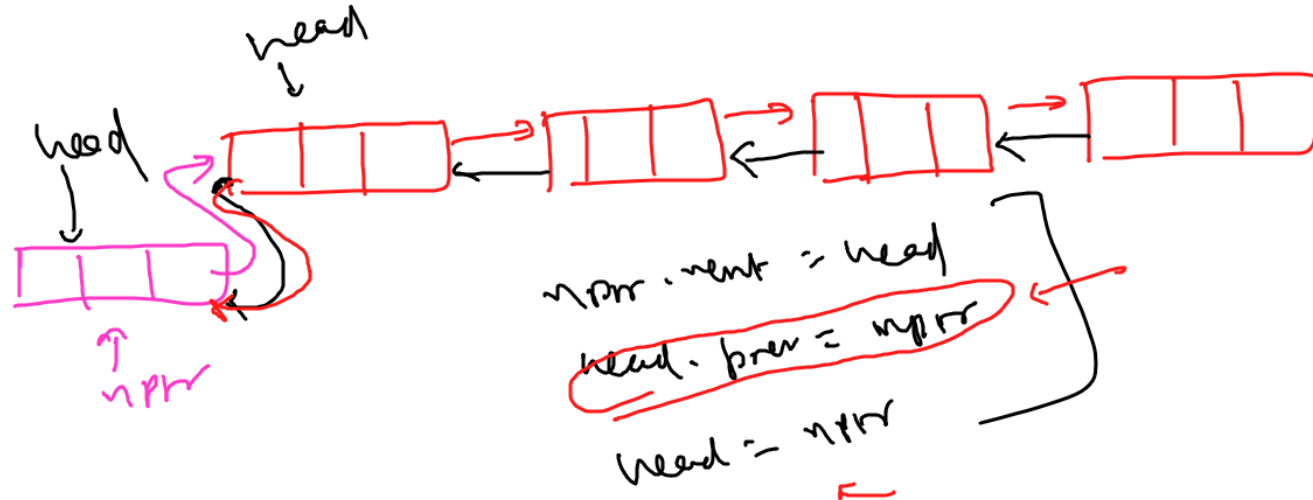


## Double Linked List

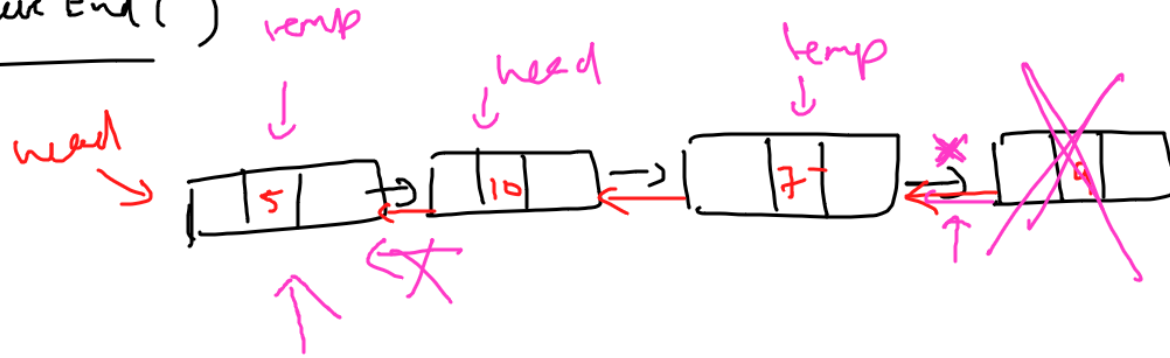
SLL  $\Rightarrow$



DLL  $\Rightarrow$

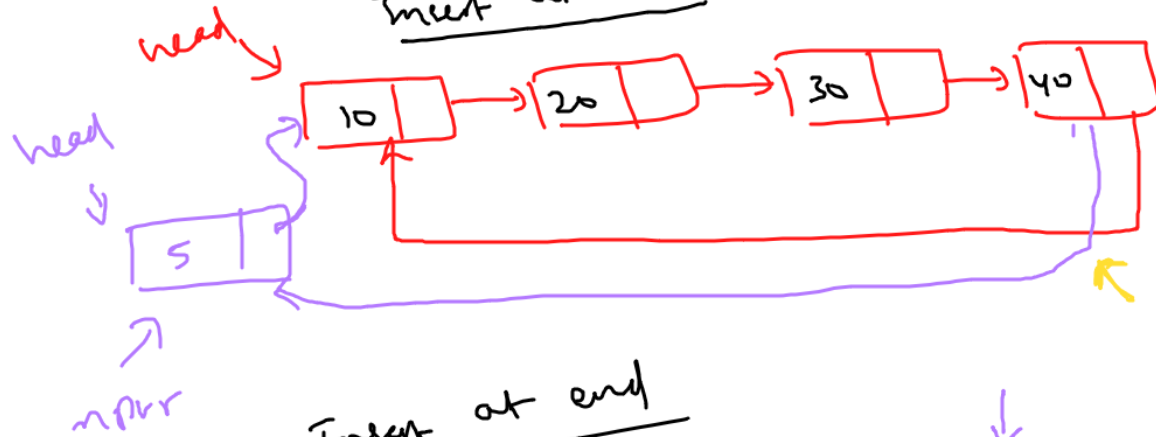


delete End ( )



