List in Python []

A List is actually a List.

1. TV remote
2. AC
3. Detergent

In Python, list help to store sequence of item in a single variable.

List are created by defining elements inside [].

List Characteristic :-

Ordered : Maintain order of elements.

Mutable: Item can be changed after creation.

Allow Duplicates : They can contain duplicates.

$$l1 = [1, 2, 3]$$

heterogenous : List can store element of diff types.

$$l2 = ['Python', 1, 3.14]$$

- Creating a list

  List can be created either by
  1] Defining element inside []
  2] Using list() function.

- Accessing List elements
  - Indexing
  - Slicing

- List Operations

1. Concatenation: $l1 + l2$
2. Repeation; $l1 * 3$
3. Membership: If 'apple' in fruits
4. Iterable : for ele in $l1$

- Modifying List

fruits[0] = 'apple'