

Class Display07

1/2

```
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
```

Class Display07 (continued)

2/2

```
eInt(box2.getText())));  
}  
  
/**  
 * Shows LCM of the two numbers by trial and error  
 */  
public void showLCM(){  
    label.setText(" " + (Integer.parseInt(box1.getText())*Integer.parseInt(  
t(box2.getText()) / gcd(Integer.parseInt(box1.getText()), Integer.parseInt(  
x2.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;  
}  
}
```