You are going to use code to create a drawing that is new and original each time your code is run!

Submit your work in oneNote by uploading to the following to this page in your personal work space:

1. Insert a file attachment of your .py file.
2. Insert 3 different screenshots of the canvas after running.
3. Print your code as a pdf. Insert the pdf printout.

Remember that plagiarism is never allowed. Any help you receive should be cited as a comment within your code.

**Step 1:** Run the file given to you called “Field of Shapes” and watch what happens. Look at the code and try to decipher what each line is doing.

**Step 2:** Modify the code by changing the method myshape so that it draws a shape of your choosing. Your shape must be complex (it cannot be one shape, but must be multiple shapes put together). Your shape cannot be one of the shapes already used (no smiley/frowny faces!). If you have no creativity, I recommend creating a flower of some sort.

**Step 3:** Modify you code by changing the background color. If your shape is a star, consider making the background a dark blue to create a night sky. If your shape is a fish, consider a bright blue to create and aquarium

**Step 4:** \*BONUS POINTS\* Modify your method so that it has a parameter size. Use this parameter to draw you shape larger or smaller, depending on the input value given when the method is called. Call your method using a random number for the parameter so that you shapes are also all different sizes when they are drawn! *Hint: use the random numbers generated for position and color to help understand how to create your own randome numbers.*

Stuck? Need help?

1. Try looking at the Turtle API <https://docs.python.org/3.3/library/turtle>
2. You can also **press the F1 key** while in the Python Shell to open the official Python API
3. Ask a neighbor or class mate for help. If you are helping someone, don’t simply tell them what to type. Ask questions to help them understand the code.
4. Come to powerhour and get help from student tutors.
5. After using all resources above, Mrs. Kronberger can also help you. Be ready to show where in the APIs you have looked and to list three people you have asked for help.

Remember, the ultimate goal is to prepare you for the AP Performance Task : Create. You will design a program without help from peers, parents, or Mrs. Kronberger. You need to be comfortable writing and debugging code on your own, so make sure you understand when getting help.

**Telling someone what to type is not helping them understand. Copying code from someone else does not help you understand. Submitting someone else’s code as your own is stealing, and both students involved will receive a zero for the assignment.**