File - C:\Users\dhava\Desktop\School\COMSC 340\Programming_project_2\src\sort\InsertionSortLinkedList.java

```java
package sort;

import jsjf.LinearNode;
import jsjf.LinkedList;

public class InsertionSortLinkedList {

    public static int steps = 0;

    public static LinkedList insertionSort(LinkedList list) {


        if (list.head == null || list.head.getNext() == null) {
            return list;
        }


        LinkedList newList = new LinkedList();
        LinearNode newListHead = new LinearNode(list.head.getElement());
        LinearNode current = list.head.getNext();

        while (current != null) {

            LinearNode key = newListHead;
            LinearNode next = current.getNext();

            if ((int)current.getElement() <= (int)newListHead.getElement()){
                LinearNode oldHead = newListHead;
                newListHead = current;
```

```
30                  newListHead.setNext(oldHead);
31                  steps++;
32
33              }
34              else {
35                  while (key.getNext() != null){
36
37                      if ((int) current.getElement() > (int) key.getElement() && (int) current
   .getElement() <= (int) key.getNext().getElement()){
38                          LinearNode oldNext = key.getNext();
39                          key.setNext(current);
40                          current.setNext(oldNext);
41                          steps++;
42                      }
43                      steps++;
44
45
46                      key = key.getNext();
47
48                  }
49
50                  if (key.getNext() == null && (int)current.getElement() > (int)key.getElement
   ()) {
51                      key.setNext(current);
52                      current.setNext(null);
53                  }
54
55              }
56              steps++;
```

```
57
58              current = next;
59          }
60
61          newList.head = newListHead;
62          return newList;
63      }
64  }
65
```