Python - Dictionary

What is Dictionary? Full Explanation.

--> Dictionary is a data structure in which we represent a group of object as key-value pair.

Syntax:

dict-name = {key:value}

Note:

1. Indexing & Slicing not work.
2. Insertion order is preserved.
3. Heterogeneous elements are allowed.
4. mutable in nature.
5. Key must be unique, but duplicates value are allowed.

```
#  //   empty dictionary
var = {}
print(type(var))
```

```
#  //  dictionary method
var = dict()
print(type(var))
```

```
#  //  dict() method set the value in key pair form
var = {"name" : "Ankit", "Age":22}
print(type(var))
print(var)
```

Note: - key always assign by string form (“ ”)

```
#  //  dict() method set the value in some data-type
var = {"name" : "Ankit", "Age":22, "username":"ruby"}
print(type(var))
print(var)
```

```
#  //  dict() method set the value in some key value
var = {"name" : "Ankit", "Age":22, "username":"Ankit"}
print(type(var))
print(var)
```

```
#  //  dict() method set the value in some key
var = {"name" : "Ankit", "Age":22, "name":"ruby"}
print(type(var))
```

```
print(var)
```
{'name': 'ruby', 'Age': 22}

```
#  //  capture the key value using list "[]" index
var = {"name" : "Ankit", "Age":22, "name":"ruby"}
print(type(var))
print(var["name"])
```
<class 'dict'>
ruby
Note: - Last Update key-Value are Accepted by Dictionary.

```
# pop() method  - remove key-pair value
var = {"name" : "Ankit", "Age":22, "name":"ruby","password":"code1234"}
var.pop("name")

print(var)
```
{'Age': 22, 'password': 'code1234'}

Note: - Show the Delete key-pair value using print(var.pop("name"))

```
# get() method  - print the currospond value
var = {"name" : "Ankit", "Age":22, "name":"ruby","password":"code1234"}
print(var.get("password"))
```
code1234

```
# get() method  - print the Unknown key value
var = {"name" : "Ankit", "Age":22, "name":"ruby","password":"code1234"}
print(var.get("pass"))
```
None

```
# get() method  - print the Unknown key value || set the default massage
var = {"name" : "Ankit", "Age":22, "name":"ruby","password":"code1234"}
print(var.get("pass","Not Available"))
```
Not Available

```
# clear() method  - Clear the all Value
var = {"name" : "Ankit", "Age":22, "name":"ruby","password":"code1234"}
var.clear()
print(var)
```
{}

```
# keys() method  - All keys to show
var = {"name" : "Ankit", "Age":22, "name":"ruby","password":"code1234"}
print(var.keys())
```
dict_keys(['name', 'Age', 'password'])

```
# items() method  - All dictionaty item to show
var = {"name" : "Ankit", "Age":22, "name":"ruby","password":"code1234"}
print(var.items())
```

dict_items([('name', 'ruby'), ('Age', 22), ('password', 'code1234')])

```
# items() method  Another Example
var = {"name" : "Ankit", "Age":22, "name":"ruby","password":"code1234"}

for key, values in var.items():
    print(key,values, sep=" - ")
```

name - ruby

Age - 22

password - code1234

```
# Update the value in seprate position
var = {"name" : "Ankit", "Age":22, "name":"ruby","password":"code1234"}

var["Age"]=25
print(var)
```

{'name': 'ruby', 'Age': 25, 'password': 'code1234'}