



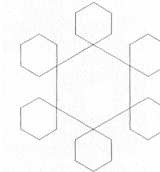
# Hexagonal Fractal



Write a Java applet using recursion to produce fractal images based on a regular hexagon. A level 0 image consists of a hexagon with the following form:



The repeated pattern is to draw six more hexagons at the corners of the larger hexagon. These six new hexagons have a side length that is half of their predecessor.



Prompt the user for two values:

1. the level of the hexagonal fractal
2. the internal distance, in pixels, of the original hexagon (level 0)

Your Java applet should run inside a browser window that displays a properly drawn hexagon fractal as specified above. You must handle level 0 through 4 at a minimum.

## Submission Details

- ✓ Due Date is **Monday, October 10, 2005, 6:40 p.m.** (5% late penalty until midnight.)
- ✓ Email your source file to Pawan Seth [ps36@uakron.edu](mailto:ps36@uakron.edu) and cc to [liszka@uakron.edu](mailto:liszka@uakron.edu). Send only your ".java" files; no class or project files. We will run scripts from the command line.
- ✓ The subject line should be "hex-fractal" and your name must be in the body of the email.
- ✓ The name of your main class file must be hexFractal.java.
- ✓ This is not a group project. Cooperative work will not be tolerated.
- ✓ No code may be borrowed from sources other than your textbook and the Sierpinski code discussed in class. Code must essentially be written entirely by you.
- ✓ You may modify the html file as you please as long as it is professional.
- ✓ Hand in a hardcopy of your code with the **SIGNED** academic integrity cover sheet. Your program will not be graded without this. In addition, please print your name beside your signature. (Some of you write worse than me!)
- ✓ Follow the "Documentation and Style Guidelines" posted on the course webpage. These originated from Cay Horstmann's "Big Java" text, were modified by Dr. Margush, and modified again for this class.