Hey, today’s article is going to be a short one. I made mention of index in the previous article. An Index is basically the numerical representation of an item’s position in a variable. Now I have already explained that not all data types can make use of indexes e.g. set, numbers. For variables of data type string, tuples and lists, each individual element has an index and by default python (as well as other programming languages such as JavaScript, PHP) makes use of zero-based indexing.

Zero based indexing means that the first item in the list/tuple or the first letter in the string has an index of zero so for example if we have

<code>name = “Dumebi”</code>

the index of letter “D” is 0, the index of letter “u” is 1 and so on. Indexes basically exist so that we can grab specific data that is stored in our variables (read as memory).

<strong>Slicing</strong>

Now as regards to slicing (getting a range of your variable back), when you provide a range, you provide the start and the end value. For example, if you have <code>name[0:3]</code> you should read this such that the start value is the index of the letter at position zero (0) and the end value is the index of the letter at position three (3). As a tip, if you know the number of things you want to return back let’s say in this instance, I want to return just “Dume”, I know that “D” is at index position 0 and I am expecting 4 letters back, when I am specifying my slice, my start value would be the index of the letter “D” and the end value would be 0 + 4(the number of letters I expect back) which is 4 ie <code>name[0:4]</code> Slice works such that it returns values starting from the start value up to but not including the end value so in this case it returns from 0 up to 3 (which is in fact the index position of our letter “e”).

That is all for today. See you tomorrow.

Cheers 🥂