**ASSIGNMENT 3**

For this assignment, you are to implement 2 generic Queues; one backed by a circular array, and other backed with a linked chain of objects (i.e., Node).  You should implement the attached interface (Queue) and call your classes ArrayQueue and LinkedQueue.  I have attached a JUnit test class that will test your implementations and output some performance measurements.

Grading:

* 25 points: your LinkedQueue and ArrayQueue both implement the interface and compile.
* 5 points: your code passes the testAddAndClear test.
* 5 points: your code passes the testAddAndRemove test.
* 5 points: your code passes the testBigaddAndRemove test.
* 10 points: style / implementation / grader's discretion.

*Note: unfortunately as we have seen, Java does not allow you to instantiate a generic array.  To get around this, the simplest approach is to use an array of Object (i.e., Object[] ) and cast any return values to T.*

*Note: remember to declare your classes as "public class ArrayQueue<T> implements Queue<T>" or public class LinkedQueue<T> implements Queue<T> " or you may get odd compile errors.*