Training Report Day-6

12 June 2024

❖ DICTIONARY IN PYTHON:-

Python dictionary is a container of the unordered set of objects like lists. The objects are surrounded by curly braces { }. The items in a dictionary are a comma-separated list of key: value pairs where keys and values are Python data type.

Each object or value accessed by key and keys are unique in the dictionary. As keys are used for indexing, they must be the immutable type (string, number, or tuple). You can create an empty dictionary using empty curly braces. Values can be assigned and accessed using square brackets [].

Example:-
dis={'name':'red','age':10}
print(dis) #will output all the key-value pairs. {'name':'red','age':10}
print(dis['name']) #will output only value with 'name' key. 'red'
print(list(dis.values())) #will output list of values in dic. ['red',10]
print(dis.keys())

➢ Rules for creating a dictionary:

1. Every key must be unique (otherwise it will be overridden)
2. Every key must be hash able (can use the hash function to hash it; otherwise Type Error will be thrown).
3. There is no particular order for the keys.

➢ Creating a dict:-

Dictionaries can be initiated in many ways:

✓ literal syntax:-

d = {} # empty d = {'key': 'value'}

dict with initial values

✓ dict comprehension:-

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d = {k:v for k,v in [('key', 'value',)]}

d = { 1: "Mukta" for k,v in[('key', 'value')]}

d

✓ **built-in class: dict():-**

d = dict() # empty dict

d = dict(key='value') # explicit keyword arguments

d = dict([('key', 'value')]) # passing in a list of key/value pairs

di = dict(Name = 'Diksha')

di

❯ Built-in Dictionary Methods:-

In Python Dictionary we have various built-in functions that provide a wide range of operations forworking with dictionaries. These techniques enable efficient manipulation, access, andtransformation of dictionary data.

1. Dictionary clear() Method
2. Dictionary get() Method
3. Dictionary items() Method
4. Dictionary keys() Method
5. Dictionary values() Method
6. Dictionary update() Method
7. Dictionary pop() Method
8. Dictionary popitem() Method