

## Creating and Printing a List:

In [1]:

```
sample_list = [1,2,3,4,5]

print(sample_list)

[1, 2, 3, 4, 5]
```

## Creating and Printing a List using the List Constructor:

In [2]:

```
sample_list = list((1,2,3,4,5)) # Calling the list constructor for the list datatype

print(sample_list)

[1, 2, 3, 4, 5]
```

**[1, 2], [2, 3], [3, 4] --> Ordered pairs**

**[1, 2, 3, 4] --> Ordered sequences**

**Both are handled within third brackets in Python.**

**List is the second type, i.e., Ordered sequences.**

In [3]:

```
sample_list = [1,2,3,4,5, "Thursday", "Python Lab", "PCCCS393"]

print(sample_list)

[1, 2, 3, 4, 5, 'Thursday', 'Python Lab', 'PCCCS393']
```

## Printing an Empty List:

In [4]:

```
sample_list = [ ]

print(sample_list)

[]
```

## Printing the Length of a List:

In [5]:

```
sample_list = [1,2,3,4,5, "Thursday", "Python Lab", "PCCCS393"]

print(len(sample_list))

8
```

## Calling Out the List Indices:

In [9]:

```
sample_list = [1,2,3, "Thursday", "Python Lab", "Rohit", 24.95, 36.05, 43.0009 ]
```

```
print(sample_list[1])

print(sample_list[3])

print(sample_list[5])

print(sample_list[-1])
```

```
2
Thursday
Rohit
43.0009
```

## Slicing the List for Selected Indices:

In [12]:

```
sample_list = [1,2,3, "Thursday", "Python Lab", "Rohit", 24.95, 36.05, 43.0009 ]

print(sample_list[1:5])

print(sample_list[1:7:3])
```

```
[2, 3, 'Thursday', 'Python Lab']
[2, 'Python Lab']
```

## Iterating Through a List:

In [14]:

```
sample_list = [1,2,3, "Thursday", "Python Lab", "Rohit", 24.95, 36.05, 43.0009]

for i in sample_list:
    print(i, end=" ")
```

```
1 2 3 Thursday Python Lab Rohit 24.95 36.05 43.0009
```

## Iterating Through a List with Respective Index Values:

In [18]:

```
sample_list = [1,2,3, "Thursday", "Python Lab", "Rohit", 24.95, 36.05, 43.0009]

for i in range(0, len(sample_list)): #len(sample_list) does the same things as starting t
he list from index pos 0, but since we are using it within a range, we are providing at l
east one range parameter.
    print(i, end=" ")
    print(sample_list[i])
```

```
0 1
1 2
2 3
3 Thursday
4 Python Lab
5 Rohit
6 24.95
7 36.05
8 43.0009
```