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IBM18CS092

B-15

```
Node insert_front(Node head, int ele)
{
```

```
    Node p = createNode();
```

```
    p->data = ele
```

```
    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;
```

3.