Unit 2 Lab 2
Learning Targets

Essential Questions

- What is OOP?
- What are objects?
- What are attributes?
- What are methods?

Key takeaways

- Python is object oriented by design, but it is not forced upon users.
- Objects are instances of "classes" - python definitions to represent and access things like data, hardware or "Turtles".
- Attributes are the properties associated with an object.
- Methods are the functions associated with an object.
- Many times we need to import modules which contain class definitions

Teaching Tips

Labs in Unit 2 are meant to act as a refresher to some of the important Python programming concepts which may be used later in the course.

One of the most important ideas of OOP is the idea of abstraction. Using an "object" with attributes and methods predefined lets us ignore all the nitty gritty details of how the object really works. Throughout this curriculum we will continue to use "objects" which do many incredible and complex things. Using the objects will allow students to ignore what is happening under the hood and instead just use and see results. Students should get in the habit of recognizing when an object is being created and should get comfortable with the "." notation used to access methods and attributes of the objects they create.

Creating turtle objects allows students to get instant feedback on what their "objects" are doing.