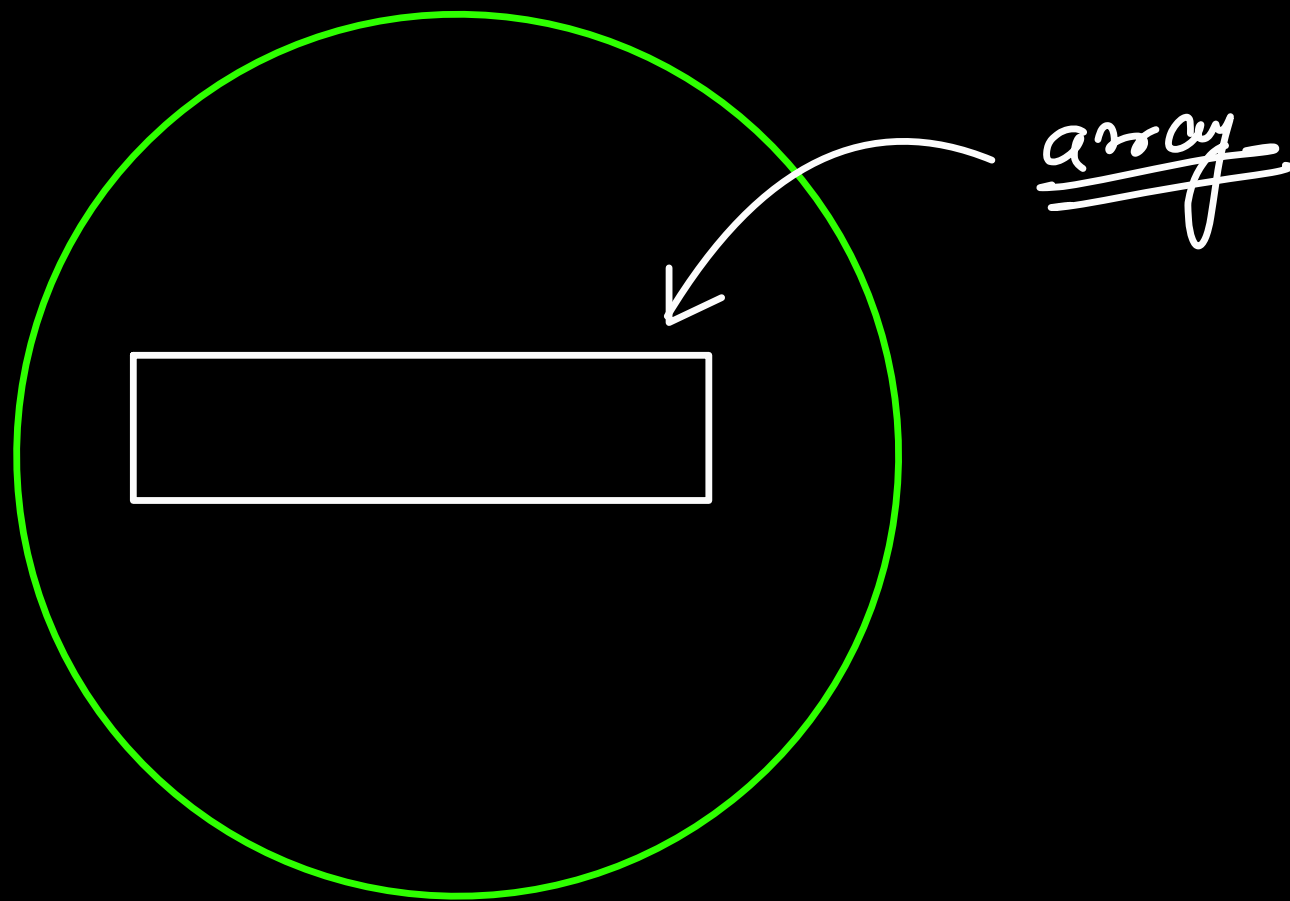
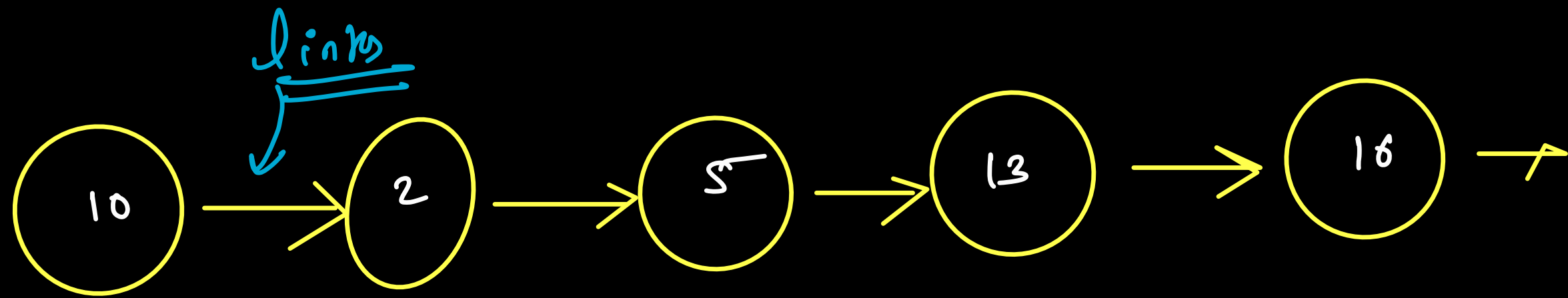


