In [ ]:
```
# Set - another data type in python similar like dictionary
  - {}
  - it can not be stored duplicate value
  -  a set is mutable
  - list as data type can not be accept
```

In [3]:
```
asset = {5,7,8}
print(type(asset))
```

```
<class 'set'>
```

In [6]:
```
asset = {5,7,8,"viraj",(1,2,3)}
```

In [7]:
```
# list to set

l = [1,2,3,4,5]

set(l)
```

Out[7]:
```
{1, 2, 3, 4, 5}
```

In [8]:
```
# blank set

a = set()
```

In [10]:
```
print(type(a))
```

```
<class 'set'>
```

In [20]:
```
# Add/update/delete

my_set = {1,3}
my_set.add(2)
print(my_set)

## update
my_set.update([4,5,6,7])
print(my_set)

# delete
my_set.discard(2)
print(my_set)

# pop

my_set.pop()
print(my_set)

# clear
my_set.clear()
print(my_set)
```

```
{1, 2, 3}
{1, 2, 3, 4, 5, 6, 7}
{1, 3, 4, 5, 6, 7}
{3, 4, 5, 6, 7}
set()
```

In [24]:
```
# union, intersection

set1 = {1,2,3,4,5}
set2 = {4,5,6,7,8}


# union
print(set1.union(set2))
print(set1 | set2)


# intersection
print(set1.intersection(set2))
print(set1 & set2)
```

```
{1, 2, 3, 4, 5, 6, 7, 8}
{1, 2, 3, 4, 5, 6, 7, 8}
{4, 5}
{4, 5}
```

In [28]:
```
# Built Function
s = {1, 2, 3, 4, 5, 6, 7, 8}
print(max(s))
print(min(s))
print(len(s))
print(sum(s))
print(sorted(s))
```

```
8
1
8
36
[1, 2, 3, 4, 5, 6, 7, 8]
```

In [29]:
```
## membership

1 in s
```

Out[29]:
```
True
```

In [30]:
```
1 not in s
```

Out[30]:
```
False
```

In [ ]:
```

```

In [ ]:
```
## Exercise

A = {12,13,143,145,167,96,34,67,89}
B = {1,13,142,145,133,96,21,22,77}4

1- FInd the union and intersection,differeneces

2- find the len of set A and B both

4- remove all the set records and single record

5- what is the difference between del and discard
```