



Fall 2021 Python Lesson 5.2



Dr. O'Brien 10/19/21

do now

be sure to: Get out **notebook**. Then write down **goal** and answer **Do Now** questions.
Answer each question with at least **one** complete sentence

A. Find your **assigned** seat (ask Dr. O'Brien)

B. Read through the MP1 requirements to the right.

C. In your notebook:

- What work do you still need to complete?
- What can you do to focus and complete your work successfully?

MP1 requirements:

- Complete all CodeHS Lessons, Unit 2
- Complete Assessment #1
- Complete Turtle Art project (Assessment #2)

Class: Python Goal: Use functions, loops, and artistic effects to generate works of art

1. Tracy has to move forward (20) and then up 40. We can see this because the start of the curve is on the same height as the vertical radius and halfway across the horizontal radius.
2. It's useful because other wise we'd have to guess exactly where it is. The diagram provides you with a frame of reference.



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Fall 2021 art project (per. 3)

The following students should remain at the front.
Everyone else go to workstation and start working on CodeHS:
N/a

Class: Python Goal: Use functions, loops, and artistic effects to generate works of art



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Fall 2021 art project (per. 6)

The following students should remain at the front.
Everyone else go to workstation and start working on
CodeHS:

Nasir
Dhiya

Class: Python **Goal:** Use functions, loops, and artistic effects to generate works of art



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Fall 2021 art project (per. 9)

The following students should remain at the front.
Everyone else go to workstation and start working on
CodeHS:

Ashley
Kingsling
Donovan
Joshua R.
Andy V

Class: Python **Goal:** Use functions, loops, and artistic effects to generate works of art

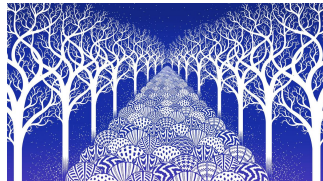


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Warm up (answer in notebook)

Examine the picture to the right:

1. Do you think a computer was used to create this image?
Explain why or why not.
2. In what ways might computers be useful to create art? Explain in at least one complete sentence.



Class: Python **Goal:** Use functions, loops, and artistic effects to generate works of art

+In what ways might computers be detrimental to creating art?
+What sorts of computational structures are needed to create an image like the one
This is something called 'algorithmic art'.



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Making art with Turtle Graphics
Part 1: Find/Create an image

You need an image to reproduce using Turtle Graphics.

For any image, be sure to **include some sort of pattern that can be reproduced using Python & Turtle Graphics** (Check w/ Dr. O'Brien if you're not sure).



Class: Python **Goal:** Use functions, loops, and artistic effects to generate works of art

- Examples are on the right.
You'll need to use color, functions, and loops in your project.



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Making art with Turtle Graphics
Part 1: Find/Create an image

two options:

1. **Create your own image, take a picture and post it in your google doc.**
2. **Find an image online. If you find the image online, write a paragraph explaining why you think it's appropriate, along with what you like about it. Paste image and description into your Google Doc.**

Complete part 1 by the end of period !!!!

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Making art with Turtle Graphics
Part 2: recreate image using turtle graphics
Your image should include all of the techniques we've learned in class

You need the following:

- a. Use loops
- b. use of functions
- c. use of artistic effects (of course!)

Class: Python **Goal:** Use functions, loops, and artistic effects to generate works of art



TODO

1. Find an image/Make one on your own. Post it to Your **Art Project Doc**.
2. After Dr. O'Brien has okayed your work of art: Work on Art project part 2 in CodeHS

Class: Python Goal: Use functions, loops, and artistic effects to generate works of art



The rest of the period

1. Find a **workstation**. Log in with your user name and password.
2. Navigate to **CodeHS** and resume work (if you were absent yesterday, let Dr. O'Brien know!)
3. Rember to **Assessment #1** (when you finish lesson 2.4)
4. Complete the following activities:
 - a. Lesson 2.5 Turning tracy w/ angles
 - b. Lesson 2.6 Comments
 - c. Lesson 2.7 Naming guidelines
 - d. Lesson 2.8: functions
 - e. Lesson 2.9: Artistic effects
 - f. Lesson 2.10: Top down design
5. Work on Turtle art project

Making art with Turtle graphics (part 1)

For any image, be sure to include some sort of pattern that can be reproduced using Python & Turtle Graphics (Check w/ Dr. O'Brien if you're not sure).

two options:

1. Create your own image, take a picture and post it in your google doc.

2. Find an image online. If you find the image online, write a paragraph explaining why you think it's appropriate, along with what you like about it. Paste image and description into your Google Doc.

Complete the rest on CodeHS!

Class: Python Goal: Use functions, loops, and artistic effects to generate works of art

- Make sure students are working quietly. See problem guides for specific Python activities.

Frequently asked questions:

+I don't know what to do!?! Make sure to carefully read the instructions.

Take notes when watching the video.

+What are you trying to make tracy do?

+how can I figure out why my code doesn't work? Try getting out a piece of paper, and following your commands yourself. What do you draw. Where do things go wrong?