CS1132 Lab Exercise 4

1 Brief graphics demo

Download the file `briefGraphicsDemoSP13.m` posted along with Assignment 2. Read it and run it; do some experimentation. Do you understand all the commands? If not, ask!

Before moving on to the next question, look closely at how to draw a filled (colored) rectangle.

2 Function to draw a rectangle

Implement the following function as specified:

```
function DrawRect(a,b,L,W,c)
% Add a rectangle to the current window, assuming hold is on.
% The rectangle has its lower left vertex at (a,b), length L,
% width W, and color c where c is one of 'r', 'g', 'y', etc.,
% or a rgb vector (e.g., [.2 1 .5]).
```

3 Interactive framework for drawing rectangles

Given two points whose x-coordinates are not the same and y-coordinates are not the same, one can draw a rectangle with those two points as the opposing corners. Complete the script `rectangles` to draw a set of user-specified rectangles:

- Draw a black square as background
- Prompt user to click two points
- Repeat until one or both user clicks is outside the background:
  - Calculate the properties of the rectangle given the two clicks
  - If a rectangle can be formed draw it in a color of your choice
  - Prompt user to click two points

Delete your files from the computer before leaving the lab!