In-Class Activity #5
(10 points)

Name #1: ____________________________ Section Leader: ______________
Name #2: ____________________________ Section Leader: ______________
Name #3: ____________________________ Section Leader: ______________

Directions: In groups of two or three, answer the following questions to the best of your collective ability. When appropriate, we encourage you to show your work, to help us understand your thought process. Your group may use one computer to help answer these questions. ICAs (In-Class Activities) count toward your grade; please take them seriously.

Week 6 (2016/09/28)

1. **ArrayList** has a method `indexOf(Object)` that returns the index of the first occurrence of the given Object’s content. What is an error situation that the programmer who wrote `indexOf(Object)` should have thought about before s/he wrote this method?

2. In class we’ve thought about implementing various list operations for the **CS127BArrayList** class. A list operation that we haven’t considered is `reverse()`, which reverses the order of the list’s content. A “before and after” diagram is given below, as is the method header. Write the body of `reverse()`. Our array is named `list` and holds references to objects of class **ElementType**.

   Before `reverse()`
   
<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>“hi”</td>
<td>“at”</td>
<td>“by”</td>
<td>“to”</td>
<td></td>
</tr>
</tbody>
</table>
   
   occupancy = 4

   After `reverse()`
   
<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>“to”</td>
<td>“by”</td>
<td>“at”</td>
<td>“hi”</td>
<td></td>
</tr>
</tbody>
</table>
   
   occupancy = 4

   ```java
   public void reverse () {

   }
   ```

When your group is satisfied with your answers, hand this to one of the class staff. We’ll review the correct answers after time is up.