## Circular Linked List

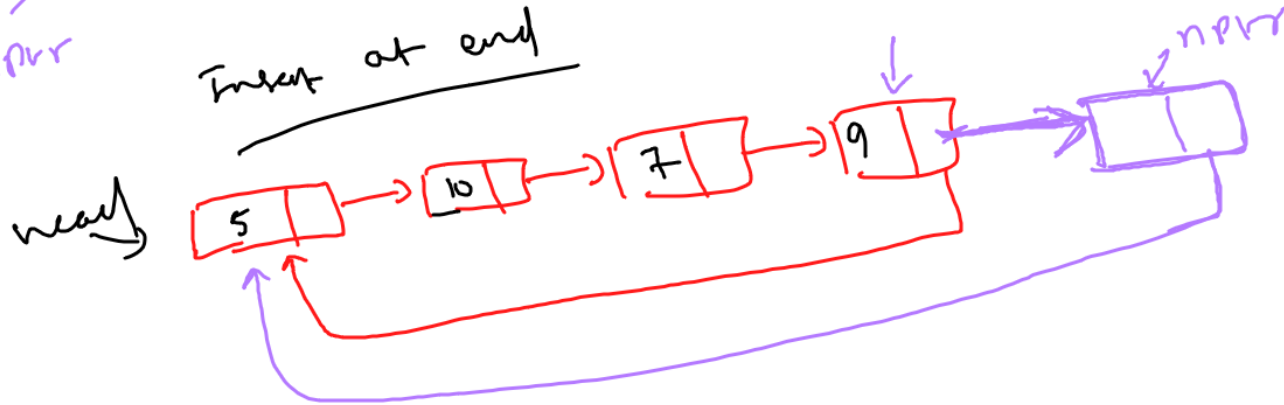
Insert at beg :-



$$T(n) = O(n) \leftarrow$$

In SLL,  
 $T(n) = O(1)$

Insert at end



$$T(n) = O(n)$$

In SLL  
 $T(n) = O(n)$

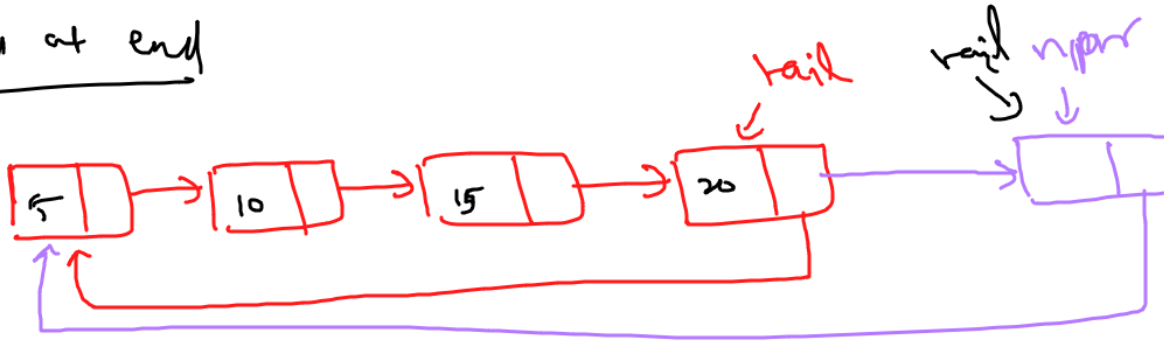
Insert at end

$$T(n) = O(1)$$

$npr.next = tail.next$

$tail.next = npr$

$tail = npr$



Insert at beg

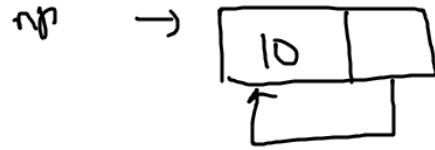
$$T(n) = O(1)$$

$npr$

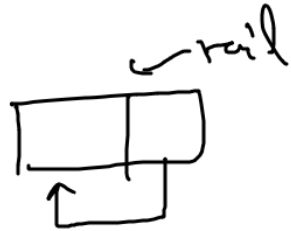


$npr.next = tail.next$   
