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import javax.swing.*;
import java.awt.*;
import java.awt.event.*;
/**
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 * @period      2
 * @version     11-29-18
 *
 * Class Display07 displays the GCD or LCM of two
 * given numbers in a JPanel text boxes
 */
public class Display07 extends JPanel
{
    //Instance variables
    private JLabel label;
    private JTextField box1, box2;
    /**
     * Default constructor
     */
    public Display07()
    {
        setLayout(new FlowLayout());
        setPreferredSize(new Dimension(200, 125));

        JPanel subpanel = new JPanel();
        subpanel.setLayout(new FlowLayout());
        subpanel.add(new JLabel("One: "));
        box1 = new JTextField("", 5);
        box1.setHorizontalAlignment(SwingConstants.CENTER);
        subpanel.add(box1);
        subpanel.add(new JLabel("Two: "));
        box2 = new JTextField("", 5);
        box2.setHorizontalAlignment(SwingConstants.CENTER);
        subpanel.add(box2);
        add(subpanel);

        label = new JLabel("?");
        label.setFont(new Font("Serif", Font.BOLD, 75));
        label.setForeground(Color.blue);
        add(label);
    }

    /**
     * Shows the GCD by calling the gcd method
     */
    public void showGCD() {
        label.setText("" + gcd(Integer.parseInt(box1.getText()), Integer.pars
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eInt(box2.getText())));
    }

    /**
     * Shows LCM of the two numbers by trial and error
     */
    public void showLCM(){
        label.setText("" + (Integer.parseInt(box1.getText())*Integer.parseInt(box2.getText()) / gcd(Integer.parseInt(box1.getText()), Integer.parseInt(box2.getText()))));
    }

    /**
     * Returns the integer value of the GCD of the two given numbers
     *
     * @param int a    First number to check
     * @param int b    Second number to check
     */
    public int gcd(int a, int b){
        int c = a;
        int d = 1;
        if (a<b){c=b;}
        for (int i=1; i<=c; i++)
            if (a%i==0 & b%i==0){d=i;}
        return d;
    }
}
```