

## First GUI Application

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### Due Date:

This assignment is due Friday 2022-02-02.

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### Purpose:

To become familiar with the `javax.swing.*` architecture for creating simple GUI applications.

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### Reading Assignment:

Read Chapters 2 and 3.

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### Recommended Coding Approach

Look at the `lab5q5.zip` file for a partial solution to one of the problems below. The approach used comes from earlier editions of Horstmann's text. Specifically it uses

- a `Main` class that runs everything. (can often be combined with the frame class)
- a `HouseFrame` class that subclasses `JFrame` to provide the outer frame in an application-specific way.
- a `HouseComponent` class that subclasses `JComponent`, and orchestrates the painting of houses.
- a `House` class that knows how to draw a House.

This approach is very general and flexible.

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### Problems

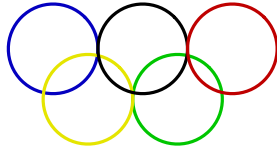
Code solutions to the following problems:

- Write a program to print your name in red inside a blue rectangle.
- Write a program to draw a face like



- Write a program to draw a traffic light (see the text for a guided solution)

- Write a program to draw two solid overlapping squares, one pink, one purple.
- Write a program that draws a house, either as simple as , or as fancy as you wish.
- Write a program to draw the Olympic rings



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## Hand In Process

This section applies to this laboratory assignment and other laboratory assignments that are graphical in nature. To help the marker:

- Your program should be contained in a package `cpSC101.name.lab2_a` where *name* is your unbc userid, *2* is the number of the lab assignment that you are handing in, and *a* is the part of the lab, for instance, `cpSC101.casper.lab2_c`.
- The `public static void main(String [] arghS)` method should be found in a class called `Main`.
- You should create a `.jar` file that contains both your `.java` and your `.class` files. IDEs (Intellij, Net Beans, *etc.*) sometimes make this difficult. A `.zip` file will also do.
- Your `.jar`-file (or `zip` file ) should have a name that depends on both your own name and the assignment number, for instance, `casperson-david-lab2.jar`.
- Each separate program should be in its own `.jar` (or `.zip`) file.