1. Declare a subclass of **JPanel** named **MyColorChoose**r that provides three **JSlider** objects and three **JTextField** oblects. Each **JSlider** represents the values from 0 to 255 for the red, green and blue parts of the color. Use these values as the arguments to the **Color** constructor to create a new **Color** object. Display the current value of each **JSlider** in the corresponding **JTextField**. When the user changes the value of the **JSlider**, the **JTextField** should be changed accordingly. Use your new GUI component as part of an application that displays the current **Color** value by drawing a filled rectangle.

2. Modify the **MyColorChooser** class of exercise 1 to allow the user to enter an integer value in the **JTextField** to set the red, green, or blue value. When the user presses *Enter* in the **JTextField**, the corresponding **JSlider** should be set to the appropriate value.

3. Modify the application of exercise 2 to draw the current color as a rectangle in an instance of a **JPanel** which provides its own **paintComponent** method to draw the rectangle and provides *set* methods to set the red, green and blue values for the current color. When any *set* method is invoked, the drawing should automatically **repaint** itself.

4. Modify the application in exercise 3 to allow the user to drag the mouse across the drawing panel (a subclass of **JPanel**) to draw a shape in the current color. Enable the user to choose what shape to draw.

5. Modify the application in exercise 4 to provide the user with the ability to terminate the application by clicking the close box on the window that is displayed and by selecting **Exit** from a **File** menu.

Turn in a printed copy of your source code and screen captures of your programs executing. You do not need to turn in any of my code, unless you have modified it.