# 17. Python Graphics: Sunrise Series

Mr. Neat

#### **Sunrise Series**

- The next few labs are going to lead to an app that allows you to click and your sun will either rise or set depending on your preference.
- Each lab will address a part of this problem

## First Sunrise Step

- Start with your code from your landscape lab.
- Your choice whether you keep the other parts of the landscape in the window
- In this lab, we are going to learn to move the sun

#### move method

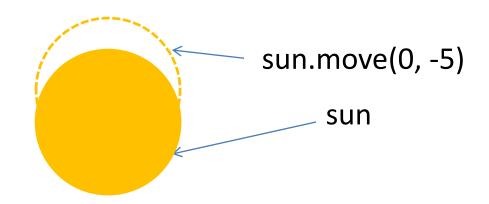
- Understand the difference between a method in Python and a function. Some examples:
- Methods: (assume an Circle object and a GraphWin object have been previously defined called sun and window respectively)
  - sun.draw(window)
  - window.close()
  - window.getMouse()

- Functions:
  - print()
  - input()
  - len()

#### move method

- move is a method
- Just like Java (if you got that far)
- Moves the object a relative amount from the present object position in the x and y direction
- Takes 2 parameters:
  - sun.move(x,y);

## move method



### **Lab** 17

- Write a Python app that makes your sun move vertically (like either a sunrise or set)
- Start with your code from the landscape lab
- Make a for loop any way that you know how
- Every time you click, the sun should move vertically by a small amount.
- This should repeat as many times as defined by the for loop
- Hint: use the GraphWin getMouse() method to control the movement.