Arrays
↓
Problems ??

Some times
can be
memory is efficient



Linked List



node

Linked List

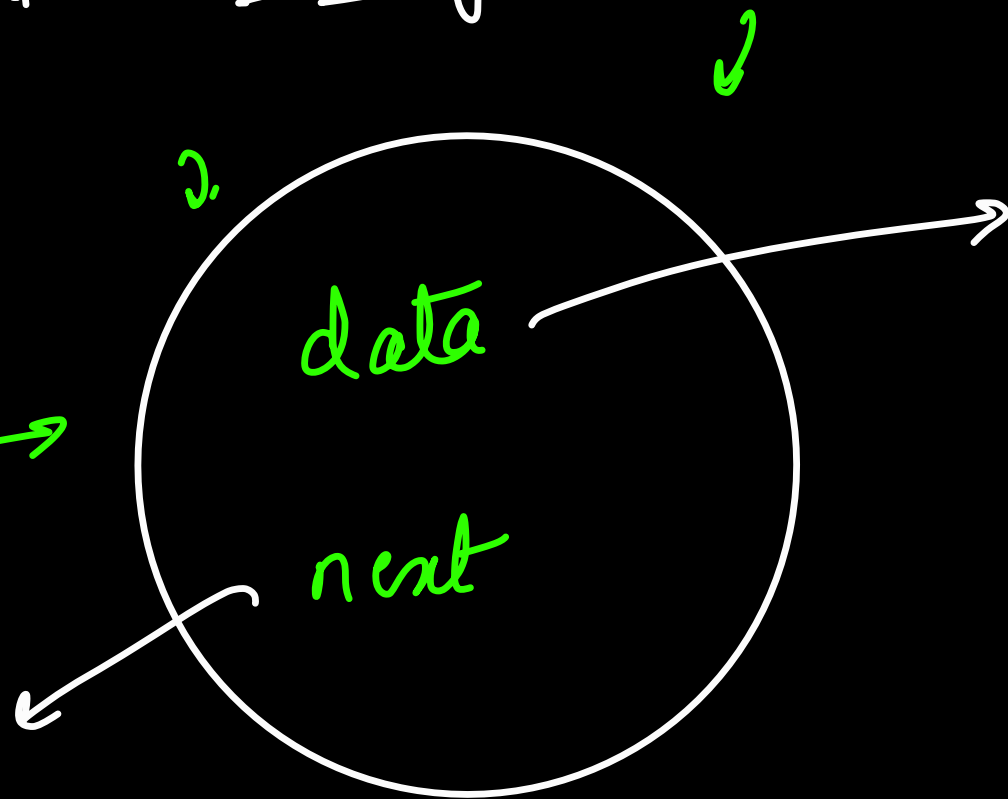
10 data structure
↓
linear

what is node?

