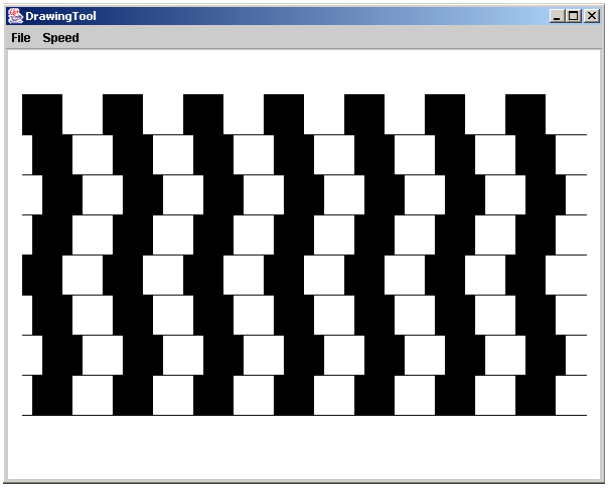
LAB EXERCISE

ParallelLines

Background:

In this lab, you will practice using nested for loops to recreate this image using the `DrawingTool` class:



To do this efficiently, there are a few suggestions to consider. First, there are eight rows each containing seven filled boxes. This suggests a nested **`for`** loop, like this:

```
for (int row = 0; row < 8; row++)
{
  // calculate the start of the row of squares

  // calculate and add a horizontal offset

  for (int col = 0; col < 7; col++)
  {
    // draw the square
    // calculate and position for the next square
  }

  // calculate the location and draw the line
}
```

Calculating the square position will take some work. You might want to make a quick sketch, with coordinates, to save frustration. Hint: there will be a negative x offset and a positive y offset to have the image start in the upper left corner as shown.

The `DrawingTool` class includes a method for drawing filled rectangles:

```
fillRect(double width, double height)
```

For instance, with a `DrawingTool` called `pen`, the call `pen.fillRect(40, 40)` would create a 40x40 filled square centered about the current drawing position.

Assignment:

1. Using the information given in the Background section above, write a program using nested for loops to display the image shown above.

2. Write and debug your work as *ParallelLines.java*. This task can be accomplished with main() alone.

3. Run your code, call your instructor to your workstation for scoring.