

## - Variable Indexing & Lists

**Name = Saif Ul Mateen Email = ulmateen@gmail.com Whatsapp = +923032171002**

```
In [26]: fruits = ["Apple", "mango", "oranges", "Banana", "Kiwi", "pineApple"]
         fruits
         print(type(fruits))

<class 'list'>

In [2]: fruits[5]

Out[2]: 'pineApple'

In [3]: len(fruits)

Out[3]: 6

In [4]: fruits[0:3]

Out[4]: ['Apple', 'mango', 'oranges']

In [5]: type(fruits)

Out[5]: list

In [6]: veg = "lady finger"
         veg

Out[6]: 'lady finger'

In [7]: veg.capitalize()

Out[7]: 'Lady finger'

In [8]: veg.upper()

Out[8]: 'LADY FINGER'

In [10]: veg1 = veg.replace("lady finger", "Carrot")
          veg1

Out[10]: 'Carrot'

In [12]: veg1.encode("utf-8")

Out[12]: b'Carrot'

In [15]: cars = "Lamborghini, Ferrari, Audi, BMW, F1, Dodge"
          cars
          cars.split(",")

Out[15]: ['Lamborghini', ' Ferrari', ' Audi', ' BMW', ' F1', ' Dodge']

In [18]: if "Apple" in fruits:
          print("Yes! Apple is included")

Yes! Apple is included
```

## - Tuples

```
In [19]: names = ("Kashan", "Faris", "Hashim", "Zain")
         names

Out[19]: ('Kashan', 'Faris', 'Hashim', 'Zain')

In [20]: type(names)

Out[20]: tuple

In [21]: len(names)

Out[21]: 4

In [24]: other_names = ("Amin", "Kashif")
          print(names + other_names)

('Kashan', 'Faris', 'Hashim', 'Zain', 'Amin', 'Kashif')
```

## - Dictionaries

```
In [27]: info = {
          "Name" : "Saif",
          "Age"  : 26,
          "Education" : "Diploma"
        }
         info

Out[27]: {'Name': 'Saif', 'Age': 26, 'Education': 'Diploma'}

In [28]: type(info)

Out[28]: dict
```

## - Sets

```
In [29]: games = {"COD Warzone", "Battlefield", "Valorant", "CSGO", "Froza Horizon"}
          games

Out[29]: {'Battlefield', 'COD Warzone', 'CSGO', 'Froza Horizon', 'Valorant'}

In [30]: type(games)

Out[30]: set
```