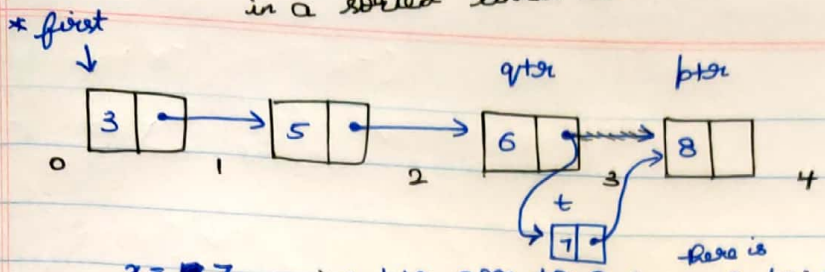
Inserting a new Node
in a sorted linked list



x = 7 ; i) * ptr goes to 8 but there is no pointer on 6, in order to insert there should be one more pointer on 6.

ii) So bring * qptr from first, following ptr.

(i) This code will be executed without a created a linked list also

```
void SortedInsert (struct Node *ptr, int x)
{
    struct Node * t;   (To create a new node)
    struct Node * qptr = NULL;  (Trailing pointer)

    t = (struct Node *) malloc (sizeof (struct Node));
    t -> data = x;
    t -> next = NULL

(1) if (first == NULL)      [No node in the linked list]
        first = t;          [Then My new node will
                             be the first node]
    else
    {
        while (ptr && ptr -> data < x)
        {
            qptr = ptr;
            ptr = ptr -> next;
        }
(if) (2) if (ptr == first)      If the place we stopped is the
        {t -> next = first;     first node, then the new node
        first = t;              will be inserted on the
                                left side. (i.e inserting in 0th position)
    else
        {t -> next = qptr -> next;
        qptr -> next = t;
    }
```