

<div>T1</div> <div>central processing unit</div>	<div>T1</div> <div>control unit</div>	<div>T1</div> <div>arithmetic logic unit</div>
<div>T1</div> <div>register</div>	<div>T1</div> <div>bus</div>	<div>T1</div> <div>clock speed</div>
<div>T1</div> <div>core</div>	<div>T1</div> <div>graphics processing unit</div>	<div>T1</div> <div>RAM</div>

<p>T1</p> <p>The processor component that performs arithmetic and logical operations.</p>	<p>T1</p> <p>The part of a processor that coordinates instruction execution and directs other components using control signals.</p>	<p>T1</p> <p>The processor that fetches, decodes and executes program instructions.</p>
<p>T1</p> <p>The number of cycles of a processor's clock per second; it alone does not determine how quickly every program runs.</p>	<p>T1</p> <p>A shared set of wires that carries data, addresses or control signals between parts of a computer.</p>	<p>T1</p> <p>A small, fast storage location within a processor used to hold data, addresses or instructions temporarily.</p>
<p>T1</p> <p>Random-access memory used for working data and instructions, usually losing its contents when power is removed.</p>	<p>T1</p> <p>A processor designed to perform many similar operations in parallel, such as calculations for image pixels.</p>	<p>T1</p> <p>An instruction-processing unit within a processor; multiple cores can work on tasks concurrently.</p>

<div>T1</div> <div>ROM</div>	<div>T1</div> <div>cache</div>	<div>T1</div> <div>secondary storage</div>
<div>T1</div> <div>compression</div>	<div>T1</div> <div>lossless</div>	<div>T1</div> <div>lossy</div>
<div>T1</div> <div>cloud computing</div>	<div>T1</div> <div>binary</div>	<div>T1</div> <div>bit</div>

<p>T1</p> <p>Non-volatile storage used to retain data and programs beyond immediate processing.</p>	<p>T1</p> <p>Fast storage holding copies of frequently needed data or instructions to reduce access time.</p>	<p>T1</p> <p>Non-volatile memory whose stored contents are normally read rather than changed during ordinary use.</p>
<p>T1</p> <p>Describing compression that discards some original information so it cannot be perfectly recovered.</p>	<p>T1</p> <p>Describing compression from which the original data can be recovered exactly.</p>	<p>T1</p> <p>Reducing the amount of data needed to represent a file, using a lossless or lossy method.</p>
<p>T1</p> <p>A binary digit, taking the value zero or one.</p>	<p>T1</p> <p>A number system using base two, with the digits zero and one.</p>	<p>T1</p> <p>Providing computing resources such as processing or storage through a network, usually the internet.</p>

<div>T1</div> <div>byte</div>	<div>T1</div> <div>hexadecimal</div>	<div>T1</div> <div>two's complement</div>
<div>T1</div> <div>Unicode</div>	<div>T1</div> <div>pixel</div>	<div>T1</div> <div>colour depth</div>
<div>T1</div> <div>sample rate</div>	<div>T1</div> <div>logic gate</div>	<div>T1</div> <div>truth table</div>

<p>T1</p> <p>A signed binary integer representation in which a negative value is formed by inverting the positive value's bits and adding one within a fixed bit width.</p>	<p>T1</p> <p>A base-sixteen number system using digits zero to nine and letters A to F.</p>	<p>T1</p> <p>A group of eight bits, commonly used as a unit of data storage.</p>
<p>T1</p> <p>The number of bits per pixel.</p>	<p>T1</p> <p>An individual picture element in a digital image or display.</p>	<p>T1</p> <p>A standard assigning code points to characters and symbols, represented using encodings such as UTF-8 or UTF-16.</p>
<p>T1</p> <p>A table listing the output of a logical expression or circuit for every combination of inputs.</p>	<p>T1</p> <p>A device or operation that applies a Boolean rule to one or more inputs to produce an output.</p>	<p>T1</p> <p>The number of measurements of a sound signal taken per second during digital sampling.</p>

<div>T1</div> <div>operating system</div>	<div>T1</div> <div>process management</div>	<div>T1</div> <div>memory management</div>
<div>T1</div> <div>driver</div>	<div>T1</div> <div>scheduler</div>	<div>T1</div> <div>time slice</div>
<div>T1</div> <div>polling</div>	<div>T1</div> <div>interrupt</div>	<div>T1</div> <div>machine code</div>

