

THIRD LEVEL GLOSSARY

Abstraction	Simplifying things; identifying what is important without worrying too much about the detail. Abstraction allows us to manage complexity
Binary (code)	A coding system using the binary digits 0 and 1 to represent a letter, digit, or other character in a computer or other electronic device
Bit	A single unit of information used in computing and digital communications – 8 bits in 1 byte. A binary bit is either a 1 or a 0
Bluetooth	Allows the exchange of data over short distances from fixed and mobile devices
Boolean	Boolean logic is a form of algebra in which all values are reduced to either TRUE or FALSE
Byte	A byte is 8 bits
Conditional Loop	Condition-controlled loops are also called WHILE loops or WHILE-END WHILE statements. A WHILE loop code is repeated based on a certain condition. The condition are either 'true' or 'false'. The WHILE loop executes while a condition is true
Compression	Reducing file size to save space in memory
CPU (Central Processing Unit)	Often known as the brain of a computer that interprets program commands and executes its instructions
Debugging	Errors in algorithms and code are called 'bugs', and the process of finding and fixing these is called debugging
Decomposing/Decomposition	Breaking problems or systems down into smaller, more manageable parts making it easier to manage complexity
Encryption	Putting data into code
Field	A set of items in a database of all the same data type
Fixed (count controlled) Loop	A loop that is set to run a set number of times
Forever Loop (Infinite)	A piece of code that will run continuously until the program ends as it does not have a functional exit



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Glitch	A sudden, usually temporary malfunction or fault of equipment or computer program
HTML	Hypertext Markup Language (the coding used for websites)
Input	Data transferred from the outside world into a computer system via some kind of input device such as a keyboard, scanner or storage device
Integer	Programming data type used to store whole numbers
Internal Commentary	Non-code lines that describe processes within the code
IP Address	A computer's unique address e.g.192.168.0.127 - This address is used by computers to communicate across a network
LAN	A Local Area Network (LAN) is a network where the workstations are 'close' together. It is usually thought of as computers in the same room, or building or even in a number of buildings, which are next to each other
Loop	A block of code repeated automatically under the program's control
Memory	There are two main types of memory : Random Access Memory (RAM) - this is where the computer stores programs and files it is using at the moment – all data stored in RAM is lost when the device switches off. Read Only Memory (ROM) holds part of a program that starts running when a computer is switched on
Mesh	A local network topology nodes (i.e. switches and routers) connect directly and non-hierarchically to as many other nodes as possible to efficiently route data to pc's on the network
Nested Loop	A loop within a loop
Network	Two or more computers connected for the purpose of storing, sharing, and managing data i.e. the internet
Output	The data actively transmitted from within the computer to an external device such as a monitor, storage device or printer



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Packet	A block of data transmitted across a network
Parallel Process	Multiple processes all running at the same time (simultaneously)
Peripheral	Any input, output or storage device connected externally or internally to the computer's CPU, such as a monitor, keyboard, mouse, printer, hard disk, graphics tablet, scanner, joystick etc.
Pixel	The basic unit of a digital image, representing a single colour or level of brightness
Predict	To make known in advance
Process	An instance of a computer program that is being run
Processor	The main part of a computer system that performs all operations
Router	Network hardware which forwards packets of data onwards to the most appropriate hardware to which it is connected allowing users to connect to a network
Selection	A programming construct in which one section of code or another is executed depending on whether a particular condition is met
Sequence	Arrange things in a particular order (computer programs are built up of sequences of instructions)
Server	A computer or computer program which manages access to a centralised resource or service in a network
Simultaneous	At the same time
Specification	A definition (layout, blueprint, design) of hardware or software
Sprite	An icon in a computer game which can be manoeuvred around the screen by means of a joystick, etc.
String	Programming data type used to store a sequence of text characters
Structure	Anything composed of organized or interrelated elements i.e. hierarchical file structure.



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Switch	PCs on a network are connected to a 'switch'. A switch manages lots of connections with computers at the same time and lets them all communicate with the server
Topology	The arrangement of a network, including its nodes and connecting lines
Variable	A way in which computer programs can store, retrieve or change data, such as a score, the time left, or the user's name
Wi-Fi	A local area network (LAN) that uses high frequency radio signals to transmit and receive data over distances of a few hundred feet

