Subset,superset,disjoint

In [1]:
```
a1={1,2,3,4,5,6,7,8,9}
b1={3,4,5,6,7,8}
c1={10,20,30,40}
```

In [3]:
```
a1.issuperset(b1)
```

Out[3]: True

In [4]:
```
b1.issubset(a1)
```

Out[4]: True

In [5]:
```
c1.isdisjoint(a1)
```

Out[5]: True

In [6]:
```
a1={1,2,3,4,5,6,7,8,9}
b1={3,4,5,6,7,8}
c1={10,20,30,40}
```

In [7]:
```
b1.isdisjoint(a1)
```

Out[7]: False

In [8]:
```
a2={1,2,3,4,5,6,7,8,9}
b2={35,45,55,65,75,85}
c2={10,20,30,40}
```

In [9]:
```
a2.isdisjoint(b2)
```

Out[9]: True

In [10]:
```
c2.isdisjoint(a2)
```

Out[10]: True

In [11]:
```
c2.isdisjoint(b2)
```

Out[11]: True

In [12]:
```
a2.issubset(b2)
```

Out[12]: False

In [13]:
```
b2.issuperset(c2)
```

Out[13]: False

dictionary

- key:value
- values can be duplicate but value cannot be duplicate

In [14]:
```
d={}
d
```

Out[14]:
```
{}
```

In [15]:
```
type(d)
```

Out[15]:
```
dict
```

In [16]:
```
d1={1:'one',2:'two',3:'three',4:'four'}
d1
```

Out[16]:
```
{1: 'one', 2: 'two', 3: 'three', 4: 'four'}
```

In [17]:
```
d1.keys()
```

Out[17]:
```
dict_keys([1, 2, 3, 4])
```

In [18]:
```
d1.values()
```

Out[18]:
```
dict_values(['one', 'two', 'three', 'four'])
```

In [19]:
```
d1.items()
```

Out[19]:
```
dict_items([(1, 'one'), (2, 'two'), (3, 'three'), (4, 'four')])
```

In [21]:
```
d1[2] # for calling the values, key is placed in []
```

Out[21]:
```
'two'
```

In [22]:
```
d1.get(1)
```

Out[22]:
```
'one'
```

In [23]:
```
d1.get(5) #as it is not present in the dictionary
```

loop in dictionary

In [25]:
```
for i in d1:
    print(i)
```

```
1
2
3
4
```

In [26]:
```
id(d1)
```

Out[26]:
```
2342745270208
```

In [27]:
```
for i in d1:
    print(i,':',d1[i])
```

```
1 : one
2 : two
3 : three
4 : four
```

membership in dictionary

In [28]:
```
1 in d1
```

Out[28]: True

In [30]:
```
"two" in d1
```

Out[30]: False

In [ ]:

In [ ]:

In [ ]: