INFO: Graphics Package

In this course, we will sometimes make use of the Zelle graphics package. This package (written by John Zelle) tells Python how to make basic shapes appear on the screen.

You can download the file graphics.py from Canvas.

Put this file in the same folder (on your desktop) where you saved the Python program that you wrote. (Later in this course, we will talk about where Python looks for packages like this.)

Type the following Python program

```
from graphics import *

win = GraphWin("My Program", 500, 400)
```

The first line tells Python that you want to use the Zelle graphics package (graphics.py) The second line tells Python to make a graphics window on your screen and call it "My Program".
(The 500 and the 600 are how wide and how tall you want the window. You can change these numbers)

INFO: Time Package

The following line imports the time package. This is a common packages that are included whenever you install Python.

```
from time import *
```

From the time package, we will make use of the sleep function. The sleep function causes Python to wait for some number of seconds.

```
from time import *
from graphics import *

win = GraphWin("My Program", 500, 400)

my_circle = Circle( Point(200,200), 100)
my_circle.draw(win)
sleep(3)
my_circle.setFill("red")
```

The above program waits for 3 seconds before changing the color of the circle.

Note: If you want things to happen more quickly you can sleep for half a second instead.

```
from time import *
from graphics import *

win = GraphWin("My Program", 500, 400)

my_circle = Circle( Point(200,200), 100)
my_circle.draw(win)
sleep(0.5)
my_circle.setFill("red")
```