

COSC2429 Intro to Programming

Week 8 – Glossary

aliases

Multiple variables that contain references to the same object.

clone

To create a new object that has the same value as an existing object. Copying a reference to an object creates an alias but doesn't clone the object.

delimiter

A character or string used to indicate where a string should be split.

element

One of the values in a list (or other sequence). The bracket operator selects elements of a list.

index

An integer variable or value that indicates an element of a list.

list

A collection of objects, where each object is identified by an index. Like other types `str`, `int`, `float`, etc. there is also a `list` type-converter function that tries to turn its argument into a list.

list traversal

The sequential accessing of each element in a list.

modifier

A function which changes its arguments inside the function body. Only mutable types can be changed by modifiers.

mutable data type

A data type in which the elements can be modified. All mutable types are compound types. Lists are mutable data types; strings are not.

nested list

A list that is an element of another list.

object

A thing to which a variable can refer.

pattern

A sequence of statements, or a style of coding something that has general applicability in a number of different situations. Part of becoming a mature Computer Scientist is to learn and establish the patterns and algorithms that form your toolkit. Patterns often correspond to your "mental chunking".

pure function

A function which has no side effects. Pure functions only make changes to the calling program through their return values.

sequence

Any of the data types that consist of an ordered collection of elements, with each element identified by an index.

side effect

A change in the state of a program made by calling a function that is not a result of reading the return value from the function. Side effects can only be produced by modifiers.