Glossary: Python Basics

Welcome! This alphabetized glossary contains many of the terms you'll find within this course. This comprehensive glossary also includes additional industry-recognized terms not used in course videos. These terms are important for you to recognize when working in the industry, participating in user groups, and participating in other certificate programs.

Term	Definition
AI	AI (artificial intelligence) is the ability of a digital computer or computer-controlled robot to perform tasks commonly associated with intelligent beings.
Application development	Application development, or app development, is the process of planning, designing, creating, testing, and deploying a software application to perform various business operations.
Arithmetic Operations	Arithmetic operations are the basic calculations we make in everyday life like addition, subtraction, multiplication and division. It is also called as algebraic operations or mathematical operations.
Array of numbers	Set of numbers or objects that follow a pattern presented as an arrangement of rows and columns to explain multiplication.
Assignment operator in Python	Assignment operator is a type of Binary operator that helps in modifying the variable to its left with the use of its value to the right. The symbol used for assignment operator is "=".
Asterisk	Symbol "* " used to perform various operations in Python.
Backslash	A backslash is an escape character used in Python strings to indicate that the character immediately following it should be treated in a special way, such as being treated as escaped character or raw string.
Boolean	Denoting a system of algebraic notation used to represent logical propositions by means of the binary digits 0 (false) and 1 (true).
Colon	A colon is used to represent an indented block. It is also used to fetch data and index ranges or arrays.
Concatenate	Link (things) together in a chain or series.
Data engineering	Data engineers are responsible for turning raw data into information that an organization can understand and use. Their work involves blending, testing, and optimizing data from numerous sources.
Data science	Data Science is an interdisciplinary field that focuses on extracting knowledge from data sets which are typically huge in amount. The field encompasses analysis, preparing data for analysis, and presenting findings to inform high-level decisions in an organization.
Data type	Data type refers to the type of value a variable has and what type of mathematical, relational or logical operations can be applied without causing an error.
Double quote	Symbol " " used to represent strings in Python.
Escape sequence	An escape sequence is two or more characters that often begin with an escape character that tell the computer to perform a function or command.
Expression	An expression is a combination of operators and operands that is interpreted to produce some other value.
Float	Python float () function is used to return a floating-point number from a number or a string representation of a numeric value.
Forward slash	Symbol "/" used to perform various operation sin Python
Foundational	Denoting an underlying basis or principle; fundamental.
Immutable	Immutable Objects are of in-built datatypes like int, float, bool, string, Unicode, and tuple. In simple words, an immutable object can't be changed after it is created.
Integer	An integer is the number zero (0), a positive natural number (1, 2, 3, and so on) or a negative integer with a minus sign (−1, −2, −3, and so on.)
Manipulate	Is the process of modifying a string or creating a new string by making changes to existing strings.
Mathematical conventions	A mathematical convention is a fact, name, notation, or usage which is generally agreed upon by mathematicians.
Mathematical expressions	Expressions in math are mathematical statements that have a minimum of two terms containing numbers or variables, or both, connected by an operator in between.
Mathematical operations	The mathematical "operation" refers to calculating a value using operands and a math operator.
Negative indexing	Allows you to access elements of a sequence (such as a list, a string, or a tuple) from the end, using negative numbers as indexes.
Operands	The quantity on which an operation is to be done.
Operators in Python	Operators are used to perform operations on variables and values.
Parentheses	Parentheses is used to call an object.
Replicate	To make an exact copy of.
Sequence	A sequence is formally defined as a function whose domain is an interval of integers.
Single quote	Symbol ' ' used to represent strings in python.
Slicing in Python	Slicing is used to return a portion from defined list.
Special characters	A special character is one that is not considered a number or letter. Symbols, accent marks, and punctuation marks are considered special characters.
Stride value	Stride is the number of bytes from one row of pixels in memory to the next row of pixels in memory.
Strings	In Python, Strings are arrays of bytes representing Unicode characters.
Substring	A substring is a sequence of characters that are part of an original string.
Type casting	The process of converting one data type to another data type is called Typecasting or Type Coercion or Type Conversion.
Types in Python	Data types are the classification or categorization of data items. It represents the kind of value that tells what operations can be performed on a particular data.
Variables	Variables are containers for storing data values.