It is a custom object
that you prepare in the memory

class

Node



is the data value
we want to store
inside a node

next stores the

reference to the next node
in the ll chain

$i = 0$

$i < \text{index}$

2 head

ref

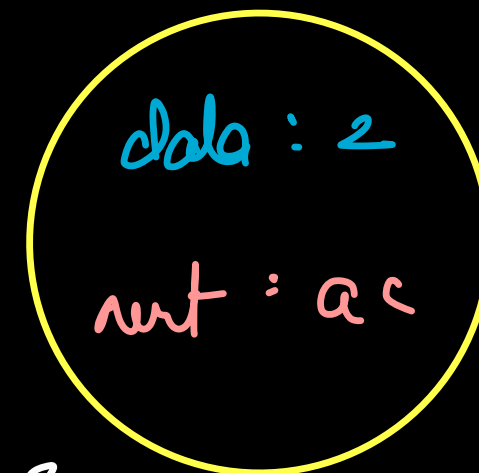


0

addr: xy



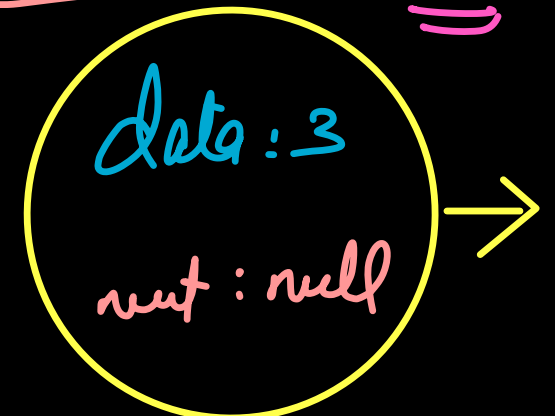
addr: ab



addr: bc



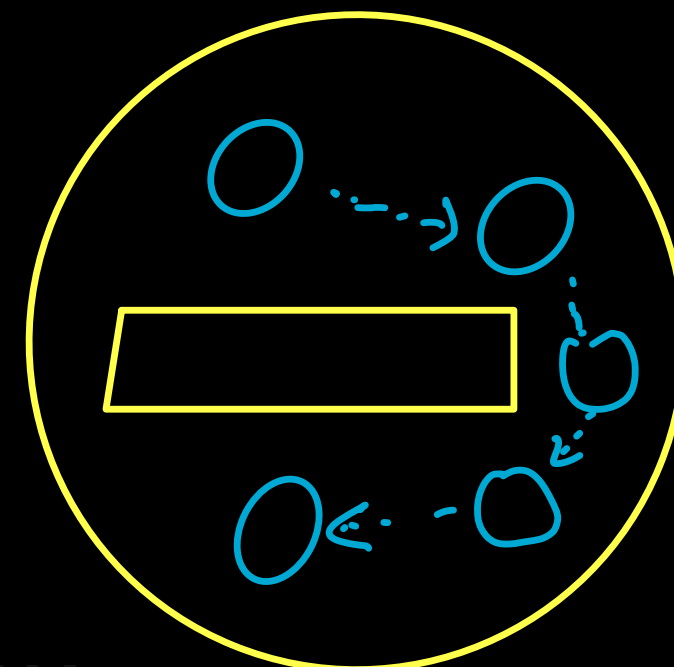
last
node
Tail
next
node



addr: ac
✓
stop

let head

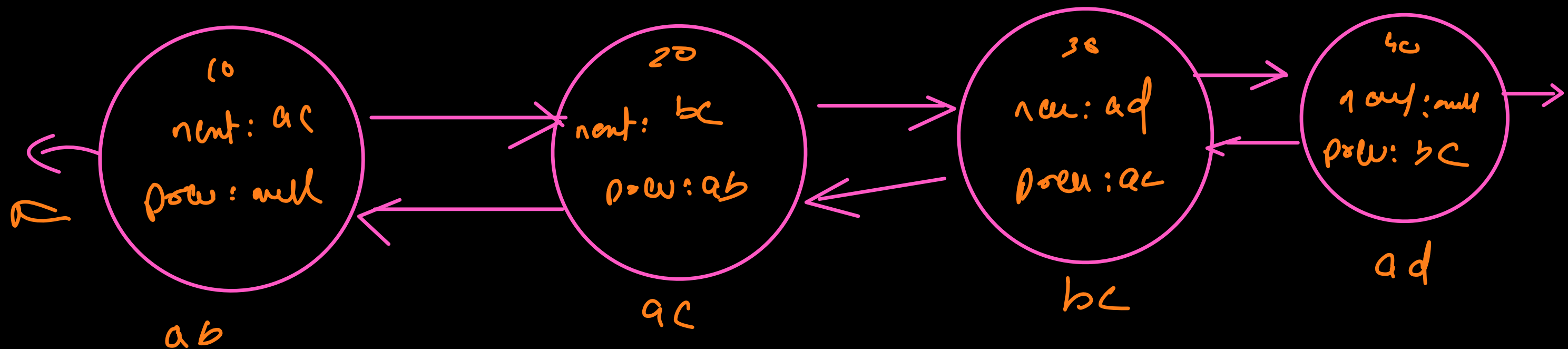
LL has no indexing



$x = \text{new Node}()$

$\text{head} = \text{new Node}()$

Doubly LL



You Don't Need Memory Address.

It is for conceptualisation.

```
class Node {
```

```
    constructor (data) {
```

```
        this.data = data;
```

```
        this.next = null;
```

