Glossary: Python Programming Fundamentals

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 |
|----------------------|---|
| Analogy | Refers to a concept or comparison outside the scope of the programming language itself, used to explain or relate one concept to another in a more understandable way. |
| Attributes | Attributes in Python refer to the characteristics or properties of an object, and they can be accessed using dot notation. |
| Branching | Branching in Python is a process of altering the flow of a program based on conditions, typically using if, elif, and else statements. |
| Comparison operators | Comparison operators in Python are used to compare values and return Boolean results (True or False), including operators like == (equal),!= (not equal), < (less than), > (greater than), <= (less than or equal to), and >= (greater than or equal to). |
| Conditions | Conditions in Python are used to make decisions in code, executing specific blocks of code based on whether a given expression evaluates to True or False. |
| Enumerate | In Python, "enumerate" is a built-in function that adds a counter to an iterable, allowing you to loop through both the elements and their corresponding indices. |
| Exception handling | Exception handling in Python is a mechanism for gracefully managing and responding to errors or exceptional conditions that may occur during program execution. |
| Explicitly | In Python, the term "explicitly" refers to performing an action or specifying something in a clear, unambiguous, and direct manner. |
| For loops | For loops in Python are used for iterating over a sequence (such as a list, tuple, or string) or other iterable objects, executing a set of statements for each item in the sequence. |
| Global variable | Global variables in Python are variables defined outside of any function or block and can be accessed and modified from any part of the code. |
| Incremented | "Incremented" in Python means to increase the value of a variable by a specified amount, typically done using the += operator or by adding a fixed value. |
| Indent | In Python, "indent" refers to the use of whitespace at the beginning of a line to signify the structure and scope of code blocks, such as loops and functions. |

| Term | Definition |
|-----------------------------|--|
| Indices | In Python, "indices" refer to the position or location of elements in a sequence, like a string, list, or tuple, starting with 0 for the first element. |
| Iterate | In Python, "iterate" means to repeatedly perform a set of operations or steps on each item in a collection, such as a list, tuple, or dictionary, typically using loops or iterators. |
| Local variables | Local variables in Python are variables defined within a specific function or block of code and are only accessible within that function or block. |
| Logic operators | Logic operators in Python are used to perform logical operations on Boolean values, including operators like and (logical AND), or (logical OR), and not (logical NOT). |
| Loops | Loops in Python are constructs for repeating a block of code, enabling the execution of the same code multiple times. |
| Parameters | Parameters in Python are placeholders in a function definition, used to accept and work with values provided to the function when it is called. |
| Programming Fundamentals | Programming fundamentals in Python involve variables, control structures, functions, data structures, input/output, and error handling for building software. |
| Range function | The range function in Python generates a sequence of numbers that can be used for iterating in a loop and is typically used as range (start, stop, step), where it creates numbers from start to stop-1 with the given step increment. |
| Scope of function | The "scope of a function" in Python refers to the region of code where a variable defined within that function is accessible or visible. |
| Sequences | Sequences in Python are ordered collections of items that can include data types like strings, lists, and tuples, allowing for indexing and iteration. |
| Syntax | In Python, "explicitly" means to state something clearly and directly, leaving no room for ambiguity or implicit interpretation. |
| While loops | While loops in Python are used to repeatedly execute a block of code as long as a specified condition is true. |