

VOCABULARY FOR INTRODUCTION TO PROGRAMMING

Algorithm:

A set of guidelines to be followed to solve a problem or accomplish a task.

API (Application Programming Interface):

A collection of protocols, routines, and tools for constructing software and applications.

Argument:

A value provided to a function or method.

Array:

A grouping of elements, usually of the same data type, stored in contiguous memory locations.

Boolean:

A data type representing true or false values.

Browser:

Software application allowing users to access and navigate the internet.

Browser cache:

Temporary storage holding frequently accessed web pages and data for faster retrieval.

Bug:

A programming error causing unexpected glitches or problems for a program's end user.

Camel Case:

The practice of capitalizing the first letter of each compound word in a programming variable to improve readability.

Class:

A blueprint for generating objects that define their properties and methods.

Code:

The string of commands or directions used by different programming languages to create, edit, or manage computer programs or applications.

Compiler:

A program that translates source code into machine code.

Compiling:

The process of taking code written in a high-level language by human developers and translating it into machine-readable code.

Conditional:

A statement that executes different actions based on whether a condition is true or false.

Conditional statements:

Another fundamental piece of programming instructions setting the terms for when a program moves forward, often expressed in an "If, then" format.

Constructor:

A method initializing an object's properties upon creation.

Cookies:

Small data files stored on a user's computer by a website, used for tracking user behavior and preferences.

CPU (Central Processing Unit):

The central component of a computer responsible for executing instructions and performing calculations.

CSS (Cascading Style Sheets): A style sheet language defining the look and formatting of a web page.

Cybersecurity: The practice of protecting computer systems and networks from unauthorized access, theft, and damage.

Data type: A classification of data based on the type of values it represents.

Debugging: The process of identifying and correcting errors in code.

Declaration: The process of announcing a variable and its type before it is used.

Download:

The process of transferring a file or data from a remote server to a local device.

E-commerce:

The buying and selling of goods and services over the internet.

Email (Electronic Mail):

A system for sending and receiving messages over the internet.

Encryption:

The process of converting information into code to protect it from unauthorized access.

Exception:

An error disrupting the normal program flow during execution.

Expression:

A combination of values, variables, and operators that can be evaluated.

File:

A collection of data stored under a specific name on a computer.

Firewall:

A security feature blocking unauthorized access to a computer or network.

FTP (File Transfer Protocol):

Standard network protocol for transferring files between computers on the internet.

Function:

A set of instructions performing a specific task, callable from other parts of the program.

Hard drive:

A storage device for saving and retrieving data, including files, documents, photos, and videos.

HTML (Hypertext Markup Language):

The coding language for creating web pages.

HTTPS (Hypertext Transfer Protocol Secure):

A secure version of HTTP using encryption to protect transmitted data.

Inheritance:

The capability of a class to inherit properties and methods from another class.

Input/Output Devices (I/O Devices):

Anything people use to input information to the computer or to take information out (output), e.g., a keyboard and mouse.

Integrated Development Environment (IDE):

A software tool where developers can write code and run their programs.

Interface:

A set of methods and properties defining how a class can be used by others.

Internet:

A global network connecting computers and devices through standardized communication protocols.

IP (Internet Protocol) Address:

A numerical label assigned to each device connected to a computer network.

Java:

A high-level, object-oriented programming language.

JavaScript:

A scripting language for creating interactive web pages and applications.

LAN (Local Area Network):

Network connecting computers and devices within a small geographic area.

Latency:

The measure of time between entering an input and the returned output.

Loop:

A structure repeating a code block until a specific condition is met.

Malware:

Software designed to harm or exploit a computer or network.

Method:

A function associated with an object or class.

Motherboard:

The primary circuit board connects all computer hardware components.

Object:

An instance of a class with its own set of properties and methods.

Operating system:

Software managing basic computer functions like file management, application running, and hardware communication.

Operator:

A symbol performing a specific operation on one or more values.

Password:

A sequence of characters providing access to a computer system or application.

Phishing:

An online scam attempting to trick users into revealing sensitive information.

Polymorphism:

The ability of an object to take on different forms or behaviors depending on the context.

Pop-up:

A window appearing on top of a web page, often containing an advertisement or message.

RAM (Random Access Memory):

Temporary storage enables quick data access by the CPU.

Recursion:

A function that calls itself repeatedly until a specific condition is met.

ROM (Read-Only Memory):

Memory that can only be read from and is not electronically modifiable after being manufactured.

Router:

A device connecting multiple computer networks and directing data traffic between them.

Search Engine:

A program for searching the internet based on user queries.

Secondary storage:

Long-term data storage options found in a device, including hard disk drives (HDD) and solid-state drives (SSD).

Server:

A computer or system managing network resources and providing services to other computers (clients).

Social Media:

Online platforms allow users to create, share, and interact with content and others.

Software:

Programs and applications that run on a computer.

Spyware:

Software collecting information about a user's activity without their knowledge.

SQL (Structured Query Language):

A programming language used for managing and manipulating relational databases.

Statement:

A line of code performing an action or setting a value.

Structured data:

Data or information that's been organized and "cleaned" to make it easier to search, manipulate, and interface well with software applications.

Syntax:

The rules and structure of a programming language.

URL (Uniform Resource Locator):

A web address specifying the location of a webpage.

USB (Universal Serial Bus):

Standard interface for connecting external devices to a computer.

Variable:

A named value assignable and changeable within a program.

Virus:

Malicious software causing damage or disruption to computer systems and networks.

Web Browser:

A software application for accessing and displaying content on the World Wide Web.

Website:

A collection of web pages hosted on a server, accessible through the internet.

Wi-Fi:

Wireless networking technology enables internet connection without cables.

World Wide Web:

An interconnected system of web pages and websites accessed via the internet.