

```
void insert-f (head, val) {
```

```
    Node new = getNode();
```

```
    new.data = val;
```

```
    new.next = head;
```

```
    head.next = XOR( new, head.next );
```

```
    head = new;
```

```
}
```

```
void insert-e (head, val) {
```

```
    Node new = getNode();
```

```
    new.data = val;
```

```
    Node curr = head;
```

```
    Node prev = null;
```

```
    Node next = null;
```

```
    while (curr.next != null) {
```

```
        next = XOR( prev, curr );
```

```
        curr prev = curr;
```

```
        curr = next;
```

```
    }
```

```
    new.next = XOR( new, null );
```

```
    curr.next = XOR( new, curr.next );
```