

Using Python on Windows:

1. Write the program in text editor such as notepad and save it with the extension .py, such as *cirles.py*, e.g.:

```
import turtle

def twoCircles():
    t = turtle.Turtle()

    # Draw the X and Y axes

    t.up() # don't draw yet

    t.goto(0, 200)
    t.down()
    t.right(90)
    t.forward(400)

    t.up()
    t.goto (-200, 0)
    t.down()
    t.left(90)
    t.forward(400)

    # Draw two circles, first at the origin

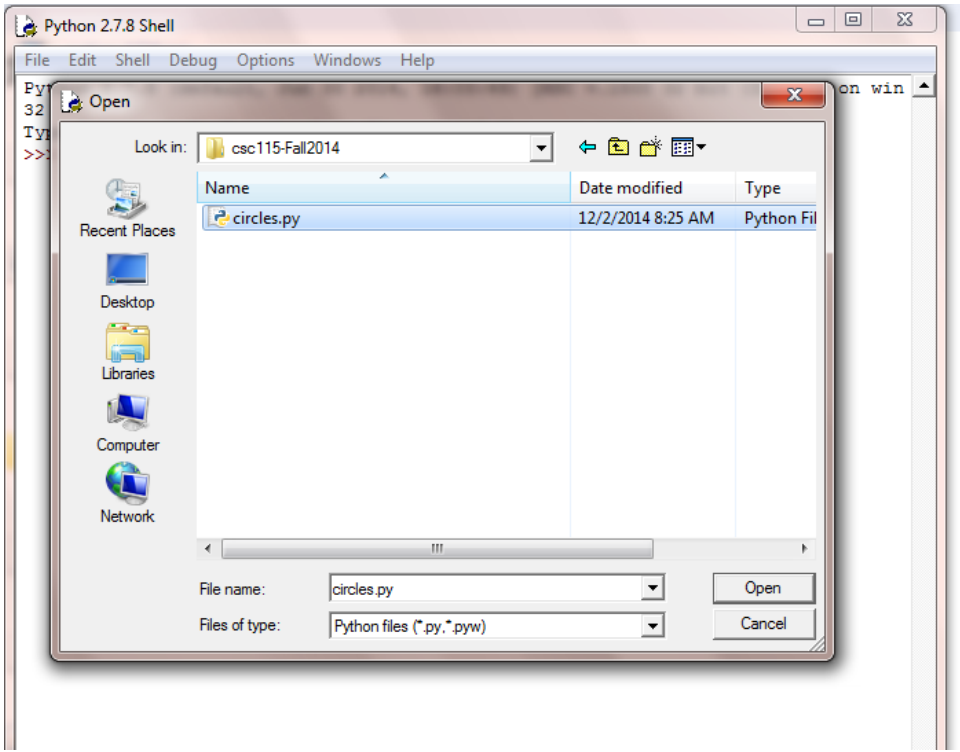
    t.up()
    t.goto(0, -100)
    t.down()
    t.circle(100)

    # Draw the second of the two cirles

    t.up()
    t.goto(0, 100)

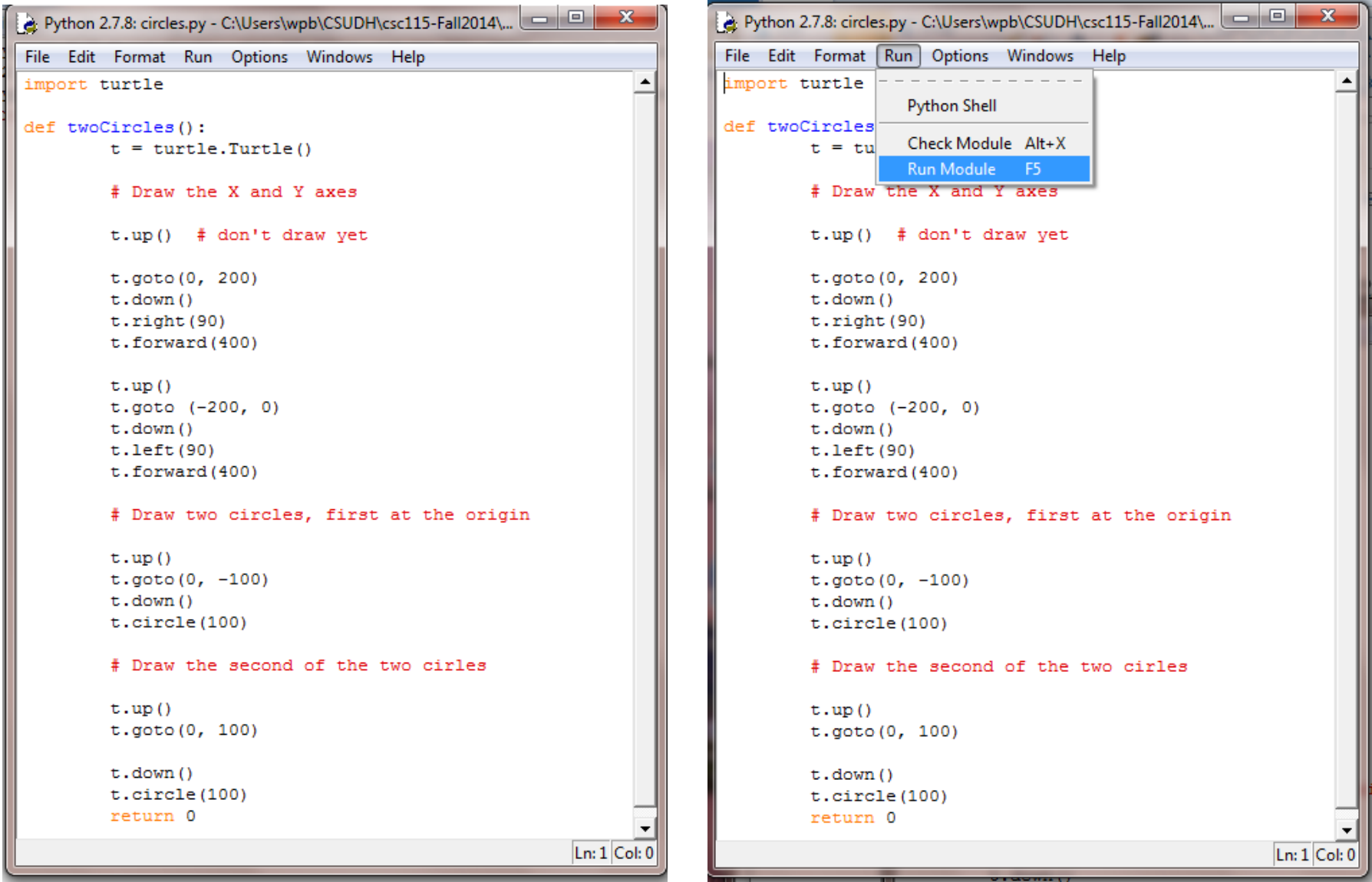
    t.down()
    t.circle(100)
    return 0
```

