Outline for April 10, 2014

Reading: text, §3

Assignment due: April 17, 2014

1. import statement
   a. import math [hypotnoex1.py]
   b. Need the “math.” before “sqrt”
   c. from math import sqrt [hypotnoex.py]
   d. Do not need the “math.” before “sqrt”

2. Turtle graphics
   a. What turtle is; import turtle

3. Drawing a figure: a box with a hat [tbox.py]
   a. Set up the window to draw in: Screen()
   b. Create the turtle: Turtle
   c. Cursor for drawing
   d. Move cursor forward: forward, backward()
   e. Turn cursor: left(), right()
   f. Wait for the window to close: mainloop()

4. Titles, background, and such [tfancybox.py]
   a. Window
      i. Color of the window background: background()
      ii. Title of the window: title
   b. Turtle, more properly called “pen”
      i. Shape of the turtle: shape()
      ii. Speed of the drawing: speed()
      iii. Color of the drawn line: color()
      iv. Thickness of the line (pixels): pensize()
      v. Hide the turtle: hideturtle()

5. Plotting points and graphing
   a. Drawing lines: penup(), pendown()
   b. Move turtle: setpos()
   c. Write text: write()
   d. Draw a dot at the current position: dot() [tchaosdots.py]
   e. Draw a line from the current position to another: goto() [tchaosline.py]

6. Functions [hello.py]
   a. What functions are
   b. Defining them
   c. Using them

7. Quick look at using them [quad.py]
   a. Passing values to functions
   b. Returning values from functions

8. The right way to do quad.py [quad-c.py]