

cmp 338

①

10.6.05

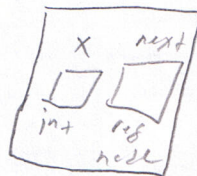
Legacy Code = Old Code  
that works!!

Insert (at current node)

Remove (the current node)

Search

Set current

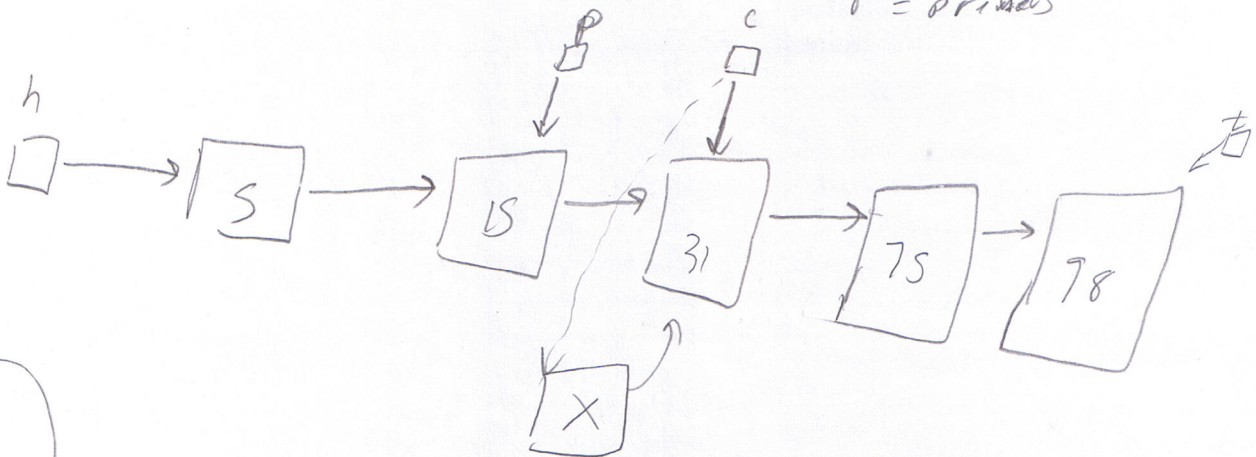


$h = head$

$t = tail$

$c = current$

$p = previous$



Code from pictures

$current = new Node(x, current)$

$previous.next = current$

public void InsertBefore(int x)

