CS 100 2018S
Homework 02

Due: at the beginning of class on February 8th.

Read: Chapter 4. Case Study: Interface Design in the text.

Do each of the exercises below. **Submit** a text file with the extension '.py' via Moodle. If you run into a problem, post to Moodle describing where you ran into trouble or email your instructor or classroom assistant, or ask your question during recitation. If you know the answer to someone's question on Moodle, post a response. You get course credit for asking and answering questions in Moodle.

1. Write code that uses turtle graphics to draw an equilateral triangle, a square and a regular pentagon, each with side length 100. Your code should draw these shapes relative to the turtle's starting position and orientation (i.e. don't use `setpos()` or any other absolute positioning methods).

2. Write code that uses turtle graphics to draw four concentric circles of radius 50, 100, 150 and 200. (The final result should look similar to a dartboard.)

3. Write code that uses the Python math module to compute and print out the values of
   a. 100! (a.k.a. 100 factorial)
   b. the log (base 2) of 1,000,000
   c. the greatest common denominator of 63 and 49

   Hint: there is a description of each function in the math module in the Python documentation, which you can access here:

   Help -> Python docs -> Global Module Index -> math