2. Start the Python GUI environment on Windows and select a module to run via the *File Menu*:

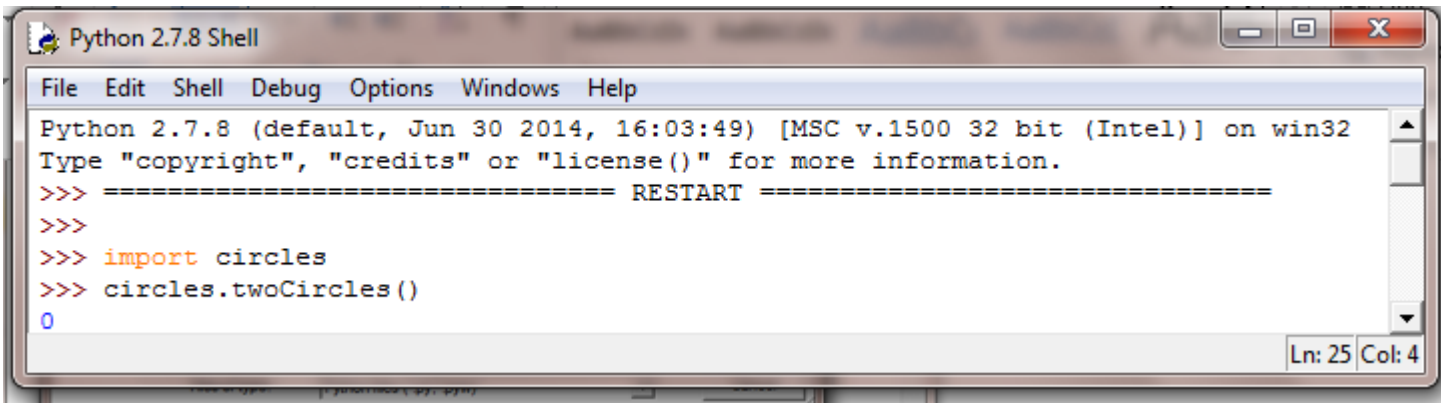


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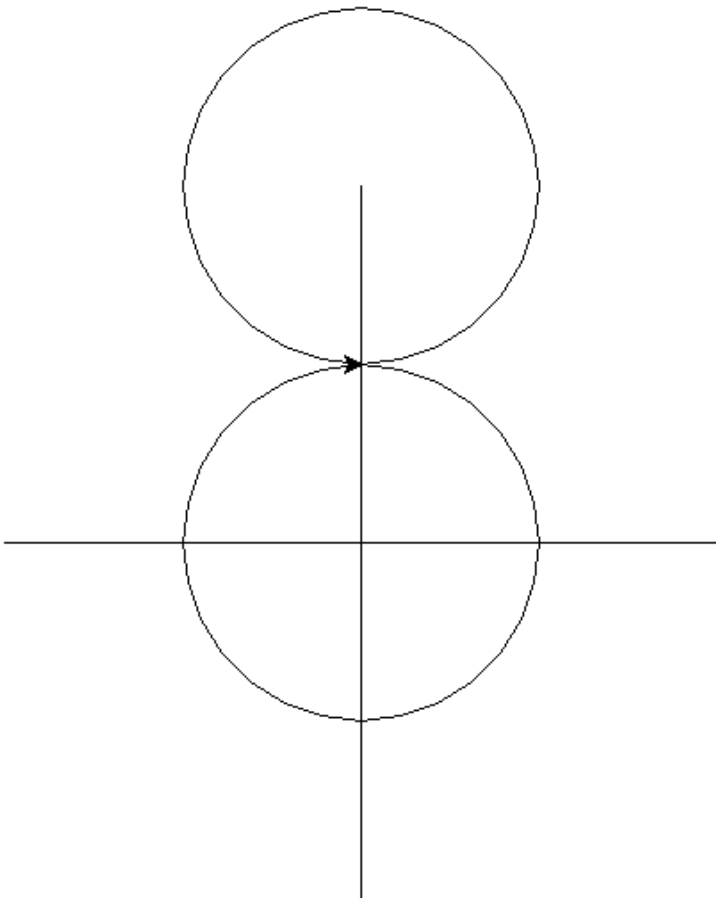
3. Run the module (via *Run Module* on the *Run* menu), which imports it into the Python environment:



4. Sample Run: “Run”-ning the module will incorporate it into the Python environment
- a. In the *Python Shell* window, type *import circles* followed by a carriage return.
 - b. Next (to actually run the program) type *circles.twoCircles()*:



5. Result:



Notes:

- 1. On UNIX systems, such as a Mac or Linux, Python is easier to use; Windows is easier now than in the past -- this chart describes an older version that tends to be very compatible/portable across nearly all systems
- 2. We are using Python 2.x in class; Python 3.x should be used when possible
- 3. Moving a text file from one system to another, e.g., PC to Mac or Linux is easy in Python – just email the text file