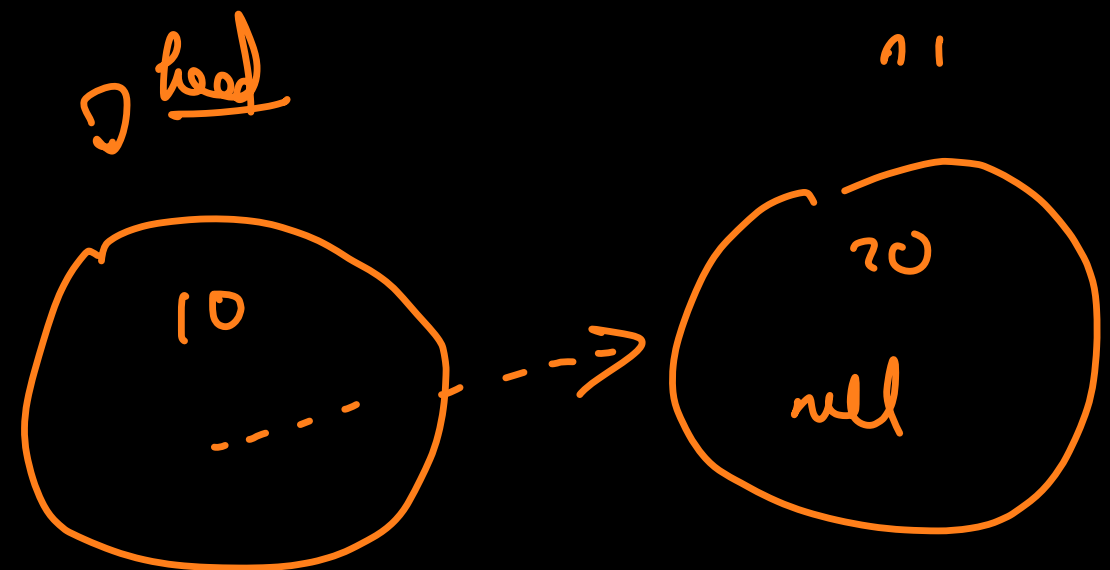
```
    }
```

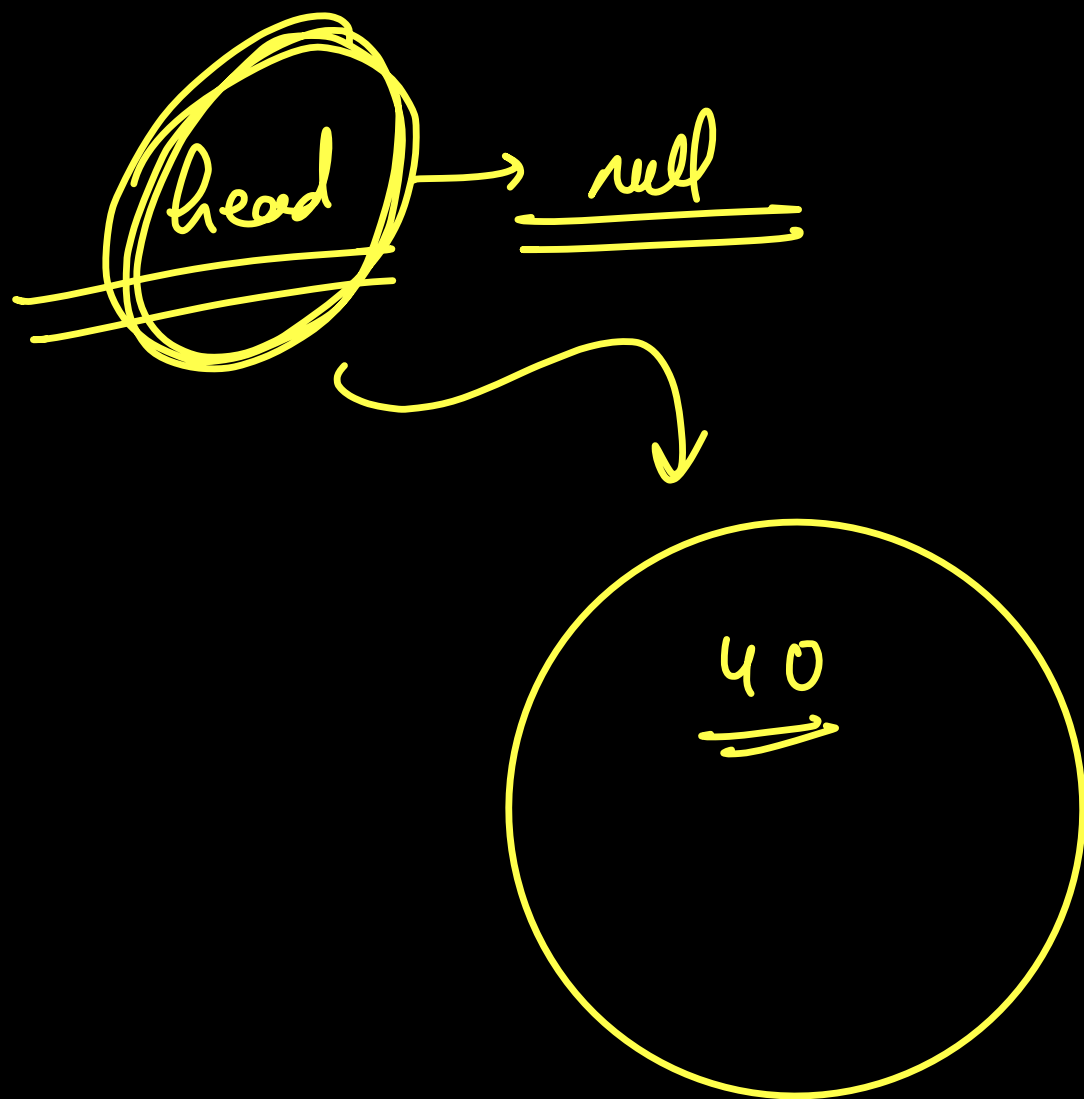
```
}
```

head = new Node (10)

