Terminology and Python

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CTEC298

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4/16/2024

Iteration

Looping over an object.

Sequence (a.k.a. "list-like object")

An ordered collection of objects.

Mapping

Dictionary-like objects store key-value pairs and support key lookups using square brackets ([...].

Tuple

Tuples are immutable sequences.

Variable (a.k.a. "name")

A name refers to an object. Variables point to objects in Python (see pointers).

Pointer (a.k.a. "reference")

A sort of "link" to an object, usually a link from a variable to an object or from a data structure to an object.

Assignment

Assignment points a variable to a value.

[Scope](https://www.pythonmorsels.com/terms/#scope)

A place where variables live.

[Dunder](https://www.pythonmorsels.com/terms/#dunder)

Dunder stands for "double underscore."

[Object (a.k.a. "value")](https://www.pythonmorsels.com/terms/#object)

Any "thing" in Python

[String Representation](https://www.pythonmorsels.com/terms/#string-representation)

An object's string representation determines what happens when Python converts that object to a string.

Modules

These terms are about importing code from other files and creating Python files that are meant to be imported.

[Package](https://www.pythonmorsels.com/terms/#package)

Python is created out of a directory (instead of a single .py file). Python packages are created by creating a directory containing a \_\_init\_\_.py file.

[Command-line interface](https://www.pythonmorsels.com/terms/#CLI)

A script or program is meant to run from your computer's command prompt (a.k.a. terminal). The command prompt is a program that accepts commands and programs to run.

[REPL (a.k.a. interactive Python interpreter)](https://www.pythonmorsels.com/terms/#REPL)

An environment for repeatedly entering Python statements and seeing the results of those statements.

[Function](https://www.pythonmorsels.com/terms/#function)

Functions are a way to make reusable code. They store code to be called later. Functions can have inputs in the form of arguments and an output in the form of a return value. They are used by them.

[Callable](https://www.pythonmorsels.com/terms/#callable)

An object which can be "called". If you have a variable that represents a callable object, you can "call" that object by putting parentheses after it (e.g., like this()). Any item passed to that callable should be put inside the parentheses.

The functions are callable (calling them runs the code in the function), and classes are also callable (calling them returns a new [instance](https://www.pythonmorsels.com/terms/#instance) of a class).

[Argument (a.k.a. "function argument")](https://www.pythonmorsels.com/terms/#function-argument)

An input to a function, a class, or another callable argument.

[Decorator](https://www.pythonmorsels.com/terms/#decorator)

Decorators augment the behavior of [functions](https://www.pythonmorsels.com/terms/#function) and [classes](https://www.pythonmorsels.com/terms/#class). Decorators can be applied to a function or class by using an @ symbol to "decorate" that function or class.

[Generator expression](https://www.pythonmorsels.com/terms/#generator-expression)

A comprehension-like syntax.

[Generator function](https://www.pythonmorsels.com/terms/#generator-function)

The function that has one or more yield statements within it. Generator functions *do not run when called*.

[Duck Typing](https://www.pythonmorsels.com/terms/#duck-typing)

A programming style characterized by focusing on an object's behavior instead of its class (a.k.a. type).

EAFP (Easier to Ask For Forgiveness Than Permission) contrasts [LBYL](https://www.pythonmorsels.com/terms/#LBYL) (Look Before You Leap).

[Monkey Patching](https://www.pythonmorsels.com/terms/#monkey-patching)

Any technique that extends or modifies the behavior of objects, typically objects you wouldn't normally alter, while a Python program is running.

[Walrus Operator](https://www.pythonmorsels.com/terms/#walrus-operator)

The := operator is used within an **assignment expression**.

[Splat (a.k.a. "star")](https://www.pythonmorsels.com/terms/#splat)

The unary \* and \*\* operators in Python are sometimes referred to as "splat" and "double-splat", especially by Ruby programmers. These operators are sometimes called "star" and "double-star".

Syntax

The terms are all about Python's "syntax," which refers to the symbols, words, and rules that make up valid Python code.

Reference

Learnpython.org