

# PYTHON

**23**  
Session

Step by Step Coding



All Code in Git

# Dictionary

- Dictionary

If we want to represent a **group of object** as **key-value** pairs then we should go for **Dictionary**.

# ● Dictionary Representation

The elements will be placed within {} brackets

Ex:

```
Dictionary <Integer,String>
```

```
rollNameDict={100:"Mehdi",101:"Ankit",102:"Akshat"}
```

- Dictionary characteristics
  - Duplicate Key are NOT Allowed but value can be Duplicate
  - Heterogeneous Object are Allowed for both key and value
  - Insertion order NOT Preserved
  - Dictionary Object are mutable
  - Dynamic Size
  - It does not support indexing and slicing

- Dictionary Object Creation
  - Empty Dictionary
  - Dictionary with Element

- # Mutability

Once we create the Set object , we can modify its content

# ● How to update the Dictionary

If the key is not available then a new entry will be added to the dictionary with the specified key-value pair

If the key is already available then old value will be replaced with new value.

# ● How to Delete the elements of Dictionary

If deletes entry associated with the specified key.

If key is not available then we will get KeyError

**Syntax :** `del dictioanry_Object[key]`

```
rollNameDict={100:"Mehdi",101:"Ankit",102:"Akshat",103: "Aditya",104: "Aditya"}
```

```
del rollNameDict[103]
```



- Traversing the Dictionary Elements

1. Using While loop

2. Using For loop

# ● Dictionary Function

- `clear()`: To remove all entries from the dictionary

Ex: `myDist={1,2,3,4}`

`myDist.clear()`

`Print(myDist)`      Output : `{}`

# ● Dictionary Function

- del: To delete total dictionary

Ex: myDist={1,2,3,4}

myDist.del

Print(myDist)      Output : Name myDist is not defined

- Dictionary Function
  - dict(): To create a dictionary

# ● Dictionary Function

- `len()`: Returns the number of items in the dictionary
- `clear()`: To remove all the elements from the dictionary
- `get()`: To get the value associated with the key
- `pop()`: It remove the entry associated with the specified key and returns the corresponding value.If the specified key is not available then we will get `KeyError`
- `popitem()`: It remove an arbitrary items (key-value) from the dictionary and returns it.

# ● Dictionary Function

- `keys()`: Returns all the key associated with the dictionary
- `values()`: It returns all the values associated with the dictionary
- `items()`: It returns list of tuples representing key-value pair
- `copy()`: To create exactly duplicate dictionary
- `setdefault()`: If the key is already available then this function returns the corresponding value but if key is not available then the specified key-value will be added as new item to the dictionary.

**Thank You**