Debugging
The Plan

- Define debugging
- Overview of how to debug
- Guided practice on PolarGrid.java
- Independent practice on RectangularGrid.java
## Debugging Defined

**What it is**
- Solving runtime errors
- Stepping through code with anticipation
- Narrowing down the location of the bug
- Recreating the bug consistently

**What it is not**
- Fixing compilation errors
- Stepping through code blindly
How to Debug

1. Be able to recreate the bug.
2. Identify the last place the code reaches during correct execution.
3. Anticipating what should happen next and step through the code.
4. When the unanticipated occurs, investigate why and fix the bug.
PolarGrid.java

This class is intended to eventually be used to layout objects in concentric circles:
RectangularGrid.java

This class is intended to eventually be used to layout objects in rows and columns
Guided Practice

1. **Go to the code link from the course website.** Save `Buggy.jar` to the Desktop.
2. **Open up Eclipse, start a new project, and import Buggy.jar.**
3. **Run** `PolarGrid.java`
4. **Look over the source code for** `PolarGrid`