

List Comprehension

- It is a method to create a list in a simple way from existing list (or) other iterables.
- A list can be generated from a [list](#) , [tuple](#) , [string](#) or a [set](#).
- A list can be empty, it is denoted as []
- [append\(\)](#) in list adds an element to a list
- A loop can be used to append values in a list of particular range.

Example 1 :

```
>>> l1 = []
>>> for x in range(10):
...     l1.append(x)
...
>>> l1
[0, 1, 2, 3, 4, 5, 6, 7, 8, 9]
>>>
```

- The above process can be done in a simple way using '[List Comprehension](#)'

Syntax of List Comprehension :

L1 = [Expression for item in iterable]

Example 2 :

```
>>>
>>> l1 =[x for x in range (10)]
>>> l1
[0, 1, 2, 3, 4, 5, 6, 7, 8, 9]
>>> |
```

- We can observe from this example that how using list comprehension we simplified using example 1
- Some other examples of list comprehension are

