

## Summary

Sessions (08-02-2023)

- **Get Operation :**

```
int LinkedList::Get(int index) {  
    Node *last = head;  
  
    for (int i = 0; i <= index; i++) {  
        last = last -> next;  
    }  
    return last -> data;  
}
```

Time complexity in Best case scenario :  $O(1)$

Time complexity in Worst case scenario :  $O(n)$

- **Update Operation :**

```
void LinkedList::Update(int newData, int index) {  
    Node *last = head;  
  
    for (int i = 0; i <= index; i++) {  
        last = last -> next;  
    }  
  
    last -> data = newData;  
    cout << "Linked List Is Updated...." << endl;  
}
```

Time complexity in Best case scenario :  $O(1)$

Time complexity in Worst case scenario :  $O(n)$

- `isEmpty()` operation :

```
// isEmpty operation
void LinkedList::isEmpty() {
    if(head -> next == NULL)
        cout << "Linked List Is Empty..." << endl;
    else
        cout << "Linked List Is Not Empty..." << endl;
}
```

- Delete Operation :

```
void LinkedList::Delete(int index) {
    Node *last = head;

    for (int i = 0; i < index; i++) {
        last = last -> next;
    }

    Node *temp = last -> next;
    last -> next = temp -> next;

    delete temp;
}
```