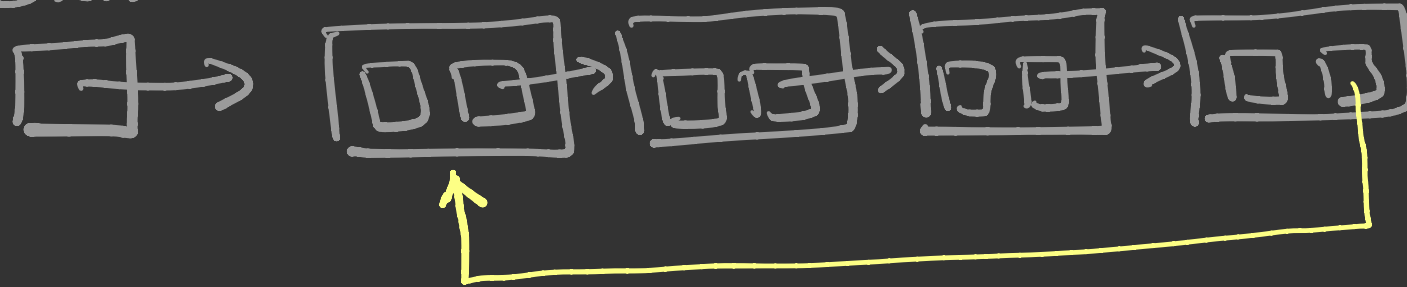
Not utilizing next pointer of last node in SLL

start



Solution

start

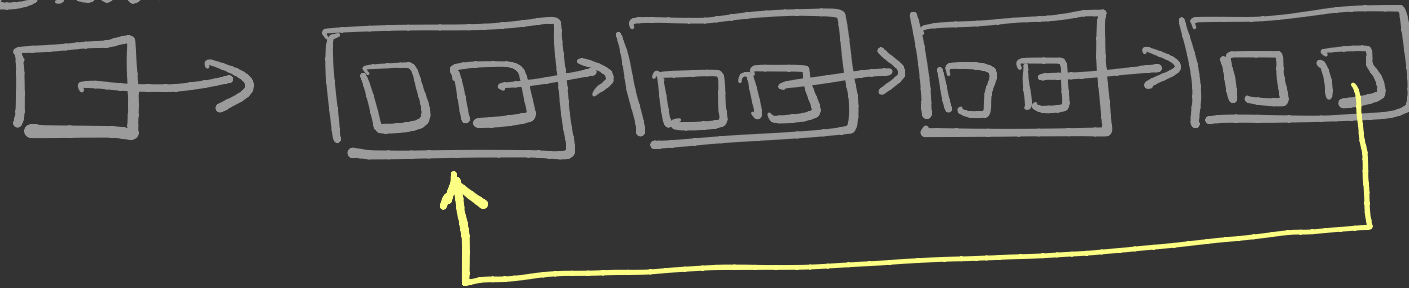


t

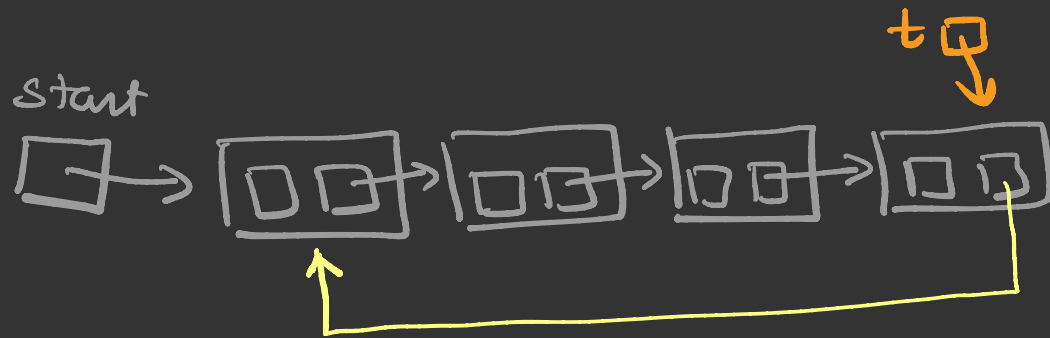
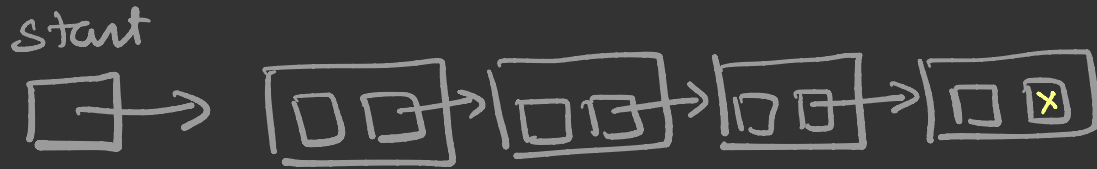
if ($t \rightarrow \text{next} == \text{start}$)
t is pointing
to last node


Circular linked list

start



Comparison of CLL with SLL



 $n \rightarrow n_{\text{next}} = \text{start};$
 $\text{start} = n;$

Insertion

- ① First No Traversing
- ② Last Traversing

Deletion

- ① First No Traversing
- ② Last Traversing

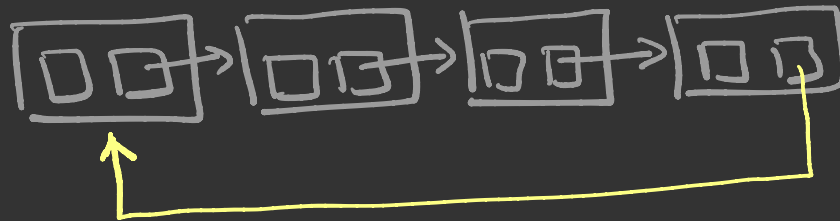
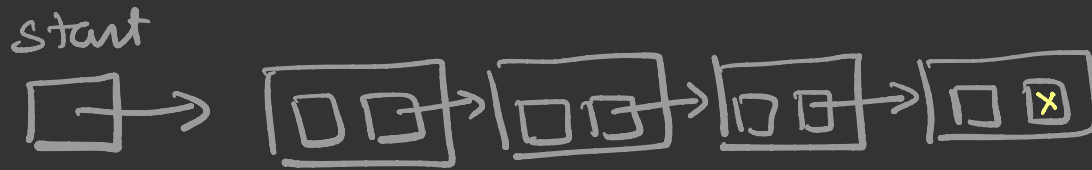
Insertion

- ① First Traversing
- ② Last Traversing

Deletion

- ① First Traversing
- ② Last Traversing

Small Change, Big Difference



$n \rightarrow \text{next} = \text{last} \rightarrow \text{next};$

$\text{last} \rightarrow \text{next} = n;$

$\text{last} = n;$



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