**Python – Sequences**

In Python, sequence is an ordered collection of values.

Python has three built-in sequence types: *strings, tuples,* and *lists*.

One very nice feature of sequences is that they can be indexed and sliced, just as we see for strings.

All sequences have the following characteristics:

* Their first positive index is 0, and it is at the left end.
* Their first negative index is -1, and it starts at the right end.
* Slice notation can be used to make copies of sub-sequences. For example, **seq[begin:end]** returns a copy of the elements **seq** starting at index **begin** and ending at location **end -1**.
* They can be concatenated (i.e., combined) using **+** and **\***. The sequences must be of the same *type* for this to work – that is to say, you cannot concatenate a tuple and a list.
* Their length is calculated by the **len** function**.** For example, **len(s)** is the number of items in sequence **s**.
* The expression **x** in **s** tests if the sequence **s** contains the element **x**. That is, **x** in **s** returns **True** if **x** is somewhere in **s**, and **False** otherwise.

In practice, strings and lists are the most common kinds of sequences. Tuples have their uses but appear less often.