# **Assignment 19 – Threads**

**Modify the GUI in Display 19.2 so that the circles are alternately red, white, and blue, and so that they fill the area from bottom to top instead of top to bottom.**

In trying solve this, I began by just altering the given loop to include another instruction for painting the oval objects, but the colors were overwriting each other. I realized I’d need to create separate loops, in separate but synchronized (for aesthetics) threads. For each color, a class extending Thread is created. The Graphics object is created, and for loops for the x and y positioning are set. Within the loop, the graphics object’s color is set, the object is drawn, and doNothing() calls Thread.sleep() with the PAUSE variable passed as the argument. The run() method is set to be synchronized and calls the paintCOLOR() method. The white version uses ‘drawOval’ and black as the color to show the outline.

