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Python 3.7.4 (tags/v3.7.4:e09359112e, Jul  8
2019, 20:34:20) [MSC v.1916 64 bit (AMD64)] on
win32
Type "help", "copyright", "credits" or
"license()" for more information.
>>> d1=dict("a":1,"b":2)
SyntaxError: invalid syntax
>>> d1=dict()
>>> print(d1)
{}
>>> d1=dict({"a":1,"b":2})
>>> print(d1)
{'a': 1, 'b': 2}
>>> d2={"c":1,"d":2}
>>> print(d2)
{'c': 1, 'd': 2}
>>>
d1={1:"Silicon",2:"Institute",{3:"Welcome",4:"Au
"}}
SyntaxError: invalid syntax
>>>
d1={1:"Silicon",2:"Institute","A":{3:"Welcome",4
:"Au"}}
>>> print(d1)
{1: 'Silicon', 2: 'Institute', 'A': {3:
'Welcome', 4: 'Au'}}
>>>
d1={1:"Silicon",2:"Institute",3:{"A":"Welcome","
B":"Au"}}
>>> print(d1)
{1: 'Silicon', 2: 'Institute', 3: {'A':
'Welcome', 'B': 'Au'}}
>>>
```

```
d1={1:"Silicon",2:"Institute",3:{3:"Welcome","B"
:"Au"}}
>>> print(d1)
{1: 'Silicon', 2: 'Institute', 3: {3: 'Welcome',
'B': 'Au'}}
>>>
d1={1:"Silicon",3:"Institute",3:{3:"Welcome","B"
:"Au"}}
>>> print(d1)
{1: 'Silicon', 3: {3: 'Welcome', 'B': 'Au'}}
>>>
d1={1:"Silicon",2:"Institute",3:{"A":"Welcome","
B":"Au"}}
>>> print(d1)
{1: 'Silicon', 2: 'Institute', 3: {'A':
'Welcome', 'B': 'Au'}}
>>> d2=dict()
>>> print(d2)
{}
>>> d2[0]="Welcome"
>>> d2[1]="to"
>>> d2[2]="Silicon"
>>> d2[3]=2023
>>> print(d2)
{0: 'Welcome', 1: 'to', 2: 'Silicon', 3: 2023}
>>> d2["Dept"]="Et,Cs,MCA"
>>> print(d2)
{0: 'Welcome', 1: 'to', 2: 'Silicon', 3: 2023,
'Dept': 'Et,Cs,MCA'}
>>> d2["Dept"]=Et,Cs,MCA
Traceback (most recent call last):
  File "<pyshell#27>", line 1, in <module>
    d2["Dept"]=Et,Cs,MCA
```

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NameError: name 'Et' is not defined
>>> d2["Dept"]=(Et,Cs,MCA)
Traceback (most recent call last):
  File "<pyshell#28>", line 1, in <module>
    d2["Dept"]=(Et,Cs,MCA)
NameError: name 'Et' is not defined
>>> d2["Dept"]=(Et,Cs,"MCA")
Traceback (most recent call last):
  File "<pyshell#29>", line 1, in <module>
    d2["Dept"]=(Et,Cs,"MCA")
NameError: name 'Et' is not defined
>>> d2["Dept"]=("Et","Cs","MCA")
>>> print(d2)
{0: 'Welcome', 1: 'to', 2: 'Silicon', 3: 2023,
'Dept': ('Et', 'Cs', 'MCA')}
>>> d2["Dept"]="Et,Cs,MCA"
>>> print(d2)
{0: 'Welcome', 1: 'to', 2: 'Silicon', 3: 2023,
'Dept': 'Et,Cs,MCA'}
>>> d2[["Roll","Sic"]]=(19,"22mmcb28")
Traceback (most recent call last):
  File "<pyshell#34>", line 1, in <module>
    d2[["Roll","Sic"]]=(19,"22mmcb28")
TypeError: unhashable type: 'list'
>>> d2[3]={"Nested":{1:"Life",2:"is",3:"Good"}}
>>> print(d2)
{0: 'Welcome', 1: 'to', 2: 'Silicon', 3:
{'Nested': {1: 'Life', 2: 'is', 3: 'Good'}},
'Dept': 'Et,Cs,MCA'}
>>> d2[("Roll","Sic")]=[19,"22mmcb28"]
>>> print(d2)
{0: 'Welcome', 1: 'to', 2: 'Silicon', 3:
{'Nested': {1: 'Life', 2: 'is', 3: 'Good'}},
```

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'Dept': 'Et,Cs,MCA', ('Roll', 'Sic'): [19,
'22mmcb28']}
>>> d2[3]=2023
>>> d2[4]={"Nested":{1:"Life",2:"is",3:"Good"}}
>>> print(d2)
{0: 'Welcome', 1: 'to', 2: 'Silicon', 3: 2023,
'Dept': 'Et,Cs,MCA', ('Roll', 'Sic'): [19,
'22mmcb28'], 4: {'Nested': {1: 'Life', 2: 'is',
3: 'Good'}}}
>>> print(d2[1])
to
>>> print(d2["Dept"])
Et,Cs,MCA
>>> print(d2.get("Dept"))
Et,Cs,MCA
>>>
d3={1:1,2:4,3:9,4:16,5:25}
>>> print(d3)
{1: 1, 2: 4, 3: 9, 4: 16, 5: 25}
>>> print(d3.pop(4))
16
>>> print(d3)
{1: 1, 2: 4, 3: 9, 5: 25}
>>> print(d3.popitem())
(5, 25)
>>> print(d3)
{1: 1, 2: 4, 3: 9}
>>> del.d3[2]
SyntaxError: invalid syntax
>>> del d3[2]
>>> print(d3)
{1: 1, 3: 9}
>>> d3.clear()
```

```
>>> print(d3)
{}
>>> d4={1:"name",2:"Age"}
>>> d5=d4.copy()
>>> print(d4)
{1: 'name', 2: 'Age'}
>>> print(d5)
{1: 'name', 2: 'Age'}
>>> print(d4.keys())
dict_keys([1, 2])
>>> print(d4.values())
dict_values(['name', 'Age'])
>>> print(d4.items())
dict_items([(1, 'name'), (2, 'Age')])
>>>
car={"Brand":"ford","Model":"Mustang","year":196
4}
>>> print(car)
{'Brand': 'ford', 'Model': 'Mustang', 'year':
1964}
>>> dit={"price":"40cr"}
>>> car.update({"color":"white"})
>>> car.update(dit)
>>> print(car)
{'Brand': 'ford', 'Model': 'Mustang', 'year':
1964, 'color': 'white', 'price': '40cr'}
>>> car.update({"color":"white"})
>>> print(car)
{'Brand': 'ford', 'Model': 'Mustang', 'year':
1964, 'color': 'white', 'price': '40cr'}
>>> print(car.items())
dict_items([('Brand', 'ford'), ('Model',
'Mustang'), ('year', 1964), ('color', 'white'),
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('price', '40cr')])
>>> sq={1:1,2:4,3:9,4:16,5:25}
>>> for i in sq:
        print(i)


1
2
3
4
5
>>> for i in sq:
        print(sq[i])


1
4
9
16
25
>>> for i in sq.values():
        print(i)


1
4
9
16
25
>>> for k,v in sq.items():
        print(k,":",v)
```

```
1 : 1
2 : 4
3 : 9
4 : 16
5 : 25
>>>
```