

C:\Users\Rich\Documents\NetBeansProjects\Lab06\src\List.java

```
1
2 /**
3  *
4  * @author Rich
5  */
6 public interface List<E> {
7     /**
8      *
9      * @return the number of elements in the list
10     */
11     int size();
12     /**
13      *
14      * @return true if the list is empty
15     */
16     boolean isEmpty();
17     /**
18      *
19      * @param i index at which the element is located
20      * @return the element at the ith index but does not remove.
21     */
22     E get(int i) throws IndexOutOfBoundsException;
23
24     /**
25      *
26      * @param i index at which the element should be inserted
27      * @param e element to be inserted
28      * @return the replaced element
29      * @throws IndexOutOfBoundsException
30     */
31     E set(int i, E e) throws IndexOutOfBoundsException;
32
33     /**
34      *
35      * @param i index where to add element e
36      * @param e new element to be added to the list, shifting all
37      * subsequent elements later.
38      * @throws IndexOutOfBoundsException
39     */
40     void add(int i, E e) throws IndexOutOfBoundsException;
41
42     /**
43      *
44      * @param i index position of the element to be removed
45      * @return the element removed
46     */
47     E remove(int i) throws IndexOutOfBoundsException;
48 }
49
```