<p>T1</p> <p>Operating-system functions that allocate, track and reclaim memory and manage address mappings where supported.</p>	<p>T1</p> <p>Operating-system activities that create, coordinate, schedule and terminate processes and manage their resources.</p>	<p>T1</p> <p>System software that manages hardware resources and provides services for applications.</p>
<p>T1</p> <p>A short interval of processor time allocated to a task before another task may run.</p>	<p>T1</p> <p>The operating-system component that chooses which ready task receives processor time.</p>	<p>T1</p> <p>Software that lets an operating system communicate with and control a particular device.</p>
<p>T1</p> <p>Instructions encoded in binary form that a processor can execute directly.</p>	<p>T1</p> <p>A signal or event that requests processor attention, causing execution to transfer to a handler when accepted.</p>	<p>T1</p> <p>Having software check a device's status again and again to see whether it needs attention.</p>

<div>T1</div> <div>compiler</div>	<div>T1</div> <div>interpreter</div>	<div>T1</div> <div>bytecode</div>
<div>T2</div> <div>network</div>	<div>T2</div> <div>LAN</div>	<div>T2</div> <div>WAN</div>
<div>T2</div> <div>VPN</div>	<div>T2</div> <div>MAC address</div>	<div>T2</div> <div>switch</div>

<p>T1</p> <p>Intermediate instructions intended for execution by a virtual machine or interpreter rather than directly by a physical processor.</p>	<p>T1</p> <p>Software that executes a program by processing its instructions at runtime rather than requiring a separate complete native executable first.</p>	<p>T1</p> <p>Software that translates a program from a source language into another form, commonly machine or intermediate code.</p>
<p>T2</p> <p>A wide area network linking devices or local networks over a large geographical area.</p>	<p>T2</p> <p>A local area network connecting devices within a limited area, such as a school site.</p>	<p>T2</p> <p>A set of connected devices or nodes that can exchange information.</p>
<p>T2</p> <p>A network device that forwards frames to the appropriate ports using hardware addresses.</p>	<p>T2</p> <p>A link-layer address associated with a network interface; it may be configured or randomised rather than permanently fixed.</p>	<p>T2</p> <p>A virtual private network providing a protected logical connection across another network, commonly using encryption.</p>

<div>T2</div> <div>router</div>	<div>T2</div> <div>firewall</div>	<div>T2</div> <div>client–server</div>
<div>T2</div> <div>peer-to-peer</div>	<div>T2</div> <div>topology</div>	<div>T2</div> <div>protocol</div>
<div>T2</div> <div>layer</div>	<div>T2</div> <div>encapsulation</div>	<div>T2</div> <div>DHCP</div>

<p>T2</p> <p>A network arrangement in which clients request services and servers provide them.</p>	<p>T2</p> <p>A security system that filters network traffic according to rules.</p>	<p>T2</p> <p>A network device that forwards packets between networks using destination addresses and routing information.</p>
<p>T2</p> <p>An agreed set of rules governing communication between devices or systems.</p>	<p>T2</p> <p>The layout of the connections.</p>	<p>T2</p> <p>A network arrangement in which participating computers can provide services directly to one another rather than relying only on a central server.</p>
<p>T2</p> <p>A protocol that lets a device obtain network configuration, such as an IP address, from a server for a specified lease period.</p>	<p>T2</p> <p>In networking, wrapping data with protocol information; in OOP, grouping data with methods and controlling access through an interface.</p>	<p>T2</p> <p>A level of a network architecture responsible for particular communication functions and using services below it.</p>

<div>T2</div> <div>DNS</div>	<div>T2</div> <div>IP address</div>	<div>T2</div> <div>packet switching</div>
<div>T2</div> <div>packet</div>	<div>T2</div> <div>bandwidth</div>	<div>T2</div> <div>latency</div>
<div>T2</div> <div>throughput</div>	<div>T2</div> <div>authentication</div>	<div>T2</div> <div>authorization</div>

<p>T2</p> <p>Sending data as separate packets that share network links and may travel along different routes.</p>	<p>T2</p> <p>A logical address used to identify a network interface and route packets to its network location.</p>	<p>T2</p> <p>Turns a domain name into an IP address.</p>
<p>T2</p> <p>The time delay between initiating an action or transmission and receiving its response or effect.</p>	<p>T2</p> <p>The data-carrying capacity of a network link, commonly measured in bits per second in this course.</p>	<p>T2</p> <p>Units of data sent through a network, containing payload and control information such as addressing details.</p>
<p>T2</p> <p>Permission for an identified user or system to access a resource or perform an action.</p>	<p>T2</p> <p>Checking that a claimed identity is valid.</p>	<p>T2</p> <p>The amount of data actually delivered or work completed per unit time.</p>

