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

Lab Description :   Write a program that demonstrates that your BasicList works as intended. BasicList is a single-linked linked list.   Each node in BasicList has a data component and a reference to the next node only. Write and test all methods in BasicList. Complete methods to add, remove, get, and search.

PART 1 – Open the   BasicList.java   file and complete the   BasicList   class.
PART 2 – Use lab15f.java to test your   BasicList   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;
   }
}
```

Sample Data :
```
4 5 6 7 8 9 10 11 12 13
24 75 86 37 82 94 111 82 43
0 4 5 2 1 4 6
```

Sample Output :

```
SUM:: 85.0
AVERAGE:: 8.5
SMALLEST:: 4
LARGEST:: 13

SUM:: 634.0
AVERAGE:: 70.44444444444444
SMALLEST:: 24
LARGEST:: 111

SUM:: 22.0
AVERAGE:: 3.142857142857143
SMALLEST:: 0
LARGEST:: 6
```