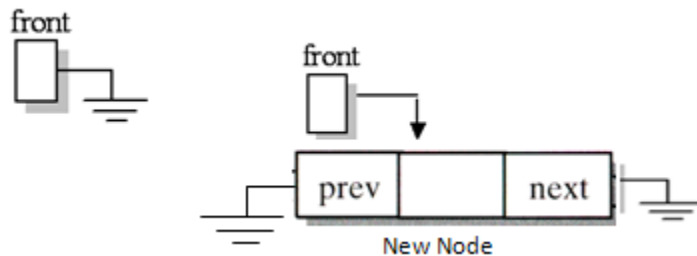


Inserting a node into an ordering linked list

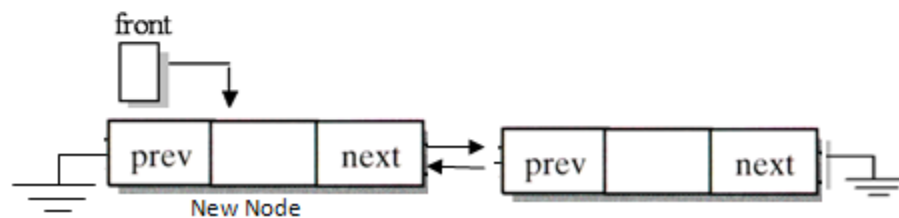
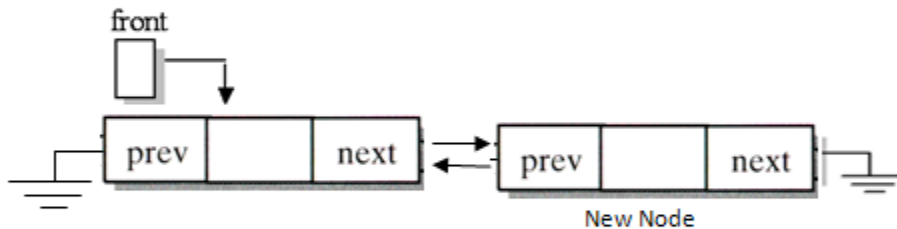
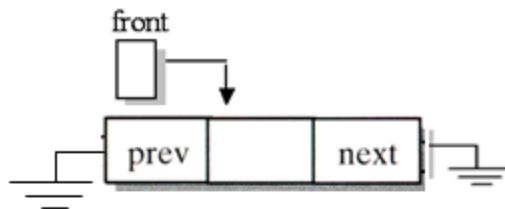
There are several different kinds of an existing ordering linked list. We will discuss them one by one.

I. An empty linked list



```
if(front == NULL) //if it was an empty list
    front = newNode;
```

II. A linked list with only one node



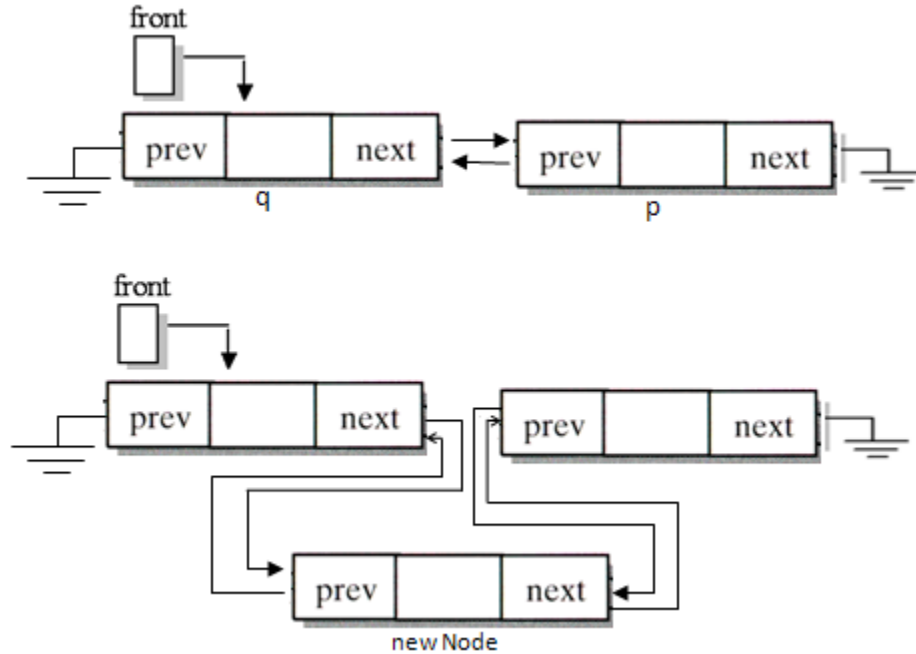
a. Adding a new node in the back of linked list

```
if(p->next == NULL) // p is the last node of the list
{
    p->next = newNode;
    newNode->prev = p;
}
```

b. Adding a new node in the front of linked list

```
p->prev = newNode;    // p pointed to the first object
newNode->next = p;
front = newNode;      // redefine the front pointer
```

III. Adding the node between two nodes of a linked list



```
if(p->prev != NULL)
{
    q = p->prev;
    q->next = newNode;    //connect newNode and q
    newNode->prev = q;
}
p->prev = newNode;      //connect newNode and p
newNode->next = p;
```

[Click here for the Example to insert a node in a sorted linked list.](#)