<div>T2</div> <div>encryption</div>	<div>T2</div> <div>symmetric encryption</div>	<div>T2</div> <div>asymmetric encryption</div>
<div>T2</div> <div>digital certificate</div>	<div>T3</div> <div>database</div>	<div>T3</div> <div>database management system</div>
<div>T3</div> <div>data redundancy</div>	<div>T3</div> <div>inconsistency</div>	<div>T3</div> <div>relational database</div>

<p>T2</p> <p>Encryption using a pair of related keys, one public and one private, for complementary operations.</p>	<p>T2</p> <p>Encryption in which the same secret key is used to encrypt and decrypt data.</p>	<p>T2</p> <p>Transforming information using an algorithm and key so that unauthorised readers cannot readily understand it.</p>
<p>T3</p> <p>Software used to store, query, update, secure and manage a database.</p>	<p>T3</p> <p>An organised collection of data that can be accessed and managed.</p>	<p>T2</p> <p>A digitally signed document binding an identity or domain to a public key, checked through a trusted certificate chain.</p>
<p>T3</p> <p>A database that organises data into tables connected through matching key values.</p>	<p>T3</p> <p>A disagreement between stored values that are meant to represent the same fact.</p>	<p>T3</p> <p>Unnecessary repetition of the same facts in stored data, which can cause update problems.</p>

<div>T3</div> <div>table</div>	<div>T3</div> <div>record</div>	<div>T3</div> <div>field</div>
<div>T3</div> <div>primary key</div>	<div>T3</div> <div>foreign key</div>	<div>T3</div> <div>composite key</div>
<div>T3</div> <div>referential integrity</div>	<div>T3</div> <div>entity</div>	<div>T3</div> <div>entity-relationship diagram</div>

<p>T3</p> <p>A named item of data within a database record.</p>	<p>T3</p> <p>A stored collection of information about an item, person or event.</p>	<p>T3</p> <p>A collection of data organised into rows and columns.</p>
<p>T3</p> <p>A key consisting of two or more fields whose combined values identify a record.</p>	<p>T3</p> <p>A field or group of fields that refers to a candidate key in another or the same database table.</p>	<p>T3</p> <p>A field or combination of fields that uniquely identifies each record in a database table.</p>
<p>T3</p> <p>A diagram showing entities, their attributes and the relationships between them in a data model.</p>	<p>T3</p> <p>A thing we store data about: a student, a book.</p>	<p>T3</p> <p>A rule requiring a non-null foreign-key value to match a referenced key; permitted nulls represent no specified reference.</p>

<div>T3</div> <div>link table</div>	<div>T3</div> <div>normalisation</div>	<div>T3</div> <div>first normal form</div>
<div>T3</div> <div>second normal form</div>	<div>T3</div> <div>third normal form</div>	<div>T3</div> <div>SQL</div>
<div>T3</div> <div>join</div>	<div>T3</div> <div>aggregate function</div>	<div>T3</div> <div>transaction</div>

T3	T3	T3
A relational table form with atomic field values and no repeating groups.	Organising relational database tables to reduce unnecessary duplication and avoid update, insertion and deletion anomalies.	A database table that represents associations between records in other tables, commonly resolving a many-to-many relationship.
T3	T3	T3
Structured Query Language, used to define, query and manipulate data in relational databases.	A form in which each nontrivial dependency has a superkey determinant or a prime dependent attribute, avoiding the usual non-key transitive dependencies.	First normal form with every non-prime attribute fully dependent on every candidate key, avoiding partial key dependencies.
T3	T3	T3
A group of operations that must all succeed or all fail, such as moving money: take it from one account and add it to another.	Database functions that combine values from multiple rows to produce a summary result, such as a count or average.	An SQL operation that combines rows from tables according to a specified relationship or condition.

<div>T3</div> <div>data warehouse</div>	<div>T4</div> <div>machine learning</div>	<div>T4</div> <div>artificial intelligence</div>
<div>T4</div> <div>deep learning</div>	<div>T4</div> <div>supervised learning</div>	<div>T4</div> <div>unsupervised learning</div>
<div>T4</div> <div>reinforcement learning</div>	<div>T4</div> <div>classification</div>	<div>T4</div> <div>regression</div>

<p>T4</p> <p>Computer methods designed to perform tasks involving abilities such as learning, reasoning, perception or language processing.</p>	<p>T4</p> <p>Methods that use data to fit models for making predictions or identifying patterns.</p>	<p>T3</p> <p>An integrated store of data from multiple sources, commonly historical, organised for analysis and reporting.</p>
<p>T4</p> <p>Learning patterns or groups from data without supplied target labels.</p>	<p>T4</p> <p>Learning a model from examples supplied with target answers or labels.</p>	<p>T4</p> <p>Machine learning using neural networks with multiple processing layers to learn representations from data.</p>
<p>T4</p> <p>A statistical method for modelling how a response variable is related to one or more explanatory variables.</p>	<p>T4</p> <p>A prediction task whose output is a category, such as spam or not spam.</p>	<p>T4</p> <p>Learning how to choose actions through interaction with an environment and feedback such as rewards.</p>

<div>T4</div> <div>training</div>	<div>T4</div> <div>test data</div>	<div>T4</div> <div>overfitting</div>
<div>T4</div> <div>accuracy</div>	<div>T4</div> <div>bias</div>	<div>T4</div> <div>data preprocessing</div>
<div>T4</div> <div>feature selection</div>	<div>T4</div> <div>feature</div>	<div>T4</div> <div>label</div>

<p>T4</p> <p>Learning training-specific detail or noise so well that performance on new data suffers.</p>	<p>T4</p> <p>Data kept separate from model fitting and selection to evaluate performance on unseen examples.</p>	<p>T4</p> <p>The process of fitting a model's adjustable parameters or rules using training data.</p>
<p>T4</p> <p>Preparing data for modelling, for example by cleaning, encoding or scaling it without leaking test information.</p>	<p>T4</p> <p>A systematic preference or prejudice that can distort judgement, decisions or the representation of information.</p>	<p>T4</p> <p>The fraction of a classifier's predictions that match the correct classes.</p>
<p>T4</p> <p>The target answer or class supplied with a supervised-learning example.</p>	<p>T4</p> <p>An input variable or measurable property used by a machine-learning model.</p>	<p>T4</p> <p>Choosing a subset of input variables to use when fitting a model.</p>

<div>T4</div> <div>data leakage</div>	<div>T4</div> <div>linear regression</div>	<div>T4</div> <div>k-nearest neighbour</div>
<div>T4</div> <div>decision tree</div>	<div>T4</div> <div>k-means clustering</div>	<div>T4</div> <div>artificial neural network</div>
<div>T4</div> <div>weight</div>	<div>T4</div> <div>confusion matrix</div>	<div>T5</div> <div>decomposition</div>

<p>T4</p> <p>A method predicting from the target values of the k closest training examples, using a chosen distance measure.</p>	<p>T4</p> <p>A method of modelling a response using a linear combination of explanatory variables and fitted coefficients.</p>	<p>T4</p> <p>The use of training or evaluation information that would be unavailable when making a real prediction, giving misleading model performance.</p>
<p>T4</p> <p>A model of connected processing units that combine inputs using adjustable weights, often arranged in layers.</p>	<p>T4</p> <p>An unsupervised method dividing data into k groups by repeatedly assigning points to centres and updating their means.</p>	<p>T4</p> <p>A model that follows feature-based tests through branches to a prediction at a leaf.</p>
<p>T5</p> <p>Breaking a computational problem into smaller, more manageable sub-problems.</p>	<p>T4</p> <p>A table comparing predicted classes with actual classes, including correct and incorrect classifications.</p>	<p>T4</p> <p>A numerical value expressing the relative importance, cost or contribution assigned to an item or connection.</p>

<div>T5</div> <div>pattern recognition</div>	<div>T5</div> <div>abstraction</div>	<div>T5</div> <div>algorithmic design</div>
<div>T5</div> <div>model</div>	<div>T5</div> <div>algorithm</div>	<div>T5</div> <div>input</div>
<div>T5</div> <div>output</div>	<div>T5</div> <div>sequence</div>	<div>T5</div> <div>selection</div>

<p>T5</p> <p>Developing precise, ordered steps that solve a computational problem.</p>	<p>T5</p> <p>Representing essential features while leaving out unnecessary detail.</p>	<p>T5</p> <p>Finding similarities or recurring structures that can help solve related problems.</p>
<p>T5</p> <p>A value, signal or resource supplied to a function, program, device or process.</p>	<p>T5</p> <p>A finite sequence of precise steps for solving a problem or carrying out a task.</p>	<p>T5</p> <p>A simplified representation of a system used to explain, analyse or predict its behaviour.</p>
<p>T5</p> <p>Choosing which branch of instructions to execute according to a condition.</p>	<p>T5</p> <p>The order in which items appear or operations are carried out.</p>	<p>T5</p> <p>A result produced by a function, calculation, device or program.</p>

<div>T5</div> <div>iteration</div>	<div>T5</div> <div>flowchart</div>	<div>T5</div> <div>trace table</div>
<div>T5</div> <div>pseudocode</div>	<div>T5</div> <div>specification</div>	<div>T5</div> <div>normal data</div>
<div>T5</div> <div>boundary data</div>	<div>T5</div> <div>invalid data</div>	<div>T6</div> <div>variable</div>

<p>T5</p> <p>A table recording variable values and outputs as an algorithm's steps are followed.</p>	<p>T5</p> <p>A diagram showing the sequence of steps and decisions in a process or algorithm.</p>	<p>T5</p> <p>Repeating a sequence of instructions or calculations.</p>
<p>T5</p> <p>Typical valid input values used to check that a program works as expected.</p>	<p>T5</p> <p>A statement of the required behaviour, inputs, outputs and constraints of a solution.</p>	<p>T5</p> <p>A language-independent description of an algorithm using structured, programming-like statements.</p>
<p>T6</p> <p>A quantity or named value that can change or take different values.</p>	<p>T5</p> <p>Input that does not meet the specification and should be rejected or handled as invalid.</p>	<p>T5</p> <p>Test values at the edges of an allowed range and, when testing validation, immediately outside it.</p>

<div>T6</div> <div>constant</div>	<div>T6</div> <div>data type</div>	<div>T6</div> <div>casting</div>
<div>T6</div> <div>integer division</div>	<div>T6</div> <div>modulo</div>	<div>T6</div> <div>string</div>
<div>T6</div> <div>immutable</div>	<div>T6</div> <div>concatenation</div>	<div>T6</div> <div>exception</div>

<p>T6</p> <p>Explicit conversion of a value from one data type to another where the conversion is supported.</p>	<p>T6</p> <p>A classification of values that determines their representation and permitted operations.</p>	<p>T6</p> <p>A named or literal value that does not change during the relevant part of a program.</p>
<p>T6</p> <p>A sequence of characters treated as a single data value.</p>	<p>T6</p> <p>An operation producing a remainder; in Python, <code>a % b</code> equals <code>a</code> minus <code>b</code> times <code>a // b</code> for nonzero <code>b</code>.</p>	<p>T6</p> <p>Division producing an integer quotient; Python's <code>//</code> floors the mathematical quotient.</p>
<p>T6</p> <p>An event raised during execution that transfers control to a handler or stops execution if unhandled.</p>	<p>T6</p> <p>Joining sequences, such as strings, end to end.</p>	<p>T6</p> <p>Unable to have its stored value changed after creation; an operation may instead produce a new object.</p>

<div>T6</div> <div>trace table</div>	<div>T6</div> <div>debugger</div>	<div>T6</div> <div>static data structure</div>
<div>T6</div> <div>dynamic data structure</div>	<div>T6</div> <div>array</div>	<div>T6</div> <div>index</div>
<div>T6</div> <div>two-dimensional array</div>	<div>T6</div> <div>abstract data type</div>	<div>T6</div> <div>LIFO</div>

<p>T6</p> <p>A data structure with an allocated size fixed during the relevant execution period.</p>	<p>T6</p> <p>A tool for examining a running program, using features such as breakpoints, stepping and variable inspection.</p>	<p>T6</p> <p>A table recording variable values and outputs as an algorithm's steps are followed.</p>
<p>T6</p> <p>A position marker or lookup structure used to locate data within a collection or database.</p>	<p>T6</p> <p>An indexed collection of elements arranged in one or more dimensions.</p>	<p>T6</p> <p>A data structure whose size can change while a program runs.</p>
<p>T6</p> <p>An ordering rule in which the most recently added item is removed first.</p>	<p>T6</p> <p>A specification of stored values and permitted operations that does not depend on a particular implementation.</p>	<p>T6</p> <p>A table: a list of rows, where each row is a list.</p>

<div>T6</div> <div>FIFO</div>	<div>T6</div> <div>underflow</div>	<div>T6</div> <div>overflow</div>
<div>T6</div> <div>sequence</div>	<div>T6</div> <div>selection</div>	<div>T6</div> <div>iteration</div>
<div>T6</div> <div>infinite loop</div>	<div>T6</div> <div>function</div>	<div>T6</div> <div>parameter</div>

