

```
d = {  
    'name' : 'venkat',  
    'mobile' : 9390018934,  
    'email' : 'venkat@gmail.com',  
    'technology' : 'python'  
}  
print(d)
```

```
{'name': 'venkat', 'mobile': 9390018934, 'email': 'venkat@gmail.com', 'technology':
```

```
print(type(d))
```

```
<class 'dict'>
```

```
print(len(d))
```

```
4
```

```
print(id(d))
```

```
140189290854016
```

```
for i in d:  
    print(i,end=' ')
```

```
name mobile email technology
```

```
for i in d:  
    print(i)
```

```
name  
mobile  
email  
technology
```

```
print(d.keys())
```

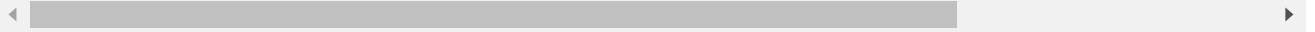
```
dict_keys(['name', 'mobile', 'email', 'technology'])
```

```
print(d.values())
```

```
dict_values(['venkat', 9390018934, 'venkat@gmail.com', 'python'])
```

```
print(d.items())
```

```
print(d.items())  
dict_items([('name', 'venkat'), ('mobile', 9390018934), ('email', 'venkat@gmail.com')])
```



```
for key in d.keys():  
    print(key)
```

```
name  
mobile  
email  
technology
```

```
for value in d.values():  
    print(value)
```

```
venkat  
9390018934  
venkat@gmail.com  
python
```

```
for item in d.items():  
    print(item)
```

```
('name', 'venkat')  
('mobile', 9390018934)  
('email', 'venkat@gmail.com')  
('technology', 'python')
```

```
for key,value in d.items():  
    print(key,' : ',value)
```

```
name : venkat  
mobile : 9390018934  
email : venkat@gmail.com  
technology : python
```

```
d = {  
    'name' : 'venkat',  
    'mobile' : 9390018934,  
    'email' : 'venkat@gmail.com',  
    'technology' : 'python'  
}  
print(d['email'])
```

```
venkat@gmail.com
```

```
d['name'] = 'sekhar'
print(d)
```

```
{'name': 'sekhar', 'mobile': 9390018934, 'email': 'venkat@gmail.com', 'technology':
```

```
d['address'] = 'hyderabad'
print(d)
```

```
{'name': 'sekhar', 'mobile': 9390018934, 'email': 'venkat@gmail.com', 'technology':
```

```
d = {
    10: 'python',
    12.88: 'python',
    True: 'python',
    False: 'python',
    'python': 'python',
    (1,2,3): 'python',
    frozenset({1,2,3}): 'python',
}
```

```
d = {
    'python': 10,
    'python': 12.88,
    'python': True,
    'python': False,
    'python': 'python',
    'python': [1,2,3],
    'python': (1,2,3),
    'python': {1,2,3},
    'python': frozenset({1,2,3}),
    'python': {1:1,2:4,3:9}
}
print(d)
```

```
{'python': {1: 1, 2: 4, 3: 9}}
```

```
d = {
    'name' : 'venkat',
    'mobile' : 9390018934,
    'email' : 'venkat@gmail.com',
    'technology' : 'python'
```

```
}
print(d['name'][::-1])
```

taknev

```
print(d['address'])
```

```
-----
KeyError                                Traceback (most recent call last)
<ipython-input-25-6c9f28f8e13d> in <module>
----> 1 print(d['address'])
```

KeyError: 'address'

SEARCH STACK OVERFLOW

## ▼ dict.get( )

```
d = {
    'name' : 'venkat',
    'mobile' : 9390018934,
    'email' : 'venkat@gmail.com',
    'technology' : 'python'
}
```

```
print(d.get('name'))
```

venkat

```
print(d.get('address'))
```

None

```
print(d.get('address','invalid key'))
```

invalid key

```
print(d.get('name','invalid key'))
```

venkat

## ▼ dict.fromkeys( )

```
l = ['name','mobile','email','technology']
d = dict.fromkeys(l)
print(d)
```

```
{'name': None, 'mobile': None, 'email': None, 'technology': None}
```

```
l = ['name','mobile','email','technology']
d = dict.fromkeys(l,'please update data')
for key,value in d.items():
    print(key,' : ',value)
```

```
name  : please update data
mobile : please update data
email  : please update data
technology : please update data
```

```
d = dict.fromkeys('python','python')
for key,value in d.items():
    print(key,' : ',value)
```

```
p  : python
y  : python
t  : python
h  : python
o  : python
n  : python
```

