

Functions

Conditional statements

Review: Functions and conditional statements

▶ Video: Wrap-up
1 min

📖 Reading: Glossary terms from week 2
20 min

📝 Quiz: Weekly challenge 2
9 questions

Glossary terms from week 2

Terms and definitions from Course 2, Week 2

- Algorithm:** A set of instructions for solving a problem or accomplishing a task
- 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
- Comparator:** An operator that compares two values and produces Boolean values (True/False)
- 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
- 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
- Function:** A body of reusable code for performing specific processes or tasks
- if:** A reserved keyword that sets up a condition in Python
- Logical operator:** An operator that connects multiple statements together and performs complex comparisons
- 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
- 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
- Self-documenting code:** Code written in a way that is readable and makes its purpose clear

Terms and definitions from the previous week

- A**
- 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
- 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
- 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
- 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**
- 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
- I**
- 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
- M**
- Markdown:** A markup language that lets the 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
- 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 the language itself that must be followed
- 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
- S**
- 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