

Secondary Storage

“Permanent storage of instructions and data not in use by the processor. Stores the operating system, applications and data not in use. Read/write and non-volatile.”



Optical Storage

“CD/R, CD/RW, DVD/R, DVD/RW Use: music, films and archive files. Low capacity. Slow access speed. High portability. Prone to scratches. Low cost.”



Magnetic Storage

“Hard disk drive. Use: operating system and applications. High capacity. Medium data access speed. Low portability (except for portable drives). Reliable but not durable. Medium cost.”



Solid State Storage

“Memory cards & solid state hard drive (SSD). Use: digital cameras and smartphones. Medium capacity. High portability. Reliable and durable. No moving parts. Fast data access speed. High cost.”



Storage Capacity

“The amount of data a storage device is able to store.”





Storage

Storage Speed

“The read/write access speed of a storage device.”



Storage Portability

“How easy it is to transport a given storage medium. E.g. Solid state and optical storage are designed to be highly portable, whereas more traditional magnetic storage is designed to stay in place.”



Storage Durability

“How resistant to damage and wear a tear a storage device is. Devices with low durability will wear out easily over time.”





Storage

Storage Cost

“The relative price of a storage medium on a”



Programming techniques

Data Type

“The basic data types provided by a programming language as building blocks. Most languages allow more complicated composite types to be recursively construction starting from basic types. E.g. char, integer, float, Boolean. As an extension a ‘string’ data type is constructed behind the scenes of many char data types.”



Programming techniques

Integer

“A data type used to store positive and negative whole numbers.”



Programming techniques

Real

“A data type used to store an approximation of a real number in a way that can support a trade-off between range and precision. A number is, in general, represented approximately to a fixed number of significant digits and scaled using an exponent.”



Programming techniques

Boolean

“Used to store the logical conditions TRUE / FALSE. Often translated to On/Off, Yes/No etc.”



Programming techniques

Character

“A single alphanumeric character or symbol.”



Programming techniques

String

“A sequence of alphanumeric characters and or symbols. e.g. a word or sentence.”



Programming techniques

Casting

“Converting a variable from one data type to another. e.g. variable entered as a string, but needs to be an integer for calculation. `age = INPUT(“Enter your age: “) age = INT(age)”`”



Arithmetic Operator

“+, -, /, *, ^. Used in mathematical expressions e.g. num1 + num2 = sum”



Boolean Operator

“AND, OR, NOT. Used in conditions. e.g. IF choice < “1” OR choice > “3””

