

```
1 /**
4 package exerciseOne;
5
6 import java.util.*;
7
8 /**
9  * @author patar450
10  *
11  */
12 public class ListExample {
13
14     public static void usingArrayList() {
15         /**
16          * ArrayList is slower than the standard arrays but is useful in programs
17          where
18          * lots of manipulation in the array is required. From the ArrayList we can
19          add
20          * and remove items, which also having the functionality of resizing it.
21          */
22         List list = new ArrayList();
23         list.add("Bernadine");
24         list.add("Elizabeth");
25         list.add("Gene");
26         list.add("Elizabeth");
27         list.add("Clara");
28         System.out.println(list);
29         System.out.println("2: " + list.get(2));
30         System.out.println("0: " + list.get(0));
31     }
32     /**
33      * LinkedList data structure is a linear data structure in which the items are
34      stored in a
35      * contiguous(linked) places and each element consist of a value and a pointer to
36      the next item.
37      * One of the disadvantages of linkedList is the problematic way of finding the nth
38      item. This s due
39      * to the developer needing to count the list until it is found.
40      */
41     public static void usingLinkedList() {
42         LinkedList queue = new LinkedList();
43         queue.addFirst("Bernadine");
44         queue.addFirst("Elizabeth");
45         queue.addFirst("Gene");
46         queue.addFirst("Elizabeth");
47         queue.addFirst("Clara");
48         System.out.println(queue);
49         queue.removeLast();
50         queue.removeLast();
51         System.out.println(queue);
52     }
53     /**
54      * For testing purposes
55      * @param args
56      */
57     public static void main(String args[]) {
58
59         System.out.println("Use of ArrayList:");
60         usingArrayList();
61     }
62 }
```

```
58         System.out.println("\nUse of LinkedList:");
59         usingLinkedList();
60
61     }
62 }
63
```