LAB 1

Data Structures
CSI310
Spring 2011

DUE: On Blackboard, Sunday, January 30 at 11:59PM. Upload your .java files as attachments.

The goal of this lab is to write code that guarantees that array elements are NEVER accessed with subscripts that are out of the array’s bounds.

When you have created a SEPARATE DIRECTORY for Lab 01, show it to the TA to get credit for that. Every separate project in a separate directory is required in this course!

To be done in the lab. Complete at home if necessary. You must have downloaded or copied, and then added the Book Classes directory to your CLASSPATH. The 3rd chapter of the “Problem Solving with Data Structures” textbook and the framed picture of Lecture 02 are excellent references for this.

Modify the FramedPictureMaker application (http://www.cs.albany.edu/~sdc/CSI310/Spr11/Labs/L01/FramedPictureMaker.java) so that

1. The inner picture is drawn off-center. Change the class name and submit as FramedPictureMaker1.java

2. The inner picture is shown, but is clipped on the right or on the bottom or both. Change the class name and submit as FramedPictureMaker2.java No credit if it crashes!

3. The inner picture is shown, but is clipped on the left or on the top or both. Change the class name and submit as FramedPictureMaker3.java No credit if it crashes!

4. Extra credit: Animate the inner picture bouncing around in various directions included slanted ones (perhaps randomly) going partly off the frame sometimes. (No credit for crashes!)