1. Answer the questions referring to the program below.

a) How many panels are created by this program? ___3___

- List all the variable identifiers that refer to panels:
  - x
  - y
  - z

- In the list above, circle the ones that can be considered subpanels of other panels.

b) Draw a picture that depicts the GUI for this program. Be sure to label everything (x, y, z, labelA, labelB, labelC), colors used (use an arrow to point at a region and write its color); don’t worry too much about placement (I am looking for the logical structure, rather than exact layout).

```java
import java.awt.*;
import javax.swing.*;
public class Quiz6b
{
    public static void main (String[] args)
    {
        JFrame frame = new JFrame ("Spring Break");

        JPanel x = new JPanel();
x.setBackground (Color.blue);
        JLabel labelA = new JLabel ("Snow");
        JLabel labelB = new JLabel ("Ice");

        JPanel y = new JPanel();
y.setBackground (Color.red);
        ImageIcon pic = new ImageIcon ("smiley.jpeg");
        JLabel labelC = new JLabel ("Good times", pic, SwingConstants.RIGHT);
        // places caption"Good times" to the right of picture

        JPanel z = new JPanel();
z.setBackground (Color.yellow);

        x.add (labelA);
x.add (labelB);
y.add (labelC);
z.add (x);
z.add (y);

        frame.getContentPane().add(z);
        frame.pack();
        frame.setVisible(true);
    }
}
```
1. Answer the questions referring to the program below.

a) How many panels are created by this program? 3

• List all the variable identifiers that refer to panels:

  \[ x, y, z \]

• In the list above, circle the ones that can be considered subpanels of other panels.

b) Draw a picture that depicts the GUI for this program. Be sure to label everything \((x, y, z, \text{label1}, \text{label2}, \text{label3})\), colors used (use an arrow to point at a region and write its color); don’t worry too much about placement (I am looking for the logical structure, rather than exact layout).

import java.awt.*;
import javax.swing.*;
public class Quiz6a
{
    public static void main (String[] args)
    {
        JFrame frame = new JFrame ("Happy memories");

        JPanel x = new JPanel();
x.setBackground (Color.green);

        JPanel y = new JPanel();
y.setBackground (Color.red);
JLabel label1 = new JLabel ("Spring");
JLabel label2 = new JLabel ("Break");

        JPanel z = new JPanel();
z.setBackground (Color.yellow);
ImageIcon pic = new ImageIcon ("smiley.jpeg");
JLabel label3 = new JLabel ("Smile", pic, SwingConstants.RIGHT);
    // places caption"Smile" to the right of picture
y.add (label1);
y.add (label2);
z.add (label3);
x.add (z);
x.add (y);
frame.getContentPane().add(x);
frame.pack();
frame.setVisible(true);
    }
}