In [6]:

```
p = [234,5675,23,4,5,5,3,67]
print(p)
```

```
[234, 5675, 23, 4, 5, 5, 3, 67]
```

In [2]:

```
type(p)
```

Out[2]:

```
list
```

In [7]:

```
p
```

Out[7]:

```
[234, 5675, 23, 4, 5, 5, 3, 67]
```

In [4]:

```
p.clear()
```

In [8]:

```
del p
```

In [9]:

```
p
```

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
<ipython-input-9-6c10289a8da7> in <module>
----> 1 p

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

Set:

- set can be represented by {} or set()
- Data type
- It is also in ordered format but it stores unordered data in kernal
- Slicing can't be done because index is not acceptable here
- Duplicate values are not allowed
- Changes can be done

In [15]:

```
d = {'56',45,67.89,'raju','56','56',3,3,3,3,3,3,3,3.67,3.56,3.78,56}
print(d,type(d))
d
```

```
{3, 67.89, 3.67, 3.56, 3.78, 'raju', 45, '56', 56} <class 'set'>
```

Out[15]:

```
{3, 3.56, 3.67, 3.78, 45, '56', 56, 67.89, 'raju'}
```

In [13]:

```
f = {}
print(f,type(f))
```

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

In [17]:

```
print(dir(set()))
```

```
['__and__', '__class__', '__contains__', '__delattr__', '__dir__', '__doc_
_', '__eq__', '__format__', '__ge__', '__getattribute__', '__gt__', '__hash_
_', '__iand__', '__init__', '__init_subclass__', '__ior__', '__isub__', '__i
ter__', '__ixor__', '__le__', '__len__', '__lt__', '__ne__', '__new__', '__o
r__', '__rand__', '__reduce__', '__reduce_ex__', '__repr__', '__ror__', '__r
sub__', '__rxor__', '__setattr__', '__sizeof__', '__str__', '__sub__', '__su
bclasshook__', '__xor__', 'add', 'clear', 'copy', 'difference', 'difference_
update', 'discard', 'intersection', 'intersection_update', 'isdisjoint', 'is
subset', 'issuperset', 'pop', 'remove', 'symmetric_difference', 'symmetric_d
ifference_update', 'union', 'update']
```

In [21]:

```
g = {56}
k = {56,678}
g.add(34)
print(g)
print(k)
```

```
{56, 34}
{56, 678}
```

In [29]:

```
p = {'rani','rakesh'}
l = p.copy()
print(p)
print(l)
```

```
{'rakesh', 'rani'}
{'rakesh', 'rani'}
```

In [30]:

```
m = l
print(m)
print(l)
```

```
{'rakesh', 'rani'}
{'rakesh', 'rani'}
```

In [31]:

```
l.clear()
```

In [32]:

```
l
```

Out[32]:

```
set()
```

In [33]:

```
del l
```

In [34]:

```
l
```

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
<ipython-input-34-cde25b5e10ad> in <module>
----> 1 l

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

In [39]:

```
j = {2,5,6,3,1}
g = {34,5,1,7,9,23,67}
p = j.difference(g)
kl = g.difference(j)
print(j)
print(g)
print(p)
print(kl)
```

```
{1, 2, 3, 5, 6}
{1, 34, 67, 5, 7, 9, 23}
{2, 3, 6}
{34, 67, 7, 9, 23}
```

In [37]:

```
k = j.union(g)
print(j)
print(g)
print(k)
```

```
{1, 2, 3, 5, 6}
{1, 34, 67, 5, 7, 9, 23}
{1, 2, 3, 34, 5, 6, 67, 7, 9, 23}
```

In [40]:

```
print(j)
print(g)
j.difference_update(g)
print(j)
print(g)
```

```
{1, 2, 3, 5, 6}
{1, 34, 67, 5, 7, 9, 23}
{2, 3, 6}
{1, 34, 67, 5, 7, 9, 23}
```

In [44]:

```
o = {7,9,56,90,2}
f = {90,67,89,6,2,78}
print(o)
print(f)
l = o.intersection(f)
print(o)
print(f)
print(l)
```

```
{2, 7, 9, 56, 90}
{2, 67, 6, 78, 89, 90}
{2, 7, 9, 56, 90}
{2, 67, 6, 78, 89, 90}
{2, 90}
```

In [45]:

```
print(o)
print(f)
o.intersection_update(f)
print(o)
print(f)
```

```
{2, 7, 9, 56, 90}
{2, 67, 6, 78, 89, 90}
{2, 90}
{2, 67, 6, 78, 89, 90}
```

In [63]:

```
t = {67,78,34,12,4,89,5,'rakesh',7,12}
print(t)
t.pop()
print(t)
```

```
{34, 67, 4, 5, 7, 12, 'rakesh', 78, 89}
{67, 4, 5, 7, 12, 'rakesh', 78, 89}
```

In [64]:

```
print(t)
t.remove(12)
print(t)
```

```
{67, 4, 5, 7, 12, 'rakesh', 78, 89}
{67, 4, 5, 7, 'rakesh', 78, 89}
```

In [65]:

```
print(t)
t.update([45,7,8,9])
print(t)
```

```
{67, 4, 5, 7, 'rakesh', 78, 89}
{67, 4, 5, 7, 8, 9, 'rakesh', 78, 45, 89}
```

In [66]:

```
print(t)
t.update({67,98,456})
print(t)
```

```
{67, 4, 5, 7, 8, 9, 'rakesh', 78, 45, 89}
{98, 67, 4, 5, 7, 8, 9, 456, 'rakesh', 78, 45, 89}
```

In [ ]:

```

```