Chapter 4 - Lists and Tuples

Python Lists are containers to store a set of values of any data type

friends = ["Apple", "Akash", "Rohan", 7, false]
↓str() ↓ int() ↘bool()
Can store value of any datatype

List Indexing
A List can be indexed just like a string

L1 = [7, 9, "Harry"]

L1[0] => 7
L1[1] => 9
L1[70] => Error
L1[0:2] => [7,9] => List Slicing

List Methods
Consider the following list :

L1 = [1, 8, 7, 2, 21, 15]

1. L1.Sort() : updates the list to [1, 2, 7, 8, 15, 21]

2. L1.reverse() : updates the list to [15, 21, 2, 7, 8, 1]

3. L1.append(8) : adds 8 at the end of the list

4. L1.insert(3,8) : This will add 8 at 3 index

5, L1.pop (2) : Will delete element at index 2 and return its value

6> L1.remove (21) : Will remove 21 from the list.

Tuples in Python
A tuple is an immutable data type in python.
↳ Cannot change

$a = ( )$ ⟹ Empty tuple
$a = (1,)$ ⟹ Tuple with only one element needs a comma
$a = (1, 7, 2)$ ⟹ Tuple with more than one element

Once defined a tuple's elements cant be altered or manipulated

Tuple methods
Consider the following tuple
$$a = (1, 7, 2)$$

1> a.Count (1) : a.Count (1) will return number of times 1 occurs in a.

2> a.index (1) : a.index (1) will return the index of first occurence of 1 in a.