Lesson 5.03 Object Oriented Programming

Object-Oriented Programming (OOP)

- OOP involves bundling together variables and functions into "classes" -- aka creating your own data types.

- Python is fundamentally object-oriented -- everything in Python is an object.

Object-Oriented Programming (OOP)

- Python does not require you to use objects or classes

- OOP helps to organize and structure complex codes by:
  - Grouping together data and behaviour in one place
  - Promoting modularization of programs
  - Isolates different parts of the program from each other

Object-Oriented Programming (OOP)

Class	A blueprint for creating objects of a particular type
Methods	Regular functions that are part of a class
Attributes	Variables that hold data that are part of a class
Object	A specific instance of a class

Private Methods

- Python prescribes a convention of prefixing the name of the variable/method with a single or double underscore to emulate the behavior of protected and private access specifiers.

- The double underscore __ prefixed to a variable makes it private. It gives a strong suggestion not to touch it from outside the class. Any attempt to do so will result in an AttributeError: