

List

Week 6: Lecture 1

# Introduction

- List is a dynamic data type available in python.
- List is used to store multiple items in a single variable.

- The elements are stored in a list as a comma-separated values between the square bracket.
- The most important feature of List is that it can store elements of different data types.

- Syntax for defining a list
- List\_variable=[val1, val2,.....]
- For example:

list\_X= [10, 11, "ravi" , 'a', 3.14]

# Example

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

```
print (first_list)
```

```
second_list=['Delhi','b','c',10,20,30,3.14]
```

```
print(second_list)
```

- In a List each element has a specific index which starts from zero and is auto incremented for next value. Therefore it can also be considered as an ordered set.
- List items are ordered, changeable, and allow duplicate values.

# Example of Index

```
List_city = ["Delhi", "Mumbai", "Kolkata"]  
print("\nList Items: ")  
print(List_city[0]) # Index 0  
print(List_city[2]) # index 2
```

# *Multi-Dimensional List*

```
# Multi-Dimensional List
```

```
List = [[1, 2] , [1]]
```

```
print(List[0][1])
```

```
print(List[1][0])
```



# len function

*# len function determine how many items a list has.*

*List\_num = [100, 200, 114,12,34]*

*print(len(List\_num))*

- Thank You.