**Week 3**

**Simple Applets**

* **Applets are designed to run in your web browser.**
* **They are downloaded as a result of your browser seeing an applet tag in your html page.**
* **There are a series of routines (we call them methods in Java) that are known by the browser. These methods are called automatically according to the following rules:**



**Here is an applet program, along with the output it produces. We will spend the rest of the period discussing how this program works.** 





**This program solves the identical problem using Swing components**

**package comparisonswing;**

**/\* <p>Title: ComparisonSwing </p>**

 **\* <p>Description: Compares 2 numbers</p>**

 **\* <p>Copyright: Copyright Coach (c) 2003</p>**

 **\* <p>Company: Coach's Corporation</p>**

 **\* @author Coach**

**\*/**

**import java.awt.\*;**

**import java.awt.event.\*;**

**import javax.swing.\*;**

**public class ComparisonSwing extends JApplet implements ActionListener{**

 **JLabel prompt1;**

 **JTextField input1;**

 **JLabel prompt2;**

 **JTextField input2;**

 **int number1, number2;**

 **JTextArea resultField;**

 **// setup the graphical user interface components and initialize variables**

 **public void init()**

 **{**

 **Container container = getContentPane();**

 **container.setLayout(new FlowLayout());**

 **prompt1 = new JLabel("Enter an integer");**

 **container.add(prompt1);**

 **input1 = new JTextField(10);**

 **container.add(input1);**

 **prompt2 = new JLabel("Enter an integer and press Enter");**

 **container.add(prompt2);**

 **input2 = new JTextField(10);**

 **input2.addActionListener(this);**

 **container.add(input2);**

 **resultField = new JTextArea();**

 **container.add(resultField);**

 **}**

 **// process user's action on the input2 text field**

 **public void actionPerformed(ActionEvent e)**

 **{**

 **number1 = Integer.parseInt( input1.getText() );**

 **number2 = Integer.parseInt( input2.getText() );**

 **resultField.setText("The comparison results are:" + "\n");**

 **if (number1 == number2)**

 **resultField.append(number1 + " == " + number2 + "\n");**

 **if (number1 != number2)**

 **resultField.append(number1 + " != " + number2 + "\n");**

 **if (number1 < number2)**

 **resultField.append(number1 + " < " + number2 + "\n");**

 **if (number1 > number2)**

 **resultField.append(number1 + " > " + number2 + "\n");**

 **if (number1 <= number2)**

 **resultField.append(number1 + " <= " + number2 + "\n");**

 **if (number1 >= number2)**

 **resultField.append(number1 + " >= " + number2 + "\n");**

 **}**

**}**

****

Your 4th Assignment:

You may use either interactive techniques (as demonstrated by the two examples above, to solve the following problem. Technique one uses TextFields, with a paint routine. Technique two uses swing components, with no paint routine.