<p>T6</p> <p>An attempt to add an item beyond a bounded data structure's capacity in this context.</p>	<p>T6</p> <p>An attempt to remove an item from an empty stack or queue in this data-structure context.</p>	<p>T6</p> <p>An ordering rule in which the earliest added item is removed first.</p>
<p>T6</p> <p>Repeating a sequence of instructions or calculations.</p>	<p>T6</p> <p>Choosing which branch of instructions to execute according to a condition.</p>	<p>T6</p> <p>The order in which items appear or operations are carried out.</p>
<p>T6</p> <p>A named input in a function definition that receives an argument when the function is called.</p>	<p>T6</p> <p>A named callable program unit that performs a task and may receive arguments and return a value.</p>	<p>T6</p> <p>A loop that continues indefinitely because its stopping condition is never reached or no stopping condition is provided.</p>

<div>T6</div> <div>return</div>	<div>T6</div> <div>modularity</div>	<div>T6</div> <div>local variable</div>
<div>T6</div> <div>global variable</div>	<div>T6</div> <div>boundary case</div>	<div>T6</div> <div>Big O notation</div>
<div>T6</div> <div>linear search</div>	<div>T6</div> <div>binary search</div>	<div>T6</div> <div>bubble sort</div>

<p>T6</p> <p>A variable whose name is accessible only within a particular function, block or other limited scope.</p>	<p>T6</p> <p>Organising a system as separate components with defined responsibilities and interfaces.</p>	<p>T6</p> <p>To finish a function call and pass control, and optionally a result, back to its caller.</p>
<p>T6</p> <p>Notation giving an asymptotic upper bound on how a chosen cost grows with input size; it is not restricted to worst-case analysis.</p>	<p>T6</p> <p>A case at an edge of the input range or behaviour defined by a specification.</p>	<p>T6</p> <p>A variable declared outside a routine's local scope and accessible wherever the language's program or module scope rules permit.</p>
<p>T6</p> <p>A sorting algorithm that repeatedly compares adjacent items and swaps those in the wrong order until the sequence is ordered.</p>	<p>T6</p> <p>A search of ordered data that repeatedly compares with the middle item and discards half of the remaining search range.</p>	<p>T6</p> <p>Checking items in sequence until the required item is found or the list ends.</p>

<div>T6</div> <div>selection sort</div>	<div>T6</div> <div>file</div>	<div>T6</div> <div>mode</div>
<div>T6</div> <div>recursive function</div>	<div>T6</div> <div>base case</div>	<div>T6</div> <div>recursive case</div>
<div>T6</div> <div>call stack</div>	<div>T6</div> <div>stack overflow</div>	<div>T6</div> <div>quicksort</div>

<p>T6</p> <p>A setting that determines how a file is opened or used, such as reading, writing or appending.</p>	<p>T6</p> <p>A named collection of data stored and managed as a unit.</p>	<p>T6</p> <p>A sorting algorithm that repeatedly selects the smallest remaining item and places it next in the sorted portion.</p>
<p>T6</p> <p>The part of a recursive definition or algorithm that reduces a problem by invoking the same process on a smaller or simpler case.</p>	<p>T6</p> <p>A recursion case answered without making a further recursive call.</p>	<p>T6</p> <p>A function that invokes itself directly or indirectly; terminating calls must progress towards a base case.</p>
<p>T6</p> <p>A sorting algorithm that partitions values around a pivot and recursively sorts the resulting smaller parts.</p>	<p>T6</p> <p>A condition in which a program needs more call-stack space than is available, often because of excessive recursion.</p>	<p>T6</p> <p>A stack that records active function calls and their return information.</p>

<div>T7</div> <div>class</div>	<div>T7</div> <div>attribute</div>	<div>T7</div> <div>method</div>
<div>T7</div> <div>object</div>	<div>T7</div> <div>instance</div>	<div>T7</div> <div>instantiation</div>
<div>T7</div> <div>state</div>	<div>T7</div> <div>behaviour</div>	<div>T7</div> <div>constructor</div>

<p>T7</p> <p>A defined way of performing a task or investigation; in programming, a function associated with a class or object.</p>	<p>T7</p> <p>A named property or characteristic associated with an object, element or record.</p>	<p>T7</p> <p>A blueprint: it defines the attributes (the data each object holds) and the methods (what each object can do).</p>
<p>T7</p> <p>Creating an object as an instance of a class.</p>	<p>T7</p> <p>A particular occurrence or example; in object-oriented programming, an object created from a class.</p>	<p>T7</p> <p>An entity in a program with associated state and behaviour, often an instance of a class.</p>
<p>T7</p> <p>A special operation used to initialise a newly created object.</p>	<p>T7</p> <p>The actions or responses provided by an object's methods.</p>	<p>T7</p> <p>The current values of an object's attributes.</p>

