COSC2429 Intro to Programming

Week 3 – Glossary

attribute
: Some state or value that belongs to a particular object. For example, tess has a color.

canvas
: A surface within a window where drawing takes place.

control flow
: See flow of execution in the next chapter.

deterministic
: A process that is repeatable and predictable.

documentation
: A place where you can go to get detailed information about aspects of your programming language.

for loop
: A statement in Python for convenient repetition of statements in the body of the loop.

instance
: An object that belongs to a class. tess and alex are different instances of the class Turtle

invoke
: An object has methods. We use the verb invoke to mean activate the method. Invoking a method is done by putting parentheses after the method name, with some possible arguments. So wn.exitonclick() is an invocation of the exitonclick method.

iteration
: A basic building block for algorithms (programs). It allows steps to be repeated. Sometimes called looping.

loop body
: Any number of statements nested inside a loop. The nesting is indicated by the fact that the statements are indented under the for loop statement.

loop variable
: A variable used as part of a for loop. It is assigned a different value on each iteration of the loop, and is used as part of the terminating condition of the loop

method
: A function that is attached to an object. Invoking or activating the method causes the object to respond in some way, e.g. forward is the method when we say tess.forward(100).

module
: A file containing Python definitions and statements intended for use in other Python programs. The contents of a module are made available to the other program by using the import statement.

object
A “thing” to which a variable can refer. This could be a screen window, or one of the turtles you have created.

pseudo-random number
A number that is not genuinely random but is instead created algorithmically.

random number
A number that is generated in such a way as to exhibit statistical randomness.

random number generator
A function that will provide you with random numbers, usually between 0 and 1.

range
A built-in function in Python for generating sequences of integers. It is especially useful when we need to write a for loop that executes a fixed number of times.

sequential
The default behavior of a program. Step by step processing of algorithm.

standard library
A collection of modules that are part of the normal installation of Python.

state
The collection of attribute values that a specific data object maintains.

terminating condition
A condition that occurs which causes a loop to stop repeating its body. In the for loops we saw in this chapter, the terminating condition has been when there are no more elements to assign to the loop variable.

turtle
A data object used to create pictures (known as turtle graphics).