## ▼ dict.update( )

```
d = {1:1,2:4,3:9}
d1 = {4:16,5:25,6:36}
d.update(d1)
print(d)
```

```
{1: 1, 2: 4, 3: 9, 4: 16, 5: 25, 6: 36}
```

```
print(d1)
```

```
{4: 16, 5: 25, 6: 36}
```

## ▼ dict.setdefault( )

```
d = {
```

```

{
    'name' : 'venkat',
    'mobile' : 9390018934,
    'email' : 'venkat@gmail.com',
    'technology' : 'python'
}
print(d.setdefault('name','sekhar'))

```

venkat

```

d = {
    'mobile' : 9390018934,
    'email' : 'venkat@gmail.com',
    'technology' : 'python'
}
print(d.setdefault('name','sekhar'))

```

sekhar

```
print(d)
```

```
{'mobile': 9390018934, 'email': 'venkat@gmail.com', 'technology': 'python', 'name':
```



## ▼ dict.pop( )

```

d = {
    'name' : 'venkat',
    'mobile' : 9390018934,
    'email' : 'venkat@gmail.com',
    'technology' : 'python'
}

```

```
print(d.pop('technology'))
```

python

```

for key,value in d.items():
    print(key,' : ',value)

```

```

name : venkat
mobile : 9390018934
email : venkat@gmail.com

```

## ▼ dict.popitem()

```
d = {
    'name' : 'venkat',
    'mobile' : 9390018934,
    'email' : 'venkat@gmail.com',
    'technology' : 'python'
}
print(d.popitem())

('technology', 'python')

print(d)

{'name': 'venkat', 'mobile': 9390018934, 'email': 'venkat@gmail.com'}
```

## ▼ dict.clear()

```
d = {
    'name' : 'venkat',
    'mobile' : 9390018934,
    'email' : 'venkat@gmail.com',
    'technology' : 'python'
}
d.clear()

print(d)

{}

marks={
    '10th_marks':None,
    'inter_marks':None
}

marks={
    '10th_marks':{
        'telugu':80,
```

```

        'hindi':70,
        'english':80,
        'maths':90,
        'science':100,
        'social':60
    },
    'inter_marks':{
        'telugu':90,
        'hindi':80,
        'english':72,
        'maths':97,
        'science':85,
        'social':50
    }
}

```

```
print(marks['10th_marks']['science'])
```

```
100
```

```
print(marks['inter_marks']['science'])
```

```
85
```

```
# task 1
```

```
l = [7,0,3,2,1,11,10,14,16,25]
[0,7,2,3,11,1,14,10,25,16] # swap
```

```
# task 2
```

```
l = [7,0,3,2,1,11,10,14,16,25]
[7,0,3,2,1,11,1,41,61,52] # reverse
```

```
# task 3
```

```
l = [7,0,3,2,1,11,10,14,16,25]
[14,0,6,4,1,22,10,14,16,25] # prime
```

```
# task 4:
```

```
l = [7,0,3,2,1,11,10,14,16]
lst = [[7,0,3],[2,1,11],[10,14,16]]
```

```
# task 5
```

```
l = [3,2,5,4,1,2,6,6,4,3,2,7,5,4,3,2,1,1] # each item count
'''
```



```
3 -> 3
2 -> 4
5 -> 2
4 -> 3
1 -> 3
6 -> 2
7 -> 1
'''
```

```
# task 6
```

```
l = [3,2,5,4,1,2,6,6,4,3,2,7,5,4,3,2,1,1]
'''
```

```
3 -> 9
2 -> 8
5 -> 10
4 -> 12
1 -> 3
6 -> 12
7 -> 7
'''
```

```
# task 7
```

```
l = [171,258,503,102,786,924,245]
[9,6,8,3,3,6,2]
```

✓ 0s completed at 1:56 PM

