

dictss

April 22, 2024

dict ==> non primitive data ==> data —> comma seperated key:value K:V mutable datatype

```
[1]: """1- define dict """  
d = {} # dict  
myd = dict()
```

dict can hold different data from different datatypes dict doesn't allow key duplication

```
[2]: info = {  
    "name": "noha",  
    "age": 31,  
    "track": "cloud",  
    "courses": ["python", "bash", "linux"],  
    "name": "Noha Shehab"  
}  
print(info)  
# key ==> no duplication in keys  
# ordered datatype
```

```
{'name': 'Noha Shehab', 'age': 31, 'track': 'cloud', 'courses': ['python',  
'bash', 'linux']}
```

```
[3]: """ access elements using key """  
print(info["age"])
```

31

```
[5]: """ dict is mutable datatype """  
info["age"] = 32  
print(info)  
info["city"] = 'Giza' # if key doesn't exist ==> will add it  
print(info)
```

```
{'name': 'Noha Shehab', 'age': 32, 'track': 'cloud', 'courses': ['python',  
'bash', 'linux']}  
{'name': 'Noha Shehab', 'age': 32, 'track': 'cloud', 'courses': ['python',  
'bash', 'linux'], 'city': 'Giza'}
```

```
[6]: "get len of dict "  
print(len(info))
```

5

```
[7]: """check if value exists in dict """  
print("Giza" in info) # this is a value  
# in operator --> check if given values exists in keys
```

False

```
[10]: """ get keys """  
info_keys = info.keys() # dict_keys  
print(info_keys)  
keys = list(info_keys)  
print(keys)
```

dict_keys(['name', 'age', 'track', 'courses', 'city'])
['name', 'age', 'track', 'courses', 'city']

```
[12]: """get values ?"""  
info_values = info.values() # dict_values  
print(info_values)  
vals = list(info_values)  
print("Giza" in info.values())
```

dict_values(['Noha Shehab', 32, 'cloud', ['python', 'bash', 'linux'], 'Giza'])
True

```
[13]: """loop over the dict """  
for abbass in info:  
    print(f"{abbass}")
```

name
age
track
courses
city

```
[14]: for abbass in info:  
    print(f"{abbass}: {info[abbass]}")
```

name: Noha Shehab
age: 32
track: cloud
courses: ['python', 'bash', 'linux']
city: Giza

```
[15]: allitems = info.items()  
print(allitems)
```

dict_items([('name', 'Noha Shehab'), ('age', 32), ('track', 'cloud'),
('courses', ['python', 'bash', 'linux']), ('city', 'Giza')])

```
[16]: for k , v in info.items(): # dict_items([(k, v)])
      print(f"{k}: {v}")
```

```
name: Noha Shehab
age: 32
track: cloud
courses: ['python', 'bash', 'linux']
city: Giza
```

```
[19]: basic_info = {"fname": "Mohamed", "lname": "thrwat", "age": 23, "uni": "AinShams"}
      salary_ref = {"salary": "100" , "currency": "KWD", 'fname': 'noha', 'lname':
        ↪ 'shehab'}
```

```
[20]: basic_info.update(salary_ref)
      print(basic_info)
```

```
{'fname': 'noha', 'lname': 'shehab', 'age': 23, 'uni': 'AinShams', 'salary':
'100', 'currency': 'KWD'}
```

```
[21]: """remove value from dict """
      popped_value=basic_info.pop("fname")
      print(popped_value)
      print(info)
```

```
noha
{'name': 'Noha Shehab', 'age': 32, 'track': 'cloud', 'courses': ['python',
'bash', 'linux'], 'city': 'Giza'}
```

```
[22]: print(info)
```

```
{'name': 'Noha Shehab', 'age': 32, 'track': 'cloud', 'courses': ['python',
'bash', 'linux'], 'city': 'Giza'}
```

```
[23]: del info['name']
```

```
[24]: print(info)
```

```
{'age': 32, 'track': 'cloud', 'courses': ['python', 'bash', 'linux'], 'city':
'Giza'}
```

```
[25]: l = [3,234,54,34]
      del l[2]
      print(l)
```

```
[3, 234, 34]
```

```
[26]: # clear dict
      info.clear()
      print(info)
```

```
{}
```

```
[27]: l.clear()  
      print(l)
```

```
[]
```

```
[ ]:
```