## Terms and definitions from Course 4

A

**Absolute file path:** The full file path, which starts from the root

**Application:** A program that performs a specific task

**Argument (Linux):** Specific information needed by a command

**Authentication:** The process of verifying who someone is

**Authorization:** The concept of granting access to specific resources in a system

B

**Bash:** The default shell in most Linux distributions

**Basic Input/Output System (BIOS):** A microchip that contains loading instructions for the computer and is prevalent in older systems

**Bootloader:** A software program that boots the operating system

C

**CentOS:** An open-source distribution that is closely related to Red Hat

**Central Processing Unit (CPU):** A computer’s main processor, which is used to perform general computing tasks on a computer

**Command:** An instruction telling the computer to do something

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

D

**Database**: An organized collection of information or data

**Date and time data:** Data representing a date and/or time

**Digital forensics:** The practice of collecting and analyzing data to determine what has happened after an attack

**Directory:** A file that organizes where other files are stored

**Distributions:** The different versions of Linux

E

**Exclusive operator**: An operator that does not include the value of comparison

F

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

**Filesystem Hierarchy Standard (FHS):** The component of the Linux OS that organizes data

**Filtering:** Selecting data that match a certain condition

**Foreign key:** A column in a table that is a primary key in another table

G

**Graphical user interface (GUI):** A user interface that uses icons on the screen to manage different tasks on the computer

H

**Hard drive:** A hardware component used for long-term memory

**Hardware:** The physical components of a computer

I

**Inclusive operator:** An operator that includes the value of comparison

**Internal hardware:** The components required to run the computer

K

**Kali Linux ™**: An open-source distribution of Linux that is widely used in the security industry

**Kernel:** The component of the Linux OS that manages processes and memory

L

**Legacy operating system:** An operating system that is outdated but still being used

**Linux:** An open-source operating system

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

N

**nano:** A command-line file editor that is available by default in many Linux distributions

**Numeric data:** Data consisting of numbers

O

**Operating system (OS)**: The interface between computer hardware and the user

**Operator:** A symbol or keyword that represents an operation

**Options:** Input that modifies the behavior of a command

P

**Package:** A piece of software that can be combined with other packages to form an application

**Package manager:** A tool that helps users install, manage, and remove packages or applications

**Parrot:** An open-source distribution that is commonly used for security

**Penetration test (pen test):** A simulated attack that helps identify vulnerabilities in systems, networks, websites, applications, and processes

**Peripheral devices:** Hardware components that are attached and controlled by the computer system

**Permissions:** The type of access granted for a file or directory

**Primary key:** A column where every row has a unique entry

**Principle of least privilege:** The concept of granting only the minimal access and authorization required to complete a task or function

Q

**Query:** A request for data from a database table or a combination of tables

R

**Random Access Memory (RAM):** A hardware component used for short-term memory

**Red Hat:** A subscription-based distribution of Linux built for enterprise use

**Relational database:** A structured database containing tables that are related to each other

**Relative file path:** A file path that starts from the user's current directory

**Root directory:** The highest-level directory in Linux

**Root user (or superuser):** A user with elevated privileges to modify the system

S

**Shell:** The command-line interpreter

**SQL (Structured Query Language):** A programming language used to create, interact with, and request information from a database

**Standard error:** An error message returned by the OS through the shell

**Standard input:** Information received by the OS via the command line

**Standard output:** Information returned by the OS through the shell

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

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

U

**Ubuntu:** An open-source, user-friendly distribution that is widely used in security and other industries

**Unified Extensible Firmware Interface (UEFI):** A microchip that contains loading instructions for the computer and replaces BIOS on more modern systems

**User:** The person interacting with a computer

**User interface:** A program that allows the user to control the functions of the operating system

W

**Wildcard**: A special character that can be substituted with any other character