

Node insert-front (Node head, int ele)

```

{
Node p = createNode();
p->data = ele;
p->next = p;
if (head == NULL)
{
p->next = null;
return p;
}
p->next = head;
head->next = head->next ^ p;
return p;
}

```

Node insert-rear (Node head, int ele)

```

{
Node p = createNode();
p->data = ele;
if (head == NULL)
{
p->next = null;
return p;
}
if (head->next == null)
{
head->next = head->next ^ p;
p->next = head;
return head;
}

```

```
Node prev = head;  
Node nextp = head->next;  
while (prev != nextp->next)
```

```
{  
    Node q = nextp->next ^ prev;  
    prev = nextp;  
    nextp = q;
```

```
}  
nextp->next = nextp->next ^ p;  
p->next = nextp;  
return head;
```

```
}
```