{

$current = new Node(x, current);$

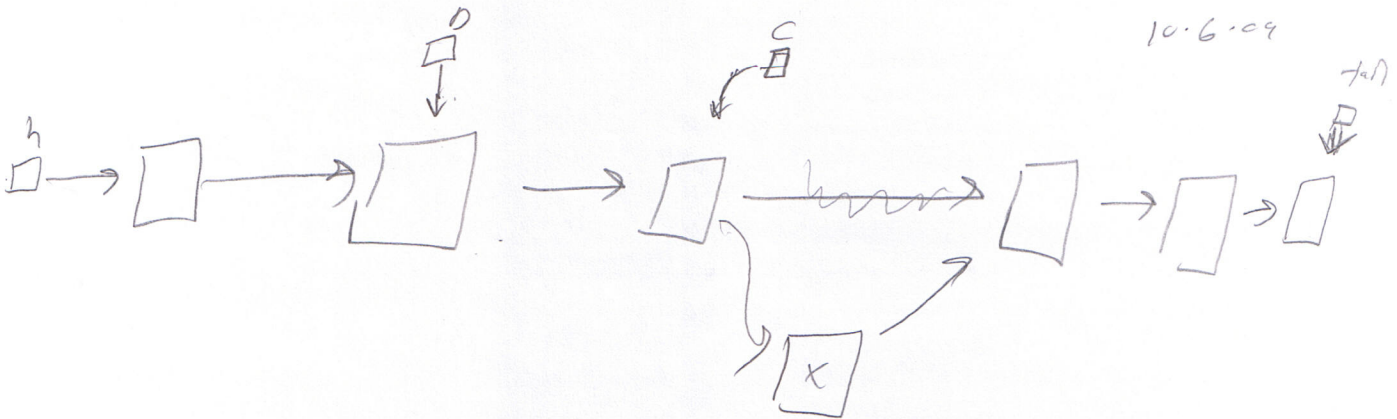
$previous.next = current;$

}

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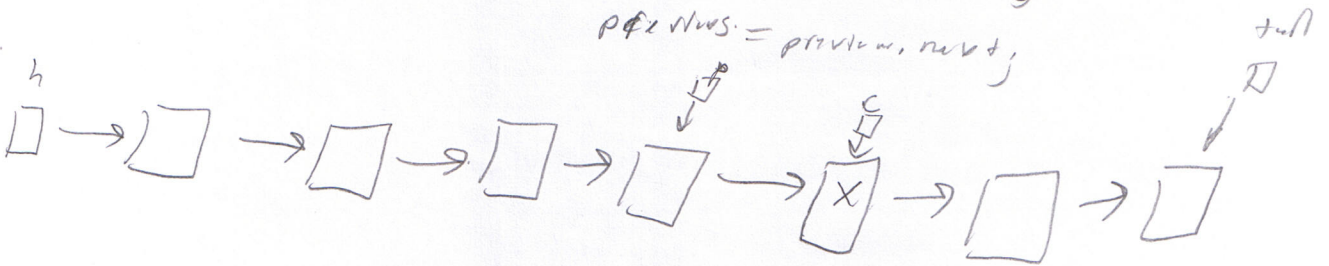
10.6.09



$current\_next = new\_node(x);$  ( $current\_next$ )

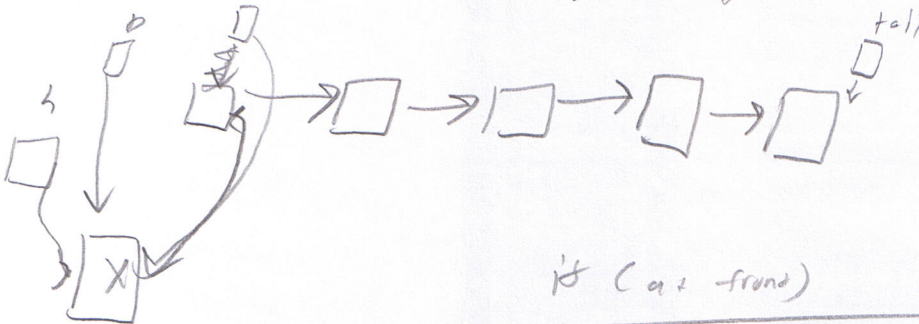
$current = current\_next;$

$previous = previous\_next;$



$\begin{cases} current = current\_next \\ previous = previous\_next \end{cases} \text{ or } \begin{cases} previous = current \\ current = previous \end{cases}$

$previous\_next \Leftrightarrow current$



if (at\_end)

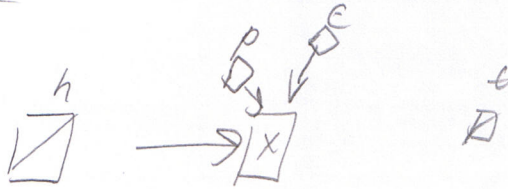
$current = new\_node(x);$   
 $tail = current;$

else

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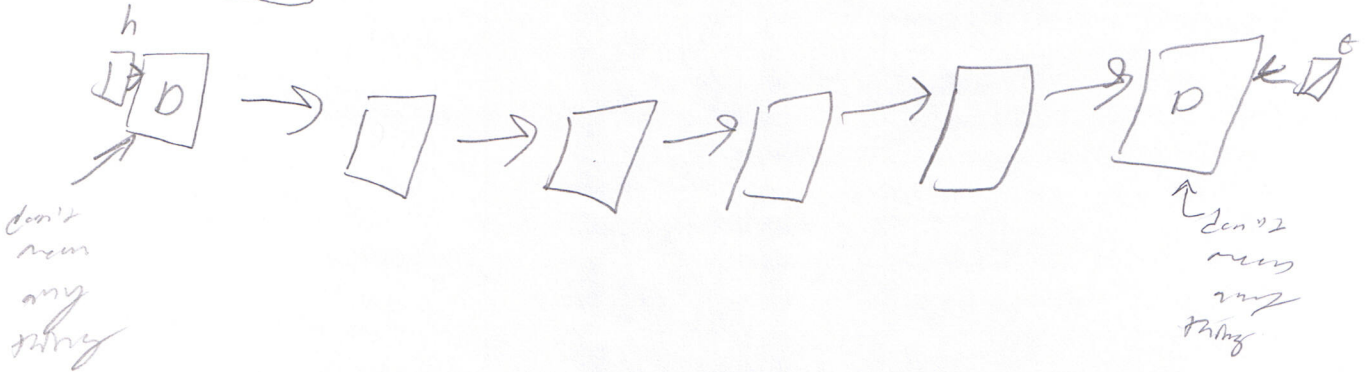
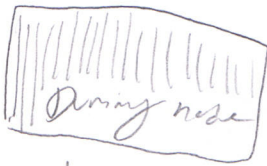
3

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if (is Empty)

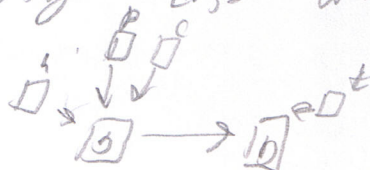
current = new Node(c, current);  
head = current;  
prev = current;  
tail = current;



Empty list with out dummy nodes

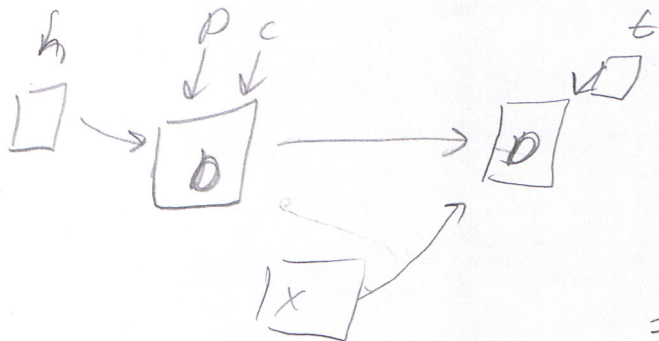


Empty list with dummy nodes





Dehydration  $\rightleftharpoons$  curing



So  
The fix

public void insertBefore(int x) {

current = new Node(x, previous, next)  
previous.next = current;

```
prev = null; next = current;
```

Insert before current }

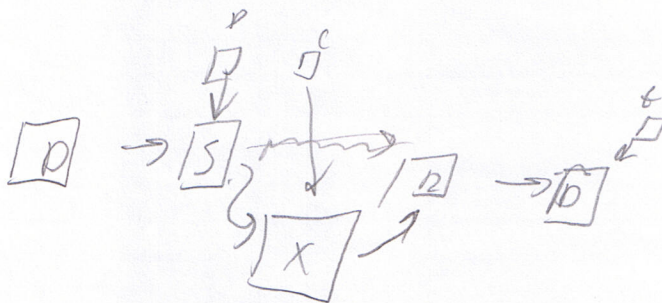
In sur Affar previous

public vote Liberty (1st x)

prev = cur + 1

Random access.

why is  
a binary  
search  
useless  
on a linked list?  
15/02/20



emp 338

5

10.6.09

```
public int search (int x)
{
```

current = head.next;

previous = head;

for (int i=0; i < j/2+1)

```
public int search (int x)
{
```

int i=0

current = head.next;

previous = head;

while (current.next != null);  
if (current.x == x) return i;  
i++

current = current.next

previous = previous.next;

}

Choose for loop  
when per  
loop start with  
a known value

while loop  
if the start of  
the loop is not known



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```
public Node
{
    String name;
    String SS;
    String address;
    String DOB;
    ;
    Node next;
}
```

Set current to  
a node number  
ex  
current (int x)