Lab – for loops

For loop syntax:
```
for var in range(start, finish, increment):    # var is a counter variable
    [ do whatever you want with var ]
```

1. Write a function called `f_to_c` that takes one float argument: a temperature in degrees Fahrenheit. This function will returns the equivalent temperature in degrees Celsius.

    ```
    def f_to_c(fah):
    ```

    a. Write a main function for your program that prints equivalent Fahrenheit and Celsius temperatures in increments of 10 degrees Fahrenheit, from -40 to 100. The output should look something like this:

    ```
    -40 F = -40 C
    -30 F = -34.4444 C
    -20 F = -28.8889 C
    (etc)
    100 F = 37.7778 C
    ```

    b. Use formatting in your print statement to round the Celsius temperatures to one decimal place.
    Hint: `print("%.1f" % x)` prints the variable x with one decimal place.
    Hint 2: You can also use the round function: `print(round(3.14159, 3))` prints 3.142.

    c. So far, your program has no input statements. Add input statements to your main function so the user can enter the low temperature to start at, the high temperature to finish at, and the degrees increment.

2. Use the graphics library to draw the following designs. Each of the six pictures below represents a design completely covering a square canvas (you can pick the size of the canvas).
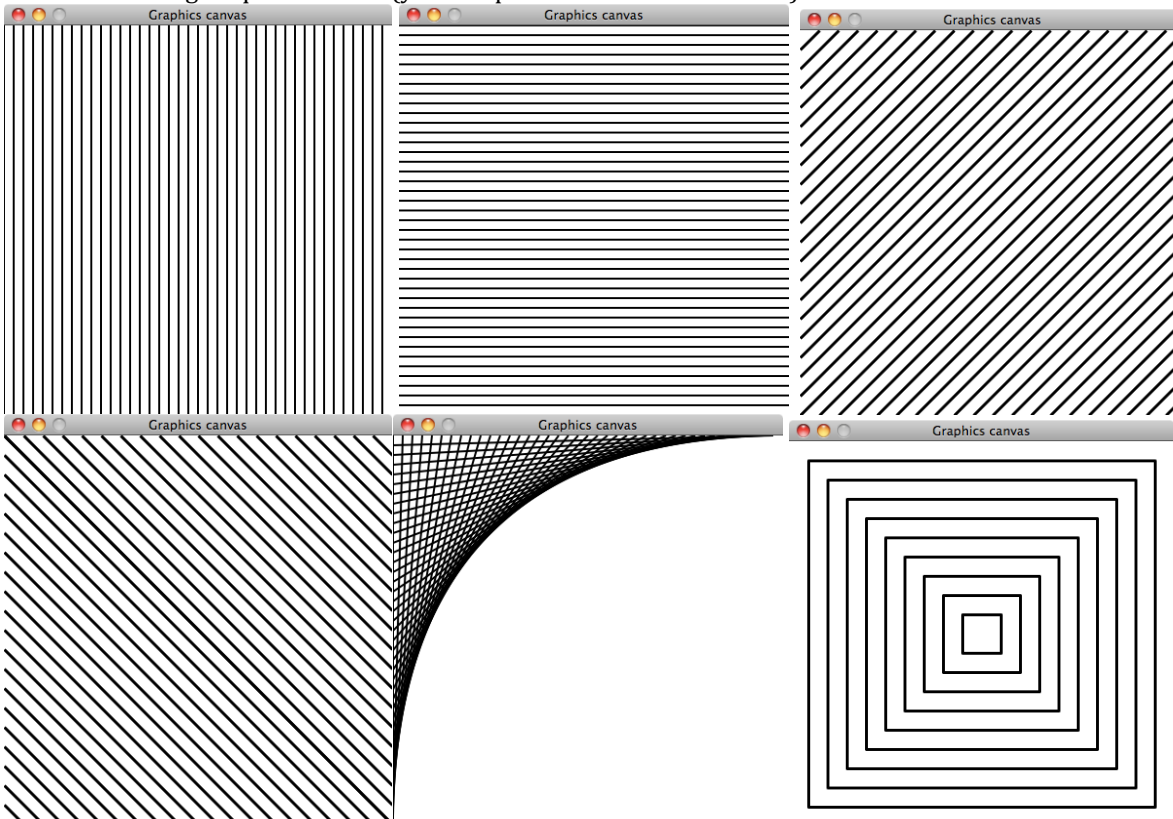
Also try drawing the fifth image with the curved design placed in the other three corners.

3. Challenge: draw a spiral. If you need sine/cosine, put "`import math`" at the top of your program, and then you will have access to the functions `math.sin` and `math.cos` functions.