Happy New Year!!! Obviously 2020 didn’t win\* (pun intended). Anyways, today we are going to be looking at python data types. Python has six data types.

* Numbers
* String
* List
* Dictionary
* Tuple
* Set

Before I go into details on each, it is worth noting that you can find out the data type of a variable by using the type () keyword.

**Numbers**

Numbers can be divided into three types. These include integers, float and complex. For example, a = 23 is of type int (integer without a decimal place). b=23.0 is of type float (because of the decimal place) c = 2.5 is also of type float. d = 5 + 3j is of type complex. (Insert code)

**String**

A string is basically a word that goes into quoted strings. In the previous day, we had a variable called name with a value of “Dumebi”. Type (name) would give you string. (NB: if you don’t enclose your strings in quotes, your code would read it as a variable name.) You can concatenate (add), repeat (multiply) and slice (select parts using the index. Index is the position of an element in a data type and it starts from 0 by default. I would go into detail on indexes later) strings also. Strings are immutable which means that we cannot change the element in a certain position. (Insert code)

**List**

A list is a set of values contained inside square brackets (ie []). A list can contain different data types. You can get an item from a list by using the index of the item. Lists are mutable which means you can change the value of items in the list by assigning the list item index to a new value. (Insert code)

**Dictionary**

A dictionary is similar to a list but instead of square brackets, you have curly brackets ie {}. Lists make use of indexes in order to call items from the list but dictionaries work differently kind of. Dictionaries make use of key: value pairs and to get hold of an item, you make use of the key (not the value!) to get the value (makes sense right!). Dictionaries are also mutable. (Insert code)

**Tuple**

Tuples are similar to lists also but instead of square brackets, you have normal parenthesis. They are immutable and they can contain different data types. Each element is separated by a comma. (Insert code)

**Set**

A set also makes use of curly braces like dictionaries but that is as far as the similarities go. A set is an unordered (when you print, you might not get it back in the same order in which you put it in.) collection of items separated by commas. A set is immutable. The aim of sets are kinda to perform math set functions e.g. union, intersection etc. (Insert code)

This was kinda long but then I hope it helps. 🙂

Cheers 🥂

\*2021 = 2020 won 😉

(Tip: it is a new year. Does the copyright of your website still say 2020? Stop hard coding it and use javaScript new Date().getFullYear() to save yourself from having to change the copyright year manually)