# Glossary

## Cybersecurity

Terms and definitions from Course 7

## A

**Algorithm:** A set of rules that solve a problem

**Argument (Python):** The data brought into a function when it is called

**Automation:** The use of technology to reduce human and manual effort to perform common and repetitive tasks

## B

**Boolean data:** Data that can only be one of two values: either `True` or `False`

**Bracket notation:** The indices placed in square brackets

**Built-in function:** A function that exists within Python and can be called directly

## C

**Command-line interface:** A text-based user interface that uses commands to interact with the computer

**Comment:** A note programmers make about the intention behind their code

**Conditional statement:** A statement that evaluates code to determine if it meets a specified set of conditions

## D

**Data type:** A category for a particular type of data item

**Debugger:** A software tool that helps to locate the source of an error and assess its causes

**Debugging:** The practice of identifying and fixing errors in code

**Dictionary data:** Data that consists of one or more key-value pairs

# E

**Exception:** An error that involves code that cannot be executed even though it is syntactically correct

# F

**File path:** The location of a file or directory

**Float data:** Data consisting of a number with a decimal point

**Function:** A section of code that can be reused in a program

# G

**Global variable:** A variable that is available through the entire program

# I

**Immutable:** An object that cannot be changed after it is created and assigned a value

**Indentation:** Space added at the beginning of a line of code

**Index:** A number assigned to every element in a sequence that indicates its position

**Integer data:** Data consisting of a number that does not include a decimal point

**Integrated development environment (IDE):** A software application for writing code that provides editing assistance and error correction tools

**Interpreter:** A computer program that translates Python code into runnable instructions line by line

**Iterative statement:** Code that repeatedly executes a set of instructions

# L

**Library:** A collection of modules that provide code users can access in their programs

**List concatenation:** The concept of combining two lists into one by placing the elements of the second list directly after the elements of the first list

**List data:** Data structure that consists of a collection of data in sequential form

**Local variable:** A variable assigned within a function

**Log:** A record of events that occur within an organization's systems

**Logic error:** An error that results when the logic used in code produces unintended results

**Loop variable:** A variable that is used to control the iterations of a loop

# M

**Method:** A function that belongs to a specific data type

**Module**: A Python file that contains additional functions, variables, classes, and any kind of runnable code

# N

**Notebook:** An online interface for writing, storing, and running code

# P

**Parameter (Python):** An object that is included in a function definition for use in that function

**Parsing:** The process of converting data into a more readable format

**PEP 8 style guide:** A resource that provides stylistic guidelines for programmers working in Python

**Programming:** A process that can be used to create a specific set of instructions for a computer to execute tasks

**Python Standard Library:** An extensive collection of Python code that often comes packaged with Python

# R

**Regular expression (regex):** A sequence of characters that forms a pattern

**Return statement:** A Python statement that executes inside a function and sends information back to the function call

# S

**Set data:** Data that consists of an unordered collection of unique values

**String concatenation:** The process of joining two strings together

**String data:** Data consisting of an ordered sequence of characters

**Style guide:** A manual that informs the writing, formatting, and design of documents

**Substring:** A continuous sequence of characters within a string

**Syntax:** The rules that determine what is correctly structured in a computing language

**Syntax error:** An error that involves invalid usage of a programming language

# T

**Tuple data:** Data structure that consists of a collection of data that cannot be changed

**Type error:** An error that results from using the wrong data type

# U

**User-defined function:** A function that programmers design for their specific needs

# V

**Variable:** A container that stores data