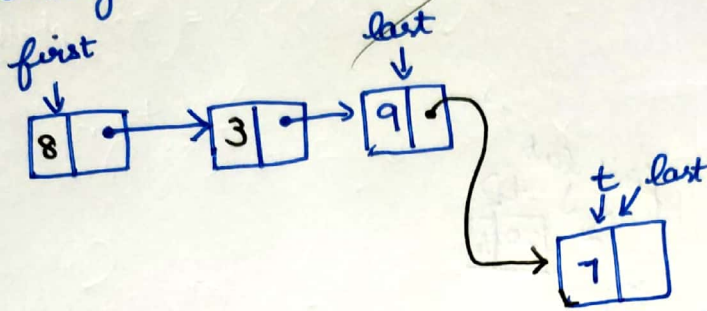


Inserting a node at the last of the linked list

- * It is not necessary to traverse the complete linked list.
- * Simply by using *last, we can add

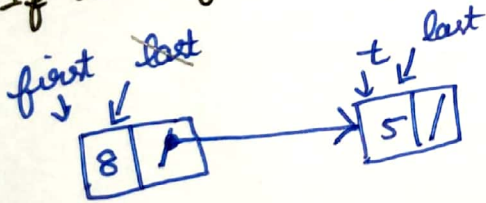
Eg: Already 3 nodes are present



∴ If we want to insert a new node at the last, it will take only constant time.

Special cases:

i) If already only one node is present :



ii) If there are no nodes :

first and last should be NULL



three pointers will point on the same new node.

Code

```
void Insertlast (int x)
```

```
{
```

```
    struct Node * t = (struct Node*) malloc (sizeof (struct Node))
```

```
    t->data = x;
```

```
    t->next = NULL
```

```
    if (first == NULL)
```

```
    {
        first = last = t;
    }
```

```
    else
```

```
        last->next = t;
```

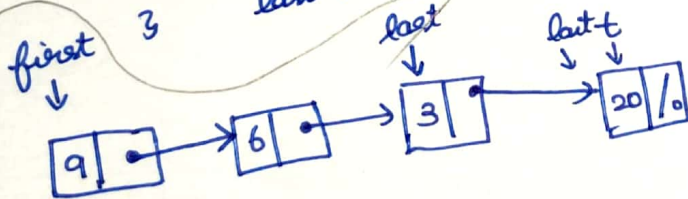
```
        last = t;
```

New node is ready

If there are no node in the linked list



(Makes a link)
(Moves the pointer last to t)



Don't ask the position, it will simply insert at the last