<div>T7</div> <div>reference</div>	<div>T7</div> <div>instance attribute</div>	<div>T7</div> <div>static</div>
<div>T7</div> <div>encapsulation</div>	<div>T7</div> <div>private</div>	<div>T7</div> <div>public</div>
<div>T7</div> <div>accessor</div>	<div>T7</div> <div>mutator</div>	<div>T7</div> <div>inheritance</div>

T7	T7	T7
Associated with a class rather than a particular instance in this object-oriented context.	An attribute whose value belongs to an individual object rather than being shared as a class attribute.	A value or name association that identifies an object, allowing more than one name to refer to the same object.
T7	T7	T7
Accessible from other code through a class's public interface, subject to the language's access rules.	Restricted from ordinary external access in languages that enforce it; a leading Python underscore is only a non-public convention.	In networking, wrapping data with protocol information; in OOP, grouping data with methods and controlling access through an interface.
T7	T7	T7
A class relationship in which a subclass derives attributes or behaviour from a superclass and may extend or override them.	A method that changes an object's state, often checking a supplied value first.	A method that reads and returns an attribute's value without changing the object's state.

<div>T7</div> <div>subclass</div>	<div>T7</div> <div>superclass</div>	<div>T7</div> <div>polymorphism</div>
<div>T7</div> <div>override</div>	<div>T7</div> <div>overloading</div>	<div>T7</div> <div>abstract class</div>
<div>T7</div> <div>abstract method</div>	<div>T7</div> <div>composition</div>	<div>T7</div> <div>aggregation</div>

<p>T7</p> <p>Using a common interface with different object types, each providing its own behaviour.</p>	<p>T7</p> <p>A class from which another class inherits attributes or behaviour.</p>	<p>T7</p> <p>A class that inherits attributes or behaviour from another class and may extend or override them.</p>
<p>T7</p> <p>A class intended to provide a shared design and not be instantiated directly when abstraction is enforced.</p>	<p>T7</p> <p>Declaring methods or constructors with the same name but different parameter lists, so the applicable version is selected from the call.</p>	<p>T7</p> <p>To provide a subclass implementation that replaces an inherited method's behaviour for that subclass.</p>
<p>T7</p> <p>An object relationship in which a whole contains independently existing component objects.</p>	<p>T7</p> <p>A whole-part object relationship in which a part is owned by the whole and its lifetime is tied to that whole.</p>	<p>T7</p> <p>A method marked as requiring implementation before a subclass can be concrete; some languages allow an abstract method to include a body.</p>

<div>T7</div> <div>design pattern</div>	<div>T8</div> <div>abstract data type</div>	<div>T8</div> <div>implemented</div>
<div>T8</div> <div>linked list</div>	<div>T8</div> <div>node</div>	<div>T8</div> <div>pointer</div>
<div>T8</div> <div>head</div>	<div>T8</div> <div>traverse</div>	<div>T8</div> <div>singly linked</div>

<p>T8</p> <p>Realised in working code using a chosen representation and set of operations.</p>	<p>T8</p> <p>A specification of stored values and permitted operations that does not depend on a particular implementation.</p>	<p>T7</p> <p>A tested solution to a common design problem.</p>
<p>T8</p> <p>A value that identifies a memory location or refers to another stored object.</p>	<p>T8</p> <p>An individual unit or point in a network, graph, tree or linked data structure.</p>	<p>T8</p> <p>A chain of nodes.</p>
<p>T8</p> <p>Describing a linked list in which each node links to its successor.</p>	<p>T8</p> <p>To visit the elements of a data structure systematically.</p>	<p>T8</p> <p>The reference to the first node of a linked list, or a null reference for an empty list.</p>

<div>T8</div> <div>doubly linked</div>	<div>T8</div> <div>circular</div>	<div>T8</div> <div>binary tree</div>
<div>T8</div> <div>children</div>	<div>T8</div> <div>root</div>	<div>T8</div> <div>leaf</div>
<div>T8</div> <div>binary search tree</div>	<div>T8</div> <div>balanced</div>	<div>T8</div> <div>pre-order</div>

