

Lab Goal : This lab was designed to teach you more about a linked list and passing a linked list as a parameter.

Lab Description : Use `ListNode` to write some basic `LinkedList` methods.

PART 1 – Open the `ListFunHouse.java` fill and complete the methods in this class.

PART 2 – Use `lab15b.java` to test your `ListFunHouse` class.

ListNode – stores a value and a reference to the next node

```
public class ListNode implements Linkable
{
    private Comparable listNodeValue;
    private ListNode nextListNode;

    public ListNode() {
        listNodeValue = null;
        nextListNode = null;
    }

    public ListNode(Comparable value, ListNode next) {
        listNodeValue = value;
        nextListNode = next;
    }

    public Comparable getValue() {
        return listNodeValue;
    }

    public ListNode getNext() {
        return nextListNode;
    }

    public void setValue(Comparable value) {
        listNodeValue = value;
    }

    public void setNext(Linkable next) {
        nextListNode = (ListNode)next;
    }
}
```

Files Needed ::

ListNode.java
Linkable.java
ListFunHouse.java
Lab15b.java

Sample Data :

See the main of `lab15b`

Sample Output :

```
Original list values: go on at 34 2.1 -a-2-1 up over
num nodes = 8
List values after calling nodeCount: go on at 34 2.1 -a-2-1 up over
List values after calling doubleFirst: go go on at 34 2.1 -a-2-1 up over
List values after calling doubleLast: go go on at 34 2.1 -a-2-1 up over over
List values after calling skipEveryOther: go on 34 -a-2-1 over
List values after calling removeXthNode(2): go 34 over
List values after calling setXthNode(2,one): go one over
```