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// LineArt.java
// Student version of the Lab06 Line Art Graphics Program assignment.
import java.awt.*;
import java.applet.*;
public class LineArt extends Applet
{
public void paint(Graphics g)
{
int w = 5000;
int h = 5000;
int linesper = 3800;
int incursions = 1;

int count;

g.drawRect(10,10,w,h);

for(count = 0; count <= linesper; count++) {
    g.drawLine(10, 10 + (count*h/linesper), 10 +(count*w/linesper), 10 + h);
    g.drawLine(10, 10 + (count*h/linesper), 10 + w - (count*w/linesper), 10);
    g.drawLine(10 + w, 10 + (count*h/linesper), 10 + (count*w/linesper), 10);
    g.drawLine(10 + w, 10 + (count*h/linesper), 10 + w - (count*w/linesper), 10 + h);
}

int num;
int wdif = w/2;
int wsum = 0;
int hdif = h/2;
int hsum = 0;
int powtwo = 1;

for(num = 1; num <incursions; num++) {
    wdif = wdif / 2;
    wsum = wsum + wdif;
    hdif = hdif / 2;
    hsum = hsum + hdif;
    powtwo = powtwo * 2;
    for(count = 0; count <= linesper; count++) {
        g.drawLine(10 + wsum, 10 + hsum + (count*h/linesper)/(powtwo), 10 + wsum
+(count*w/linesper) / (powtwo), 10 + h - hsum);
        g.drawLine(10 + wsum, 10 + hsum + (count*h/linesper)/(powtwo), 10 + w - wsum
- (count*w/linesper) / (powtwo), 10 + hsum);
        g.drawLine(10 + w - wsum, 10 + hsum + (count*h/linesper)/(powtwo), 10 + wsum
+ (count*w/linesper) / (powtwo), 10 + hsum);
    }
}
}

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        g.drawLine(10 + w - wsum, 10 + hsum + (count*h/linesper)/(powtwo), 10 + w -  
wsum - (count*w/linesper) / (powtwo), 10 + h - hsum);  
    }  
    g.drawRect(10 + wsum,10 + hsum,w/powtwo,h/powtwo);  
}  
}  
}
```