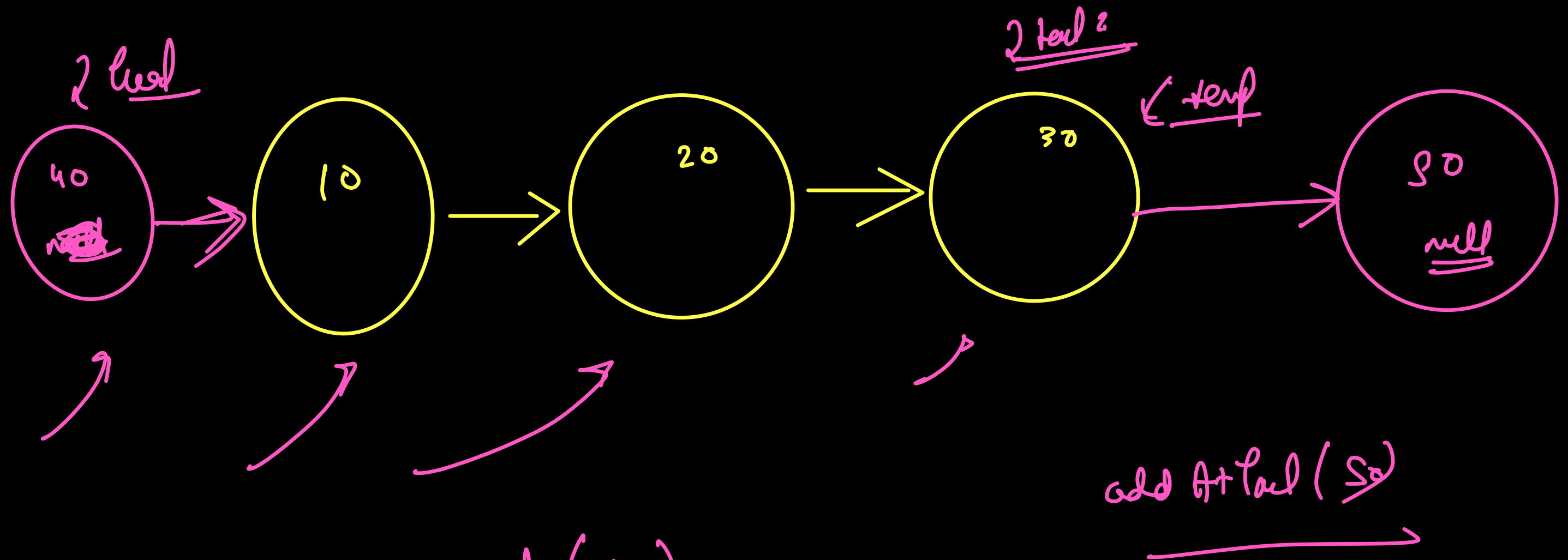
n1 = new Node (20)

head.next = n1





add At Head (40)



