

Dict {key:Value}

```
In [1]: d = {} #empty dict creation
        print(d,type(d))
```

```
{ } <class 'dict'>
```

```
In [2]: di = {1:1,2:2} # dict creation both key and value with int
        d
```

```
Out[2]: {1: 1, 2: 2}
```

```
In [8]: mydict = {1:'one' , 2:'two' , 3:'three'} # dictionary with integer
        mydict
```

```
Out[8]: {1: 'one', 2: 'two', 3: 'three'}
```

```
In [3]: df = {1.0:2.0,3.0:30.0} # dict creation both key and value with
        df
```

```
Out[3]: {1.0: 2.0, 3.0: 30.0}
```

```
In [6]: ds = {'first' : 'first', 'second': 'second'}
        ds
```

```
Out[6]: {'first': 'first', 'second': 'second'}
```

```
In [7]: dict = {'s.no':1,'product':'mango'}
        dict
```

```
Out[7]: {'s.no': 1, 'product': 'mango'}
```

```
In [9]: mydicts = {'A':'one' , 'B':'two' , 'C':'three'} # dictionary with c
        mydicts
```

```
Out[9]: {'A': 'one', 'B': 'two', 'C': 'three'}
```

```
In [10]: mydict = {1:'one' , 'A':'two' , 3:'three', 4:'four', 5:'five'} # di
        mydict
```

```
Out[10]: {1: 'one', 'A': 'two', 3: 'three', 4: 'four', 5: 'five'}
```

```
In [11]: mydict.keys() # display keys
```

```
Out[11]: dict_keys([1, 'A', 3, 4, 5])
```

```
In [12]: mydict.values() # display values
```

```
Out[12]: dict_values(['one', 'two', 'three', 'four', 'five'])
```

```
In [13]: mydict.items() #dispaly items(pairs)
```

```
Out[13]: dict_items([(1, 'one'), ('A', 'two'), (3, 'three'), (4, 'four'), (5, 'five')])
```

```
In [14]: mydict = {1:'one' , 2:'two' , 'A':['Mahi' , 'Rev' , 'Mayur']} # sin  
mydict
```

```
Out[14]: {1: 'one', 2: 'two', 'A': ['Mahi', 'Rev', 'Mayur']}
```

```
In [16]: mydict = {1:'one' , 2:'two' , 'A':['Mahi' , 'Rev' , 'Mayur'], 'B':['  
mydict
```

```
Out[16]: {1: 'one', 2: 'two', 'A': ['Mahi', 'Rev', 'Mayur'], 'B': ['HR', 'D  
ev', 'enf']}
```

```
In [18]: mydict = {1:'one' , 2:'two' , 'A':[{ 'Name': 'Mahi', 'Age': 34} , 'Rev'  
mydict
```

```
Out[18]: {1: 'one',  
          2: 'two',  
          'A': [{ 'Name': 'Mahi', 'Age': 34}, 'Rev', 'Mayur'],  
          'B': ['HR', 'Dev', 'enf']}
```

```
In [19]: keys = {'a','b','c','d'}  
mydict1 = dict.fromkeys(keys)  
mydict1
```

```
Out[19]: {'c': None, 'b': None, 'd': None, 'a': None}
```

```
In [20]: keys = {'a','b','c','d'}  
value = 100  
mydict1 = dict.fromkeys(keys, value)  
mydict1
```

```
Out[20]: {'c': 100, 'b': 100, 'd': 100, 'a': 100}
```

```
In [21]: keys = {'a','b','c','d'}  
value = [1,2,3,4,5]  
mydict1 = dict.fromkeys(keys, value)  
mydict1
```

```
Out[21]: {'c': [1, 2, 3, 4, 5],  
          'b': [1, 2, 3, 4, 5],  
          'd': [1, 2, 3, 4, 5],  
          'a': [1, 2, 3, 4, 5]}
```

```
In [22]: mydict
```

```
Out[22]: {1: 'one',  
          2: 'two',  
          'A': [{ 'Name': 'Mahi', 'Age': 34}, 'Rev', 'Mayur'],  
          'B': ['HR', 'Dev', 'enf']}
```

```
In [23]: mydict[1] #accessing data
```

```
Out[23]: 'one'
```

```
In [24]: mydict['A']
```

```
Out[24]: [{'Name': 'Mahi', 'Age': 34}, 'Rev', 'Mayur']
```

```
In [25]: mydict.get('B') # accessing data by using get method
```

```
Out[25]: ['HR', 'Dev', 'enf']
```

```
In [26]: mydict1 = {'Name': 'Mahi' , 'ID': 1642023 , 'DOB': 1991 , 'job' : 'Data Analyst'}
mydict1
```

```
Out[26]: {'Name': 'Mahi', 'ID': 1642023, 'DOB': 1991, 'job': 'Data Analyst'}
```

```
In [28]: mydict1['Name']
```

```
Out[28]: 'Mahi'
```

```
In [29]: mydict1.get('job')
```

```
Out[29]: 'Data Analyst'
```

```
In [43]: mydict1 = {'Name': 'Mahi' , 'ID': 1642023 , 'DOB': 1991 , 'job' : 'Data Analyst', 'Adress': 'India'}
