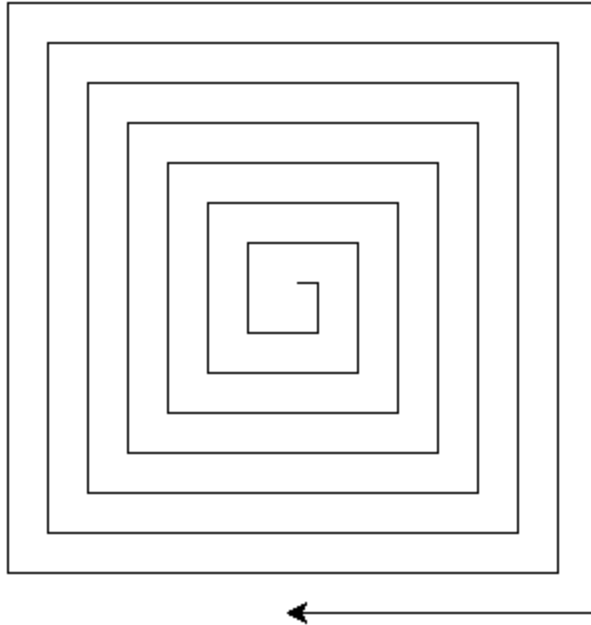


Loops, print, math

Spend some time familiarizing yourself with print, loops and math in Python. Can you re-write the cumulative sum program we had worked on yesterday?

1. Rewrite the star line program we did in class. Can you make the stars first grow and then shrink? Can you do interesting things with the color gradient?
2. Draw a Turtle Graphics square spiral. Your spiral should take x and y positions as parameters so it can be drawn at different places on the screen:



3. Write a function called `calculate_tax` that takes two parameters: an income level and a number of dependents. Print out tax owed according to the following rules:
 - Flat tax of 20%
 - \$10 000 standard deduction (in other words, you only pay taxes on income above \$10 000)
 - \$2000 deduction for each dependent
4. Draw a rounded Turtle Graphics spiral.
5. Python provides a built-in function called `len` that returns the length of a string, so the value of `len('allen')` is 5. Write a function named `right_justify` that takes a string named `s` as a parameter and prints the string with enough leading spaces so that the last letter of the string is in column 70 of the display.
6. PROGRAMMING COMPETITION QUESTION:
Write a function `draw_tree` that takes a size parameter and prints out the following pattern:

Size 3:

```
*  
***  
*****  
*
```

Size 4:

```
*  
***  
*****  
*****  
*
```