let $n = \text{new Node}(40)$

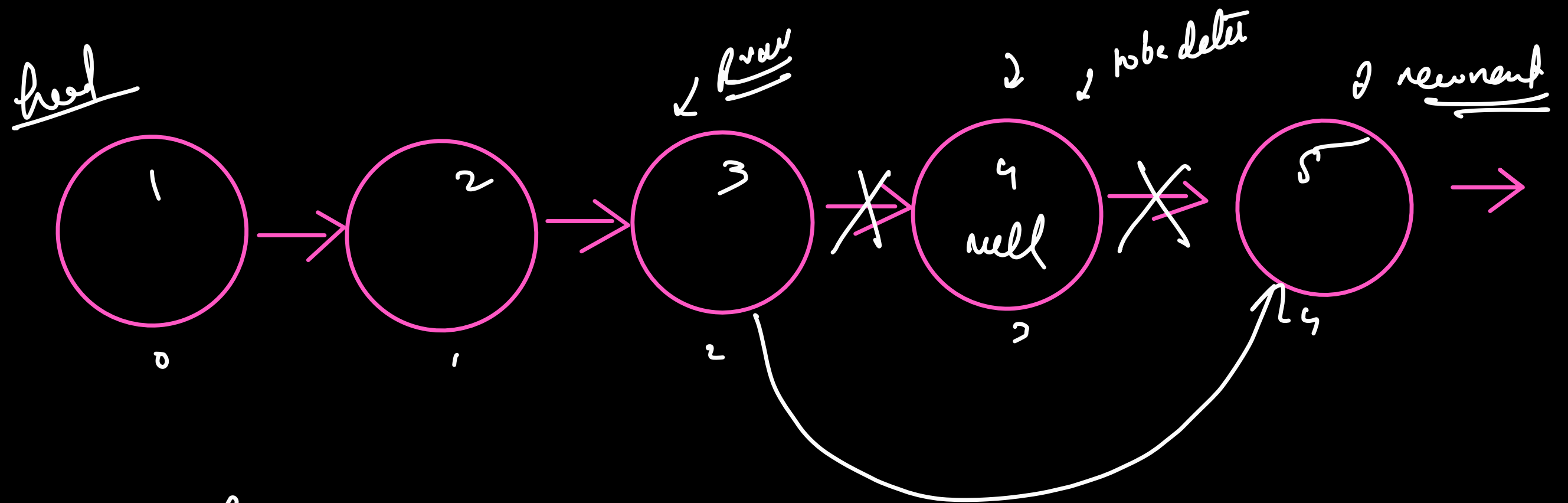
$n.\text{next} = \text{this.head}$

$\text{this.head} = n$

empty ll → add AT Tail

head → next

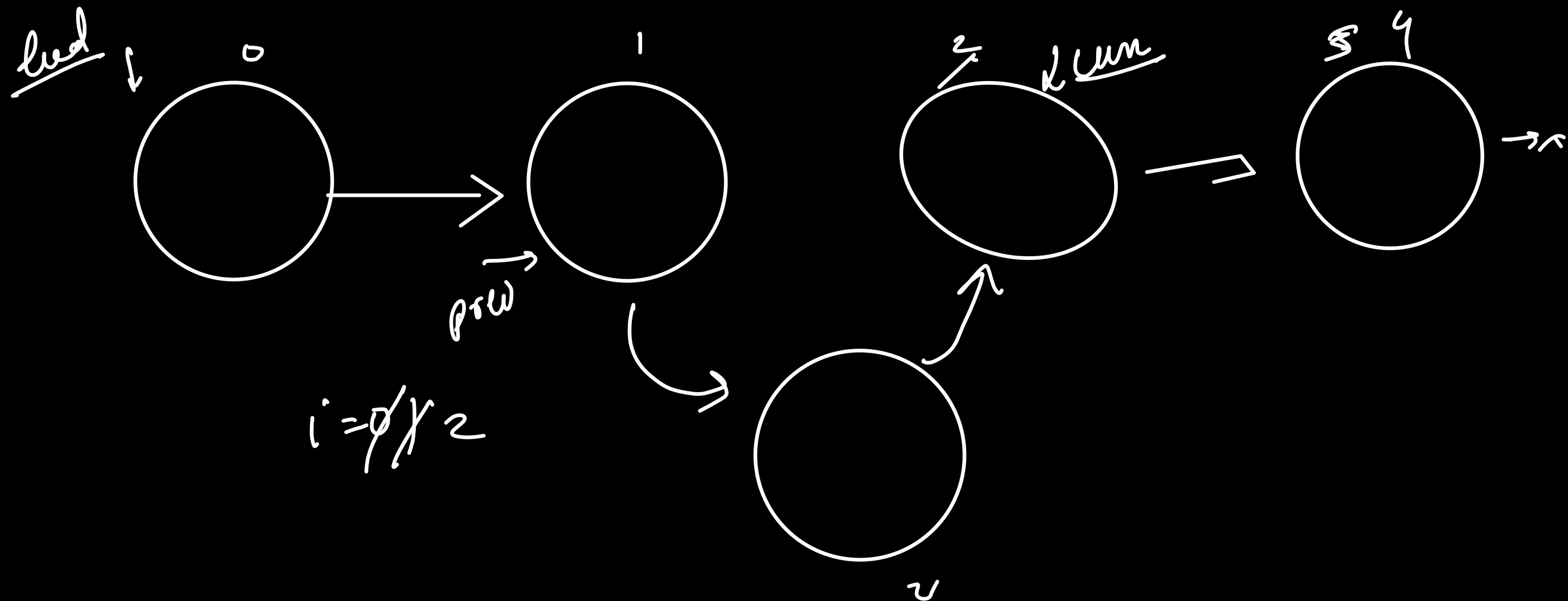




$i = 0$ / 2 / 3

$prev = \text{nodeToBeDel}$
 $\text{nodeToBeDel} = \text{nodeToBeDel} \cdot \text{next}$

$prev \cdot \text{next} = \text{newNode}$
 $\text{nodeToBeDel} \cdot \text{next} = \text{null}$



$prev = curr$

$curr = curr.next$

$n = \text{new Node}(\dots)$

$prev.next = n$

$n.next = \underline{curr}$