## 1. Union Method :

In [4]:
```
# create set object and assign it to variable A
A = {1,2,3,4,5}

# create set object and assign it to variable B
B = {4,5,6,7,8,9}

# call union method to get union of set A and B and assign it to variable S
S = A.union(B)

# print all the values of set A, B and S
print('A : ',A)
print('B : ',B)
print('A Union B : ',S)
```

```
A :  {1, 2, 3, 4, 5}
B :  {4, 5, 6, 7, 8, 9}
A Union B :  {1, 2, 3, 4, 5, 6, 7, 8, 9}
```

## 2. Intersection Method :

In [5]:
```
# Python Set Intersection
# create set object and assign it to variable A
A = {1,2,3,4,5}

# create set object and assign it to variable B
B = {4,5,6,7,8,9}

# call intersection method to get intersection of set A and B and assign it
S = A.intersection(B)

# print all the values of set A, B and S
print('A : ',A)
print('B : ',B)
print('A Intersection B : ',S)
```

```
A :  {1, 2, 3, 4, 5}
B :  {4, 5, 6, 7, 8, 9}
A Intersection B :  {4, 5}
```

## 3. Difference Method :

In [6]:
```
# Python Set Difference
# create set object and assign it to variable A
A = {1,2,3,4,5}

# create set object and assign it to variable B
B = {4,5,6,7,8,9}

# call difference method to get A - B and assign it to variable S
SA = A.difference(B) # A - B
SB = B.difference(A) # B - A

# print all the values of set A, B and S
print('A : ',A)
print('B : ',B)
print('A Difference B : ',SA)
print('B Difference A : ',SB)
```

```
A :  {1, 2, 3, 4, 5}
B :  {4, 5, 6, 7, 8, 9}
A Difference B :  {1, 2, 3}
B Difference A :  {8, 9, 6, 7}
```

## 4. Difference_update Method :

In [12]:
```
# Python Set Difference
# create set object and assign it to variable A
A = {1,2,3,4,5}

# create set object and assign it to variable B
B = {4,5,6,7,8,9}

# call difference_update method to get A - B by updating set A
B.difference_update(A)

# print all the values of set A
print('B Difference A : ',B)
```

```
B Difference A :  {6, 7, 8, 9}
```

## 5. Isdisjoint method :

In [13]:
```
# Python Set isdisjoint
# create first set object and assign it to variable s1
s1 = {1,2,3,4,5}

# create second set object and assign it to variable s2
s2 = {5,6,7,8,9}

# create third set object and assign it to variable s3
s3 = {6,7,8,9,10}

# call isdisjoint() to check if s1 & s2 are disoint or not
if(s1.isdisjoint(s2)):
    print('s1 and s2 are disjoint');
else:
    print('s1 and s2 are not disjoint');

# call isdisjoint() to check if s1 & s3 are disoint or not
if(s1.isdisjoint(s3)):
    print('s1 and s3 are disjoint');
else:
    print('s1 and s3 are not disjoint');

# print('s1 and s2 are disjoint?',s1.isdisjoint(s2))
# print('s1 and s3 are disjoint?',s1.isdisjoint(s3))
```

```
s1 and s2 are not disjoint
s1 and s3 are disjoint
```

In [ ]: