

CIS 210, Fall 2016

Introduction to Computer Science

Main Menu

[Class home page](#)[Piazza](#)[How to Succeed](#)[Schedule](#)[Assignments](#)[References](#)[Exams](#)

Project 1, Part 2

This assignment is due Friday, September 30 at 5pm. Save your Python program in a file called drawflower.py and turn that file in using Canvas.

Purpose

Practice turtle graphics.

Create your own turtle graphics function

In the textbook, there are several examples of functions that draw shapes using Python's support for turtle graphics. One of the functions shown on page 34 is drawSquare(). I hope that you took my advice in the first lecture to create a draw.py file containing all of the graphic functions defined in Chapter 1 and test them out.

Of course, as we discussed in lecture, the book authors do not conform to the programming style guide that we are using. Therefore, you will see in that I have changed the name of that function to draw_square.

Using the draw_square() function, one can draw an interesting flower-like shape by drawing many squares. Each square is drawn after turning the turtle by some number of degrees between each square.

Requirements

You will create a Python program to draw a flower-like shape using draw_square(). draw_flower() takes the number of squares to draw as a parameter (num_squares) and draws a flower by repeating the square num_squares times. You will need to figure out how far to turn the turtle based on num_squares.

```
# draw a flower using 25 squares, each with side length 100

$ python3 drawflower.py 25 100
```

Getting started

This [starter code](#) may be helpful.

Grading

25 points possible

- 10: Program runs and produces the correct output. 5 points if it produces a non-star figure.
- 10: Follows [CIS 210 coding guidelines](#), including author identification and header .
- 5: Clarity. The program should not only be consistent with the requirements and approach described here, but it should be very easy to read the program and verify its consistency with the spec.

Contact [webmaster](#).

Based loosely on Transparentia design by Arcsin, from OSWD.org.