 $tail.next = npr$

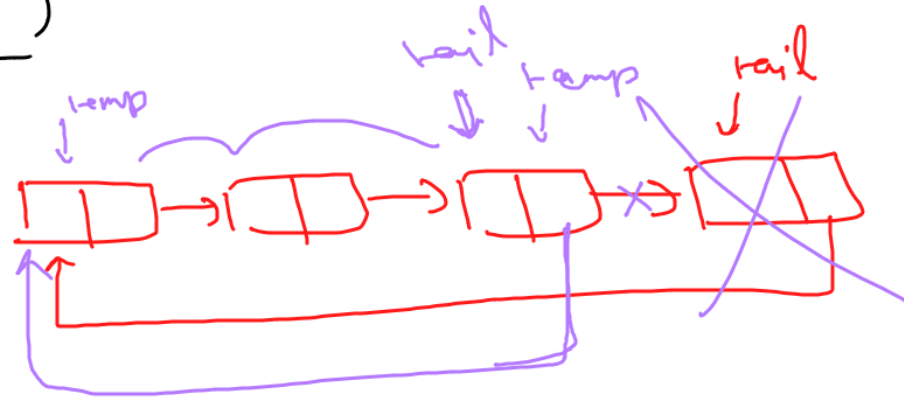
## creating a Node in CLL



np.data = n  
np.next = np



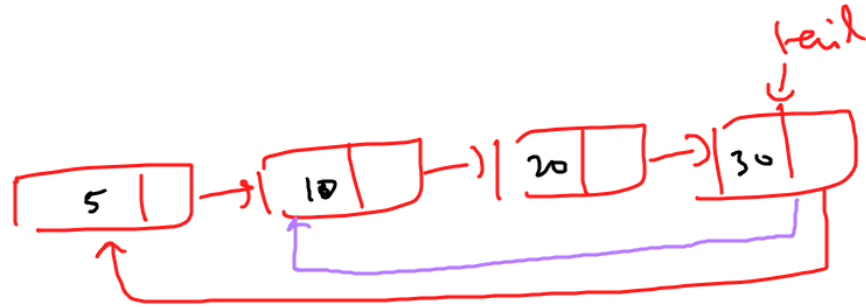
delete End ( )



$temp \rightarrow next = tail \rightarrow next$

$tail = temp$

After Beg



$tail \rightarrow next = tail \rightarrow next \rightarrow next$

SLL

Stack

push() → insertBeg() ✓  
pop() → deleteBeg() ✓  
display() → display() ✓

Queue

SLL

enqueue() → insertEnd()  
dequeue() → deleteBeg()  
display() → display()