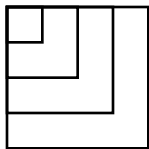


Mr. Fahrenbacher

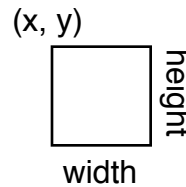
Looped Drawing

For this project you will need to make a new Java Project in Eclipse Application called "LoopedDrawing". Add the LoopedDrawingFrame.java and LoopedDrawingPanel.java files to your src folder - you will only be modifying the LoopedDrawingPanel (You can use these files as base files for your own projects using drawing if you like). After each step below, comment out your old code before moving onto the next step.

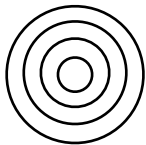
1. In the upper left hand corner of the screen, draw nested squares like you see to the left. The side lengths of the squares should be 15, 30, 45, and 60. You must use a loop!



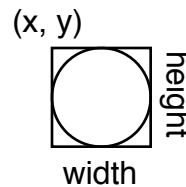
Use: `g.drawRect(x, y, width, height)`



2. Draw co-centric circles like the ones on the left. All the circles should share the same center: the very **middle** of the drawing panel. The **radiuses** of these circles should be 10, 20, 30, and 40. (What are the **diameters**?) You must use a loop!

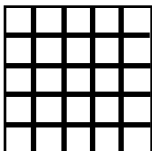


Use: `g.drawOval(x, y, width, height)`



HINT: `getWidth()` and `getHeight()` give you the width and height of the drawing panel. From that you should be able to calculate the middle of the panel.

3. Using two **separate** for loops, break the drawing panel into these regions. You must use **for** loops!



Use: `g.drawLine(x1, y1, x2, y2)`

4. CHALLENGE: Draw an 8x8 checkerboard with alternating colors of red and black squares. You will need to use **nested** loops. Use: `g.fillRect(x, y, width, height)`.

