Glossary terms from week 3

Terms and definitions from Course 2, Week 3

break: A keyword that lets a user escape a loop without triggering any ELSE statement that follows it in the loop

Concatenate: To link or join together

Escape character: A character that changes the typical behavior of the characters that follow it

For loop: A piece of code that iterates over a sequence of values

format(): A string method that formats and inserts specific substrings into designated places within a larger string

index(): A string method that outputs the index number of a character in a string

Indexing: A way to refer to the individual items within an iterable by their relative position

Iterable: An object that's looped, or iterated, over

Iteration: The repeated execution of a set of statements, where one iteration is the single execution of a block of code

Loop: A block of code used to carry out iterations

range(): A Python function that returns a sequence of numbers starting from zero, increments by 1 by default, and stops before the given number

String slice: A portion of a string that can contain more than one character; also referred to as a substring

While loop: A loop that instructs the computer to continuously execute the code based on the value of a condition

Terms and definitions from previous weeks

A

Algorithm: A set of instructions for solving a problem or accomplishing a task

Argument: Information given to a function in its parentheses

Assignment: The process of storing a value in a variable

Attribute: A value associated with an object or class which is referenced by name using dot notation

B

Boolean: A data type that has only two possible values, usually true or false

Branching: The ability of a program to alter its execution sequence

C

Cells: The modular code input and output fields into which Jupyter Notebooks are partitioned

Class: An object's data type that bundles data and functionality together

Comparator: An operator that compares two values and produces Boolean values (True/False)

Computer programming: The process of giving instructions to a computer to perform an action or set of actions

D

Data type: An attribute that describes a piece of data based on its values, its programming language, or the operations it can perform

def: A keyword that defines a function at the start of the function block

Docstring: A string at the beginning of a function's body that summarizes the function's behavior and explains its arguments and return values

Dot notation: How to access the methods and attributes that belong to an instance of a class

Dynamic typing: Variables that can point to objects of any data type

E

elif: A reserved keyword that executes subsequent conditions when the previous conditions are not true

else: A reserved keyword that executes when preceding conditions evaluate as False

Explicit conversion: The process of converting a data type of an object to a required data type

Expression: A combination of numbers, symbols, or other variables that produce a result when evaluated

F

Float: A data type that represents numbers that contain decimals

Function: A body of reusable code for performing specific processes or tasks

I

if: A reserved keyword that sets up a condition in Python

Immutable data type: A data type in which the values can never be altered or updated

Implicit conversion: The process Python uses to automatically convert one data type to another without user involvement

Integer: A data type used to represent whole numbers without fractions

J

Jupyter Notebook: An open-source web application for creating and sharing documents containing live code, mathematical formulas, visualizations, and text

K

Keyword: A special word in a programming language that is reserved for a specific purpose and that can only be used for that purpose

L

Logical operator: An operator that connects multiple statements together and performs complex comparisons

M

Markdown: A markup language that lets a user write formatted text in a coding environment or plain-text editor

Method: A function that belongs to a class and typically performs an action or operation

Modularity: The ability to write code in separate components that work together and that can be reused for other programs

Modulo: An operator that returns the remainder when one number is divided by another

N

Naming conventions: Consistent guidelines that describe the content, creation date, and version of a file in its name

Naming restrictions: Rules built into the syntax of a programming language

O

Object: An instance of a class; a fundamental building block of Python

Object-oriented programming: A programming system that is based around objects which can contain both data and code that manipulates that data

P

Programming languages: The words and symbols used to write instructions for computers to follow

R

Refactoring: The process of restructuring code while maintaining its original functionality

return: A reserved keyword in Python that makes a function produce new results which are saved for later use

Reusability: The capability to define code once and using it many times without having to rewrite it

S

Self-documenting code: Code written in a way that is readable and makes its purpose clear

String: A sequence of characters and punctuation that contains textual information

Syntax: The structure of code words, symbols, placement, and punctuation

V

Variable: A named container which stores values in a reserved location in the computer's memory