

Review Questions 10

Topic: Queue and List ADTs

1. Would it make sense to call a queue a LILO (last-in-last-out) structure?
2. Attempt Exercises 7.4 on page 167 in the textbook.
3. Trace the following code, showing the contents of the queue `q` after each call
[note: `enqueue() = addLast()`; `dequeue() = removeFirst()`]

```
ArrayQueue q;  
q.enqueue("A");  
q.enqueue("B");  
q.enqueue("C");  
q.dequeue();  
q.dequeue();  
q.enqueue("D");  
q.enqueue("E");  
q.enqueue("F");  
q.dequeue();  
q.enqueue("G");  
q.dequeue();  
q.dequeue();  
q.dequeue();
```

4. Explain whether the expression is true or false:

Feeling = <<I, want, to, pass, this, exam, but, I, do, not, know, if, I, can, pass, it>>
5. In deciding whether to use an `ArrayList` or a `LinkedList` in an application, what factors make one choice better than the other?
6. Attempt Exercises 8.3 on page 199 in the textbook.