Python!

By- Mugdha Panhale,

Finitely Infinite Systems Pvt. Ltd.

Dictionary

Python dictionary have known as key value pair.
And if we look up a specific key in the dictionary
we'll be able to see the associated value.

a Python dictionary is an unordered collection of items with each item of a dictionary having a key value pair as mentioned.

To create a Dictionary Data Structure:-
Syntax:

my_dict= {‘Key’, ‘Value’ }

Dictionary

Examples:
Key: Value
Apples: 0.49
Cakes: 4.99
Sweets: 0.99

Accessing elements from a Dictionary
names_ages = {‘Jane’ : 24, ‘Kim’ : 52, ‘Sam’ : 32}
names_ages[‘Jane’]
o/p: 24

names_ages[‘Kim’]
o/p: 52

names_ages[‘Simon’]
o/p: KeyError: ‘Simon’

Dictionary

Accessing the values of the Dictionary using get method

names_ages.get(‘Sam’)
o/p : 32
names_ages.get(‘Jane’)
o/p : 24
type(name_ages.get(‘simon’))
o/p : NoneType

Dictionary

Changing & Adding Dictionary elements
Using Assignment Operator

my_dict = {‘apple’ : 0.49, ‘banana’ : 0.69, ‘bread’ : 1.50}
my_dict[‘bread’]
o/p : 1.5
my_dict[‘bread’] = 2.50
my_dict
o/p : {‘apple’ : 0.49, ‘banana’ : 0.69, ‘bread’ : 2.50}
my_dict[‘pear’] = 0.99
my_dict
o/p : {‘apple’ : 0.49, ‘banana’ : 0.69, ‘bread’ : 2.50, ‘pear’ : 0.99}

Dictionary

Removing elements from a Dictionary
pop Method

my_dict = {apple': 0.49, 'banana': 0.69, 'bread': 2.5, 'pear': 0.99}
my_dict.pop('bread.)
o/p : 2.5
my_dict.pop(‘butter’)
o/p : KeyError: 'butter’

popitem method
my_dict.popitem()
o/p : ('pear’, 0.99)
my_dict.popitem()
o/p : ('bread’, 2.5)

my_dict
o/p : {apple': 0.49, 'banana': 0.69}

Dictionary

Removing elements from a Dictionary
clear method:
my_dict.clear()
my_dict
o/p : {}

my_dict = {apple': 0.49, 'banana': 0.69, 'bread': 2.5, 'pear': 0.99}
my_dict[‘apple’]
o/p : 0.49

delete method:
del my_dict[‘applel’]
my_dict
o/p : {'banana': 0.69, 'bread': 2.5, 'pear'. 0.99}
del my_dict
my_dict
o/p : Name Error

Dictionary

Other useful Dictionary methods

my_dict = {apple': 0.49, 'banana': 0.69, 'bread': 2.5, 'pear': 0.99}
my_dict.items()
o/p : dict_items ([(‘apple’, 0.49), (‘banana', 0.69), (‘bread', 2.5), (‘pear', 0.99)])

list(my_dict.items())
[('apple', 0.49), ('banana', 0.69), ('bread', 2.5), ('pear', 0.99)]

my_dict.keys()
dict_keys(['apple', 'banana', 'bread', 'pear'])

my_dict.values()
o/p: dict_values([0.49, 0.69, 2.5, 0.99])

Dictionary

Other useful Dictionary methods

```
for value in my_dict.values():
print(value)
o/p :
0.49
0.69
2.5
0.99
for key in my_dict.keys():
print(key)
o/p :
apple
banana
bread
pear
```

Dictionary

Other useful Dictionary methods
for value in my_dict.items():
print(value)
o/p :
('apple', 0.49)
('banana', 0.69)
('bread', 2.5)
('pear', 0.99)

#how to take dictionary as input?
student={} #empty dictionary
n=int(input('how many students? :
for i in range(n):
name=input('enter name of student')
fee=float(input('enter fees of student'))
student [name]=fee
print(student)

Dictionary

Dictionary Membership & Built-in functions

my_dict = {'custard': 2.99, 'banana': 0.69, 'bread': 2.5, 'pear': 0.99}
'custard' in my_dict
o/p : True
'grapes' in my_dict
o/p : False

'grapes' not in my_dict
o/p : True

len(my_dict)
o/p : 4
sorted (my_dict)
o/p : ['banana', 'bread', 'custard', 'pear']

Dictionary

Dictionary Membership & Built-in functions

all(my_dict)
o/p : True
bool('custard')
o/p : True

my_dict = {'custard': 2.99, False: 0.69, 'bread': 2.5, 'pear': 0.99}
all(my_dict)
o/p : False

my_dict = {'custard': 2.99, 'banana': 0.69, 'bread': 2.5, 'pear': 0.99}
any(my_dict)
o/p : True
my_dict = {'custard': 2.99, False: 0.69, 'bread': 2.5, 'pear': 0.99}
any(my_dict)
o/p : True
because one on the key in the dictionary is true.
But when dictionary is empty when we use any built in function it will return false.