CS 260
Programming Lab 2 Part A

For this exercise you are to create a class that implements a FIFO or queue on an array as described in the documents in Moodle. This FIFO is needs to properly wrap on the array as needed, it does not need to expand the array.

Class Methods

- Constructor (Python init) – create an array of ***n*** integers where ***n*** is the parameter passed in. If no value is passed in, create an array of 20 items (default constructor). If ***n*** is less than 1, create an array of size 10. ***Do not initialize the elements of the array*.** (Python requires initializing the array, use zero).
- void addTail(value) – add the value to the tail of the queue, wrapping if necessary. If there is no room to add a new value, throw an exception. (C++ use ***out_of_range*** , C# use ***IndexOutOfRange***, Python use ***IndexError***).
- int removeHead() – save the value at the head of the queue, update the queue to remove the item at the head, and return the saved value. Wrapping if necessary. If the queue is empty, throw an exception. (C++ use ***out_of_range*** , C# use ***IndexOutOfRange***, Python use ***IndexError***).

Testing

There is a driver provided in Moodle for the lab. Your class needs to pass that test to get credit.

Note, if you look at the documentation in Moodle, you should have enough help to get this lab completed.