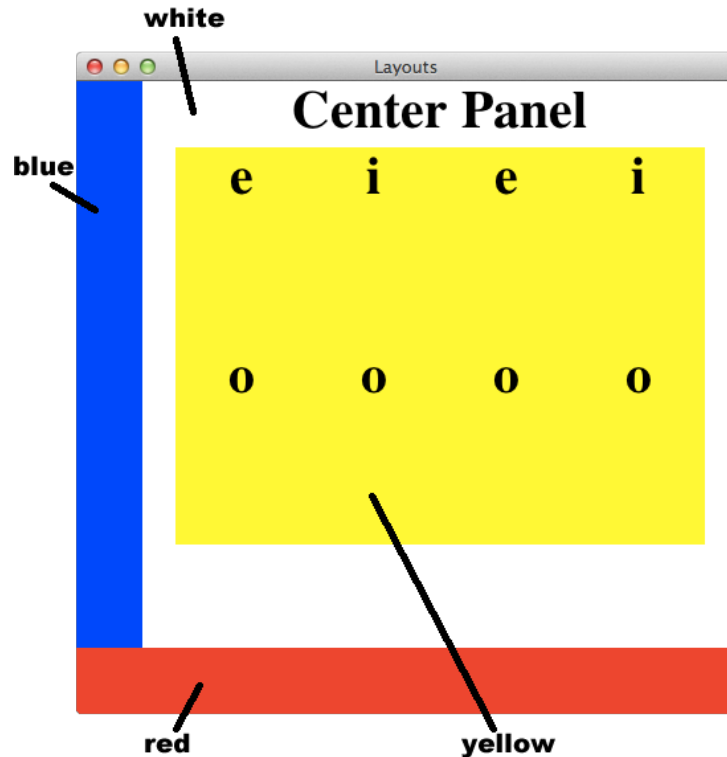


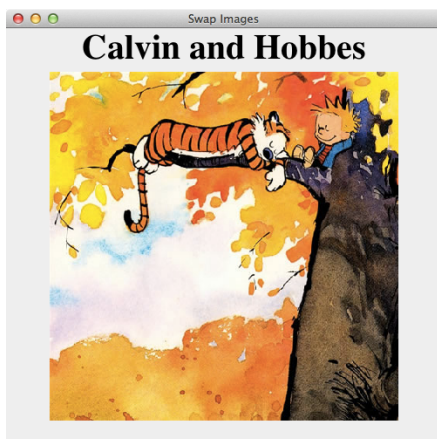
1) Vocabulary

Term	Question	Answer
Double Buffering	<p>a) What is the advantage of double buffering?</p> <p>b) What would happen if it wasn't used? Explain.</p>	<p>a)</p> <p>b)</p>
drawImage()	<p>a) In this method, what two types of image files can be drawn?</p> <p>b) What parameters are passed?</p>	<p>a)</p> <p>b)</p>
JLabel(x)	<p>a) What does x represent in this constructor?</p> <p>b) What listener is associated with this component?</p>	<p>a)</p> <p>b)</p>
Layouts	<p>What is the default layout for</p> <p>(a) a JFrame?</p> <p>(b) a JPanel?</p>	<p>a)</p> <p>b)</p>
Focus	<p>a) What does it mean to have focus?</p> <p>b) How does a component get focus?</p>	<p>a)</p> <p>b)</p>
setVisible(true)	<p>(a) Name a component this method could be used with.</p> <p>(b) What does method do?</p>	<p>a)</p> <p>b)</p>

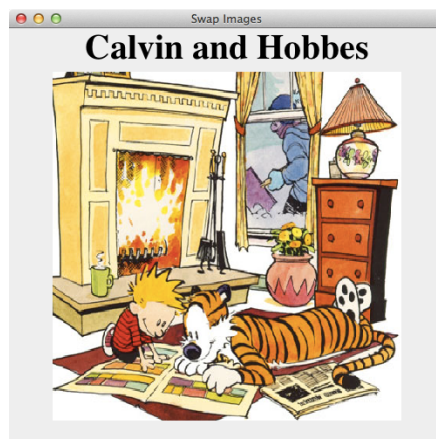
2) Layout managers. Write a program that creates the layout as shown below. Assume the JFrame is 500 by 500 pixels and approximate the sizes and widths of the other panels.



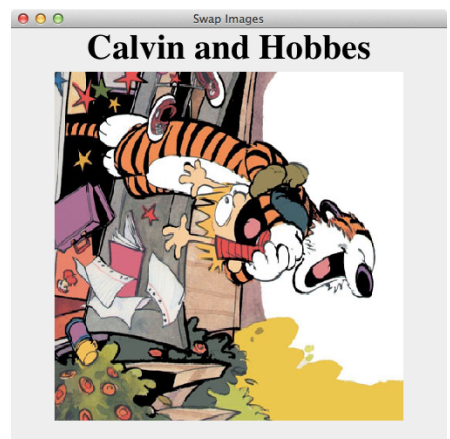
3) Write a program SwapImages.java. Your program will display three images of Calvin and Hobbes, one after the other, on a card layout. A timer will switch between the images every 3000 milliseconds.



calvin1.jpg



calvin2.jpg



calvin3.jpg

- Create a JFrame that uses the FlowLayout manager. Add the JLabel "Calvin and Hobbes" and the image JPanel.
- Create an image JPanel that uses the CardLayout manager. Load the three images, draw them into three separate JPanels, then add the three, to the image JPanel.
- Sizes: Make the JFrame 500 by 500 pixels, the JLabel font "Serif", bold, and 40 points, and the images 400 by 400 pixels.