mydict1
```

```
Out[43]: {'Name': 'Mahi',
          'ID': 1642023,
          'DOB': 1991,
          'job': 'Data Analyst',
          'Adress': 'India'}
```

```
In [31]: mydict1['DOB'] = 1992
mydict1['Adress'] = 'Paris,India'
mydict1
```

```
Out[31]: {'Name': 'Mahi',
          'ID': 1642023,
          'DOB': 1992,
          'job': 'Data Analyst',
          'Adress': 'Paris,India'}
```

```
In [32]: dict1 = {'DOB': 1995}
mydict1.update(dict1)
mydict1
```

```
Out[32]: {'Name': 'Mahi',
          'ID': 1642023,
          'DOB': 1995,
          'job': 'Data Analyst',
          'Adress': 'Paris,India'}
```

```
In [33]: mydict1.pop('job')
```

```
mydict1
```

```
Out[33]: {'Name': 'Mahi', 'ID': 1642023, 'DOB': 1995, 'Adress': 'Paris,India'}
```

```
In [36]: mydict1.popitem() # random item will be removed
mydict1
```

```
Out[36]: {'Name': 'Mahi', 'ID': 1642023, 'DOB': 1991, 'job': 'Data Analyst'}
```

```
In [37]: del[mydict1['ID']] #ID will be removed
mydict1
```

```
Out[37]: {'Name': 'Mahi', 'DOB': 1991, 'job': 'Data Analyst'}
```

```
In [38]: mydict1.clear()
mydict1
```

```
Out[38]: {}
```

```
In [41]: del mydict1 #delete dict
```

```
-----
NameError                                Traceback (most recent call
l last)
Cell In[41], line 1
----> 1 del mydict1

NameError: name 'mydict1' is not defined
```

```
In [44]: mydict1
```

```
Out[44]: {'Name': 'Mahi',
          'ID': 1642023,
          'DOB': 1991,
          'job': 'Data Analyst',
          'Adress': 'India'}
```

```
In [46]: mydict2 = mydict1
```

```
In [47]: id(mydict2),id(mydict1)
```

```
Out[47]: (4454248960, 4454248960)
```

```
In [49]: mydict3 = mydict2.copy() #copy the dict
mydict3
```

```
Out[49]: {'Name': 'Mahi',
          'ID': 1642023,
          'DOB': 1991,
          'job': 'Data Analyst',
          'Adress': 'India'}
```

```
In [50]: id(mydict3)
```

```
Out[50]: 4454237056
```

```
In [51]: mydict3['Adress'] = 'India, Paris'  
mydict3
```

```
Out[51]: {'Name': 'Mahi',  
          'ID': 1642023,  
          'DOB': 1991,  
          'job': 'Data Analyst',  
          'Adress': 'India, Paris'}
```

```
In [52]: mydict2
```

```
Out[52]: {'Name': 'Mahi',  
          'ID': 1642023,  
          'DOB': 1991,  
          'job': 'Data Analyst',  
          'Adress': 'India'}
```

```
In [57]: mydict1
```

```
Out[57]: {'Name': 'Mahi',  
          'ID': 1642023,  
          'DOB': 1991,  
          'job': 'Data Analyst',  
          'Adress': 'India'}
```

```
In [ ]: #loop
```

```
In [59]: for i in mydict1:  
          print(i, ':' , mydict1[i])    #printing key , value
```

```
Name : Mahi  
ID : 1642023  
DOB : 1991  
job : Data Analyst  
Adress : India
```

```
In [60]: for i in mydict1:  
          print(mydict1[i]) # printing values / items
```

```
Mahi  
1642023  
1991  
Data Analyst  
India
```

```
In [61]: mydict1
```

```
Out[61]: {'Name': 'Mahi',  
          'ID': 1642023,  
          'DOB': 1991,  
          'job': 'Data Analyst',  
          'Adress': 'India'}
```

In []:

In []:

In []:

In []: *#Membership*

In []:

In []:

In [63]: `'Name' in mydict1`

Out[63]: True

In [64]: `'Mahi' in mydict1` *#membership works on only Key not on values/items*

Out[64]: False

In [65]: `'Adress' in mydict1`

Out[65]: True

In []: *#All/Any*

In [66]: `all(mydict1)`

Out[66]: True

In [67]: `any(mydict1)` *# if any value is 0 then only it will declare fals*

Out[67]: True

In []:

In []:

In []:

In []: