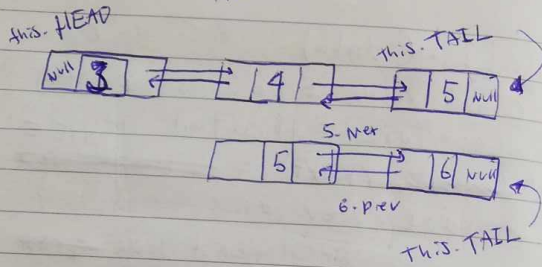
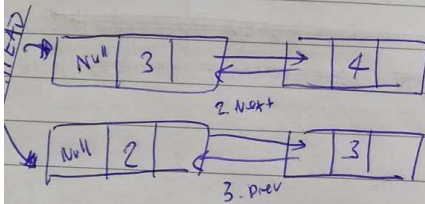


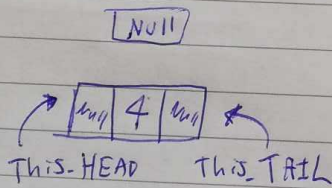
## ADD LAST



## ADD First

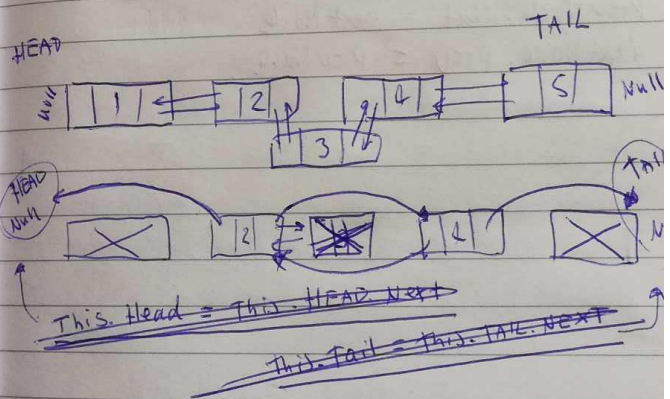


ADD SOMETHING!

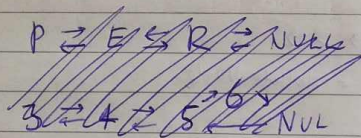


## REMOVE - NODE

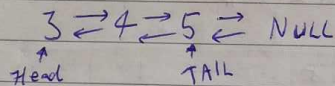
if Tail AND head = Null  
List Empty  
if Tail = head  
1 element  
Tail = Null AND head = Null  
else ... if current = delete  
(current) ~~prev~~



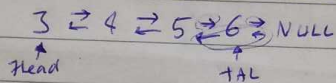
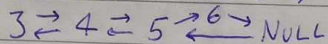
~~Null~~



STANDARD



"ADD - LAST - DATA (6)"



~~addLast(data)~~

~~data = this.tail~~

addLast(data)

6

const node = new node(data)

5 LastNode = this.tail

~~LastNode.next = null~~ Node  
node.prev = (NULL)

node.prev =

LastNode

node = this.tail

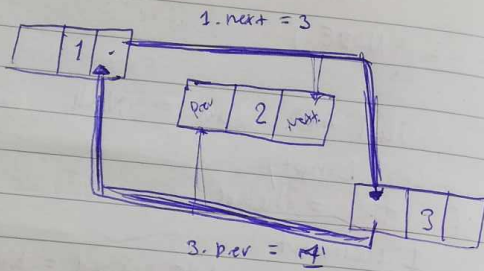
// Should we set/care Last Node's Next?

~~Set~~ LastNode.Next = Node

// ~~Head node prev for Null?~~

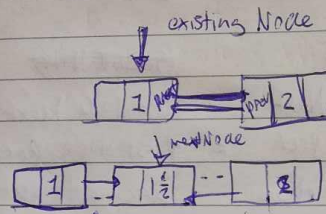
~~... Null -> null + New Node()~~





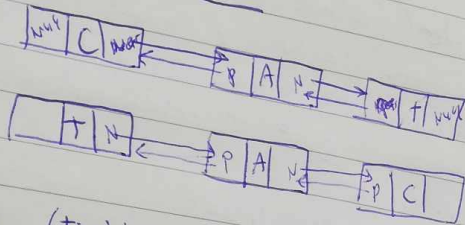
$\text{nextNode} = \text{current}.\text{next}$   
 $\text{prevNode} = \text{current}.\text{prev}$   
 $\text{prevNode}.\text{next} = \text{nextNode}$   
 $\text{nextNode}.\text{prev} = \text{prevNode}$

Insert After (NewNode, existing Node)  
 If  $\text{current} \neq \text{head} / \text{current} \neq \text{tail}$ .  
 while loop  
 if  $\text{existing} == \text{thisNode}$   
 ...



$\text{existingNode}.\text{next} = \text{NewNode}$   
 $\text{NewNode}.\text{prev} = \text{existingNode}$   
~~NewNode~~  
 $\text{existingNode}.\text{prev}$

## SWAP Notes



Let (First Node)

Const FirstNodeNext

Const FirstNodePrev

Const SecondNodeNext

Const SecondNodePrev

(Second Node)

FirstNodeNext = FirstNodeNext

FirstNodePrev = FirstNodePrev

SecondNodeNext = SecondNodeNext

SecondNodePrev = SecondNodePrev

~~FirstNodeNext~~

Kæmpefølgen?

FN.next = SecondNodeNext

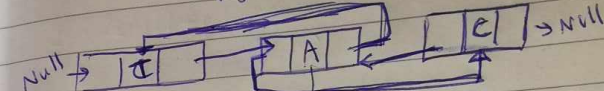
FN.Prev = SecondNodePrev

SN.next = FirstNodeNext

SN.Prev = SecondNodePrev

Hvad med deres Nabo(er)

fejls scenario



Start med Naboer!?

FirstNodeNext = FirstNodeNext. (A)

FirstNodeNext.Prev

NB: Fokus på det vi ikke vil flytte, så hænder forbliver intakt!!!

