Practice Problem 3.1

The following program is supposed to draw nine rotated boxes at the center of the sketch window, but it doesn't work. Instead, I get the following error.

File "problem3.1.py", line 13, in rotatedBoxes
UnboundLocalError: Local variable 'angle' referenced before assignment.

What is wrong with my program?

```
1.  from Processing import *
2.  window(500, 500)
3.  rectMode(CENTER)
4.
5.  # Keep track of the rotation angle
6.  angle = 0.0
7.
8.  # Draw rotated boxes at the center of the window
9.  def rotatedBoxes():
        global alpha
10.     for i in range(9):
11.         pushMatrix()
12.         translate(250, 250)
13.         rotate(angle)
14.         rect(0, 0, 50, 50)
15.         popMatrix()
16.         angle += radians(10)
17.
18. # Draw
19. rotatedBoxes()
```

A global statement is required to update the value of alpha

Practice Problem 3.2

Write a class named `FlyingSaucer` that defines a graphic object which, when drawn, renders a white circle with a 10-pixel wide gray outline. The `FlyingSaucer` object has three instance variables, **`x`**, **`y`** and **`size`**, that represent its location (`x`, `y`) and its width and height (`size`). The `FlyingSaucer` constructor should initialize these instance variables. Give the `FlyingSaucer` class one method named `draw()` that draws the `FlyingSaucer` at its `x-y` location, with a width and height of `size`.

A start of the class definition has been provided, along with a program to test the `FlyingSaucer` class and a sample output window.

```
from Processing import *
window(500, 500)
background(0)

class FlyingSaucer:
    # Class implementation goes here

    def __init__(self, x, y, size):
        self.x = x
        self.y = y
        self.size = size


    def draw(self):
        fill(255)
        stroke(128)
        strokeWeight(10)
        ellipse(self.x, self.y, self.size, self.size)



# Test the FlyingSaucer class
s = FlyingSaucer(250, 250, 100)
s.draw()
```