

**Problem #1 Overview:** The purpose of this problem is to begin to look at objects and classes with graphics. The goal isn't necessarily to create everything from scratch, but to be able to follow an already created program (read the code) and to be able to edit the code to make it do specific tasks.

**Step 1:** Create a new class called **Canvas**. Copy and paste the Canvas class code from the course Moodle page. Notice that there is no Main class in Canvas ... you will get an error if you try to run it by itself. Take some time to read the program code ... try to understand what it is doing.

**Step 2:** Create another new class called **MyArtwork**. Copy and paste the MyArtwork class code from the course Moodle page. Notice that this is a Main class. It will be "looking at" (or calling) the Canvas class that you created in Step 1. Take some time to read the program code ... try to understand what it is doing.

**Step 3:** Run the MyArtwork class ... take special note of everything that happens in the created window.

**Step 4:** Edit one of the two classes so that the output window is no longer square. Make the output window taller and skinnier than it was originally. Run the program to make sure this happens.

**Step 5:** Edit one of the two classes so that the background color is no longer black. Make the new background color your favorite color. Run the program to make sure that the window is now taller and skinnier than the original and that the background color is now your favorite color.

**Step 6:** Edit one of the two classes again so that the color of the square in the middle of the screen becomes a different color (you pick what color it becomes).

**Step 7:** Edit one of the two classes again so that the square becomes a rectangle that is taller than it is wide.

**Step 8:** Edit a class one last time so that the program window has a different greeting (no longer says "Hi there"). You choose an appropriate greeting. This completes problem #1 for this worksheet.

**Problem #2 Overview:** The purpose of this problem is to show your understanding of the previous problem on this worksheet and to display a little bit of artistic creativity.

**Step 1:** Create a new class called **MyPicture**. Copy and paste the MyArtwork class code from the course Moodle page. Your MyPicture class should call the Canvas class to do all of your drawing. **DO NOT EDIT THE CANVAS CLASS!**

**Step 2:** Now it is time to do your own artwork. Create a design, picture, logo, scenery, or image that looks interesting to you.

**Requirements For Your Output:**

- At least four different colors used.
- Display at least eight different items (draw at least eight different things).
- Change the Window Title to something that explains what your drawing is.