

Sahil A. Nawab – Recursion Exercises

DisappearingSquare.java

```
package Recursion;

import java.applet.Applet;
import java.awt.Color;
import java.awt.Graphics;

public class DisappearingSquare extends Applet {

    public void paint(Graphics g) {
        int defaultWidth = 1000; int defaultHeight = 650;
        setSize(defaultWidth, defaultHeight);

        drawSquare(0, 200, g);
        drawSquareRight(1000, 200, g);
    } // end paint method

    public void drawSquare(int xPos, int length, Graphics g) {
        if (length >= 2) {
            g.setColor(genRandColor());
            g.fillRect(xPos, 200 - length, length, length);

            drawSquare(xPos + length + 10, (int) (length * 0.75), g);
        }
    } // end method drawSquare

    public void drawSquareRight(int xPos, int length, Graphics g) {
        if (length >= 2) {
            g.setColor(genRandColor());
            g.fillRect(xPos, 450, length, length);

            drawSquareRight(xPos - length - 10, (int) (length * 0.75),
g);
        }
    } // end method drawSquareRight

    public Color genRandColor() {
        int randRed = (int) (Math.random() * 256),
            randGreen = (int) (Math.random() * 256),
            randBlue = (int) (Math.random() * 256);

        return new Color(randRed, randGreen, randBlue);
    } // end method genRandColor
} // end class DisappearingSquare
```