Lab 06 – Java Has Built in Data Structures?

# Problem

Assigned the task of creating an Array list of Integers with random numbers from 0 – 99. Sort the Array list, then populate both a queue and a stack with the numbers, and dequeuer the queue and pop the stack. Repeat the entire process 3 times.

# Proposed Solution

Create an array list of integers. Code a method to produce the random numbers from 0-99. Enqueue a stack with the numbers. Dequeue the stack and print the numbers out. Push a stack with the numbers. Pop the stack with the numbers, and print those numbers out. Repeat this entire process 3 times.

# Problems Encountered

Had some sorting issues with my arrayList. I apparently forgot to turn in this report, hopefully I can at least get some partial credit for it.

# Additional Questions

**Lab Report Questions:**

1. What are some advantages of using an ArrayList over an array? Disadvantages?

An array list has the advantages of an array (with random access) and it can be resized (by links)

1. Putting an ascending sorted collection of data into a queue will keep the numbers in order. Putting them in a stack will reverse the order when popping.