<u>**IMPORTANT DEFINITIONS**</u>

Here are some important definitions in computer science and general computer terminology:

Hardware

- **CPU (Central Processing Unit)**: The main part of a computer responsible for performing calculations and executing instructions.
- **RAM (Random Access Memory)**: Temporary storage used by the CPU to store data that is being used or processed.
- **Hard Drive/SSD (Solid State Drive)**: Permanent storage used to store the operating system, software, and files.
- **GPU (Graphics Processing Unit)**: Specialized processor designed to accelerate graphics rendering.
- **Motherboard**: The main circuit board that connects all the components of a computer.
- **Peripheral Devices**: External devices connected to the computer, such as a mouse, keyboard, printer, and monitor.

Software

- **Operating System (OS)**: The software that manages computer hardware and software resources, providing services for computer programs (e.g., Windows, macOS, Linux).
- **Application Software**: Programs designed to perform specific tasks for the user, such as word processing, web browsing, and gaming.
- **Driver**: Software that allows the operating system to communicate with hardware devices.

Networking

- **IP Address (Internet Protocol Address)**: A unique identifier assigned to each device connected to a network.
- **DNS (Domain Name System)**: A system that translates domain names (e.g., www.example.com) into IP addresses.
- **Router**: A device that forwards data packets between computer networks, often used to connect local networks to the internet.
- **Firewall**: A security system that monitors and controls incoming and outgoing network traffic based on predetermined security rules.

Data

- **Database**: A structured set of data held in a computer, often managed by a database management system (DBMS).
- **Algorithm**: A step-by-step procedure or formula for solving a problem.
- **Encryption**: The process of converting information into a secure format that can only be read by someone with the correct decryption key.

Programming

- **Programming Language**: A formal language used to write computer programs (e.g., Python, Java, C++).
- **Compiler**: A program that translates code written in a high-level programming language into machine code that the computer's CPU can execute.
- **API (Application Programming Interface)**: A set of tools and protocols for building software applications, allowing different programs to communicate with each other.

Security

- **Malware**: Malicious software designed to harm, exploit, or otherwise compromise a computer system.
- **Phishing**: A type of cyber attack that attempts to obtain sensitive information by disguising as a trustworthy entity.
- **Antivirus Software**: Programs designed to detect and remove malware from a computer system.

Web

- **HTML (Hypertext Markup Language)**: The standard language for creating web pages and web applications.
- **CSS (Cascading Style Sheets)**: A style sheet language used for describing the presentation of a document written in HTML.
- **JavaScript**: A programming language commonly used to create interactive effects within web browsers.
- **URL (Uniform Resource Locator)**: The address used to access resources on the internet.

Cloud Computing

- **Cloud Storage**: A service that allows data to be stored on remote servers accessed via the internet.
- **SaaS (Software as a Service)**: A software distribution model in which applications are hosted by a service provider and made available to customers over the internet.
- **Virtualization**: The process of creating a virtual version of something, such as a server or storage device.

General Terms

- **Bit**: The smallest unit of data in a computer, represented as a 0 or 1.
- **Byte**: A unit of data that is eight bits long.
- **Cache**: A smaller, faster memory location that stores copies of frequently accessed data to speed up access.
- **Bandwidth**: The maximum rate of data transfer across a network or internet connection.