<p>T8</p> <p>A tree in which each node has at most two children, conventionally left and right.</p>	<p>T8</p> <p>Describing a linked list in which the last node links back to the first.</p>	<p>T8</p> <p>Describing a linked list in which each node links to both its successor and predecessor where present.</p>
<p>T8</p> <p>A tree node with no children.</p>	<p>T8</p> <p>The top node of a tree, with no parent within that tree.</p>	<p>T8</p> <p>Nodes directly below and linked from a parent in a tree.</p>
<p>T8</p> <p>A tree traversal visiting the node, then the left subtree, then the right subtree.</p>	<p>T8</p> <p>Having tree heights kept suitably small relative to the number of nodes, supporting short search paths.</p>	<p>T8</p> <p>A binary tree organised by ordered keys so search can choose one subtree at each comparison; duplicate handling follows its defined policy.</p>

<div>T8</div> <div>in-order</div>	<div>T8</div> <div>post-order</div>	<div>T8</div> <div>set</div>
<div>T8</div> <div>union</div>	<div>T8</div> <div>intersection</div>	<div>T8</div> <div>difference</div>
<div>T8</div> <div>hash table</div>	<div>T8</div> <div>hash function</div>	<div>T8</div> <div>collision</div>

<p>T8</p> <p>A collection of distinct elements.</p>	<p>T8</p> <p>A tree traversal visiting the left subtree, then the right subtree, then the node.</p>	<p>T8</p> <p>A binary-tree traversal visiting the left subtree, then the node, then the right subtree.</p>
<p>T8</p> <p>In the first but not the second.</p>	<p>T8</p> <p>The set of elements that belong to all of the sets being compared.</p>	<p>T8</p> <p>The set of elements that belong to at least one of the sets being combined.</p>
<p>T8</p> <p>A conflict such as different keys mapping to the same hash location, or simultaneous transmissions interfering on a shared network medium.</p>	<p>T8</p> <p>A function mapping a key to a hash value used to select a table slot or bucket.</p>	<p>T8</p> <p>A data structure that uses a hash function to locate slots or buckets for keys and their associated values.</p>

<div>T8</div> <div>chaining</div>	<div>T8</div> <div>linear probing</div>	<div>T8</div> <div>load factor</div>
<div>T9</div> <div>case study</div>	<div>T9</div> <div>stakeholder</div>	<div>T9</div> <div>additional terminology</div>
<div>T9</div> <div>command term</div>	<div>T9</div> <div>anonymised</div>	<div>T10</div> <div>computational solution</div>

<p>T8</p> <p>The number of stored entries divided by the number of table slots or buckets.</p>	<p>T8</p> <p>A hash-table collision method that checks successive table positions until an available slot or the sought entry is found.</p>	<p>T8</p> <p>Resolving hash collisions by keeping multiple entries in a bucket, for example in a linked list.</p>
<p>T9</p> <p>Terms supplied with a case study that students are expected to research beyond the core course content.</p>	<p>T9</p> <p>A person or group with an interest in, or affected by, an organisation's activities.</p>	<p>T9</p> <p>A few pages about one real-world use of computing: a hospital, a farm, a transport network or a game studio, for example.</p>
<p>T10</p> <p>A designed and implemented computer-based response to a specified problem or user need.</p>	<p>T9</p> <p>Processed so individuals cannot reasonably be identified from the data, rather than merely replacing their names with reversible codes.</p>	<p>T9</p> <p>An instruction word indicating the type of response expected, such as compare or explain.</p>

<div>T10</div> <div>end user</div>	<div>T10</div> <div>success criteria</div>	<div>T10</div> <div>test plan</div>
<div>T10</div> <div>normal data</div>	<div>T10</div> <div>boundary data</div>	<div>T10</div> <div>invalid data</div>
<div>T10</div> <div>AI tool</div>	<div>T10</div> <div>academic integrity</div>	<div>T10</div> <div>acknowledged</div>

<p>T10</p> <p>A documented set of tests specifying inputs, actions and expected results for checking a solution.</p>	<p>T10</p> <p>The specific, testable things the finished product must do.</p>	<p>T10</p> <p>The person or group who will use the finished product.</p>
<p>T10</p> <p>Input that does not meet the specification and should be rejected or handled as invalid.</p>	<p>T10</p> <p>Test values at the edges of an allowed range and, when testing validation, immediately outside it.</p>	<p>T10</p> <p>Typical valid input values used to check that a program works as expected.</p>
<p>T10</p> <p>Explicitly credited to its source or contributor.</p>	<p>T10</p> <p>Honest, responsible work that credits contributions and sources and does not misrepresent authorship.</p>	<p>T10</p> <p>Software using artificial-intelligence methods to assist a task, such as generating or analysing content.</p>

T10

evaluation

T10		
evaluation		

		<div>T10</div> <div>A reasoned assessment of something's quality, effectiveness or significance against relevant criteria.</div>