

In [1]: `#collection_name:- 1. Counter()`

In [6]: `from collections import Counter  
l=[1,1,1,12,2,2,3,3,4,4,5]`

In [7]: `Counter(l)`

Out[7]: `Counter({1: 3, 2: 2, 3: 2, 4: 2, 5: 1, 12: 1})`

In [8]: `l=['a','a','a','s','s','c']`

In [9]: `Counter(l)`

Out[9]: `Counter({'a': 3, 'c': 1, 's': 2})`

In [11]: `s = 'How many times does each word show up in this sentence word times each ea  
ch word'  
  
words = s.split()  
  
c=Counter(words)  
c.most_common(1)`

Out[11]: `[('word', 3)]`

In [12]: `#DEFAULTDICT() STARTS`

In [14]: `from collections import defaultdict`

In [15]: `d={}`

In [16]: `d['one']`

```
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KeyError                                Traceback (most recent call last)
<ipython-input-16-075401876800> in <module>()
----> 1 d['one']

KeyError: 'one'
```

In [17]: `d=defaultdict(object)`

In [18]: `d['one']`

Out[18]: `<object at 0x4d64610>`

In [19]: `for n in d:  
 print n`

one

```
In [21]: d=defaultdict(lambda:1)
```

```
In [22]: d
```

```
Out[22]: defaultdict(<function __main__.<lambda>>, {})
```

```
In [23]: d['one']
```

```
Out[23]: 1
```

```
In [24]: #orderdict starts here
```

```
In [25]: print 'Normal dictionary:'
```

```
d = {}
```

```
d['a'] = 'A'
```

```
d['b'] = 'B'
```

```
d['c'] = 'C'
```

```
d['d'] = 'D'
```

```
d['e'] = 'E'
```

```
for k, v in d.items():  
    print k, v
```

```
Normal dictionary:
```

```
a A
```

```
c C
```

```
b B
```

```
e E
```

```
d D
```

```
In [29]: print 'Normal dictionary:'
```

```
d = collections.OrderedDict()
```

```
d['a'] = 'A'
```

```
d['b'] = 'B'
```

```
d['c'] = 'C'
```

```
d['d'] = 'D'
```

```
d['e'] = 'E'
```

```
for k, v in d.items():  
    print k, v
```

```
Normal dictionary:
```

```
a A
```

```
b B
```

```
c C
```

```
d D
```

```
e E
```

In [30]: **print** 'Dictionaries are equal? '

```
d1 = {}  
d1['a'] = 'A'  
d1['b'] = 'B'
```

```
d2 = {}  
d2['b'] = 'B'  
d2['a'] = 'A'
```

```
print d1 == d2
```

Dictionaries are equal?  
True

In [31]: **print** 'Dictionaries are equal? '

```
d1 = collections.OrderedDict()  
d1['a'] = 'A'  
d1['b'] = 'B'
```

```
d2 = collections.OrderedDict()
```

```
d2['b'] = 'B'  
d2['a'] = 'A'
```

```
print d1 == d2
```

Dictionaries are equal?  
False

In [32]: *#namedtuples start here*

In [33]: **from collections import** namedtuple

In [34]: Dog = namedtuple('Dog','age breed name')

```
sam = Dog(age=2,breed='Lab',name='Sammy')
```

```
frank = Dog(age=2,breed='Shepard',name="Frankie")
```

In [35]: sam

Out[35]: Dog(age=2, breed='Lab', name='Sammy')

In [36]: sam.age

Out[36]: 2

In [37]: sam.name

Out[37]: 'Sammy'

In [38]: `sam.breed`

Out[38]: `'Lab'`

In [39]: `sam[0]`

Out[39]: `2`