In [1]:
```
#Superset, subset, disjoint
```

In [2]:
```
s1 = {1,2,3,4,5,6,7,8,9}
s2 = {3,4,5,6,7,8}
s3 = {10, 11, 12}
```

In [3]:
```
s1.issuperset (s2)
```

Out[3]: True

In [4]:
```
s1.issubset (s2)
```

Out[4]: False

In [5]:
```
s2.isdisjoint (s3)
```

Out[5]: True

In [6]:
```
s3.isdisjoint (s1)
```

Out[6]: True

In [7]:
```
for i in s1:
    print (i)
```

```
1
2
3
4
5
6
7
8
9
```

In [8]:
```
for i in enumerate (s2):
    print(i)
```

```
(0, 3)
(1, 4)
(2, 5)
(3, 6)
(4, 7)
(5, 8)
```

In [ ]:
```
# Dictionary
```

In [9]:
```
d = {}
d
```

Out[9]: {}

In [10]:
```
type(d)
```

Out[10]:
```
dict
```

In [11]:
```
d1 = {1: 'one', 2 : 'two', 3: 'three'}
d1
```

Out[11]:
```
{1: 'one', 2: 'two', 3: 'three'}
```

In [12]:
```
d1.keys()
```

Out[12]:
```
dict_keys([1, 2, 3])
```

In [14]:
```
d1.values ()
```

Out[14]:
```
dict_values(['one', 'two', 'three'])
```

In [15]:
```
d2 = d1.copy ()
d2
```

Out[15]:
```
{1: 'one', 2: 'two', 3: 'three'}
```

In [16]:
```
d1.items()
```

Out[16]:
```
dict_items([(1, 'one'), (2, 'two'), (3, 'three')])
```

In [17]:
```
d1[1]
```

Out[17]:
```
'one'
```

In [18]:
```
keys = {'ab', 'c', 'd'}
value = [ 20, 30, 40]
mydict3 = dict.fromkeys (keys, value)
mydict3
```

Out[18]:
```
{'d': [20, 30, 40], 'c': [20, 30, 40], 'ab': [20, 30, 40]}
```

In [19]:
```
value.append(50)
mydict3
```

Out[19]:
```
{'d': [20, 30, 40, 50], 'c': [20, 30, 40, 50], 'ab': [20, 30, 40, 50]}
```

In [20]:
```
range(10)
```

Out[20]:
```
range(0, 10)
```

In [21]:
```
list(range(0,10))
```

Out[21]:
```
[0, 1, 2, 3, 4, 5, 6, 7, 8, 9]
```

In [22]:
```
r = range (1,10)
r
```

Out[22]:
```
range(1, 10)
```

In [23]:
```
for i in r:
    print(i)
```

```
1
2
3
4
5
6
7
8
9
```