

Set

1. Superset
2. Subset
3. Disjoint

```
s11 = {1,2,3,4,5,6,7,8,9}
s12 = {3,4,5,6,7,8}
s13 = {10,20,30,40}
```

```
s12.issubset(s11)
```

True

```
s13.issubset(s11)
```

False

```
s11.issuperset(s11)
```

True

```
s11.issuperset(s12)
```

True

```
s11 = {1,2,3,4,5,6,7,8,9}
s12 = {3,4,5,6,7,8}
s13 = {10,20,30,40}
```

```
s13.isdisjoint(s11)
```

True

```
s12.isdisjoint(s11)
```

False

```
s13.issubset(s12)
```

False

```
s12.issuperset(s13)
```

False

```
s12 = {1,2,3,4,5}
s13 = {10,20,30}
s14 = {15,25,35}
```

```
s14.isdisjoint(s12)
```

True

```
s14.isdisjoint(s13)
```

True

```
s15 = {1,2,3,4,5,6}
```

```
s16 = {4,5,6}
```

```
s17 = {10,20}
```

```
s16.issubset(s15)
```

True

```
s17.isdisjoint(s15)
```

True

```
s17.isdisjoint(s16)
```

True

```
s15
```

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

```
for i in s15:  
    print(i)
```

```
1
```

```
2
```

```
3
```

```
4
```

```
5
```

```
6
```

```
for i in enumerate(s15):  
    print(i)    #with index values
```

```
(0, 1)
```

```
(1, 2)
```

```
(2, 3)
```

```
(3, 4)
```

```
(4, 5)
```

```
(5, 6)
```

```
sum(s15)
```

```
21
```

```
min(s15)
```

```
1
```

```
max(s11)
```

```
9
```

```
min(s15)
```

```
1
```

Set Completed

Dictionary Started

```
d={}
```

```
d
```

```
{}
```

```
type(d)
```

```
dict
```

```
d1 = {1 : 'one', 2 : 'two', 3: 'three'}
```

```
d1
```

```
{1: 'one', 2: 'two', 3: 'three'}
```

```
d1.keys()
```

```
dict_keys([1, 2, 3])
```

```
d1.values()
```

```
dict_values(['one', 'two', 'three'])
```

```
d2 = d1.copy()
```

```
d2
```

```
{1: 'one', 2: 'two', 3: 'three'}
```

```
d1.items()
```

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

```
d1[1]
```

```
'one'
```

```
keys = {'ram', 'b', 'c', 'd'}
```

```
value = [10, 20, 30]
```

```
mydict3 = dict.fromkeys(keys, value) # Create a dictionary from a
```

sequence of

mydict3

```
{'ram': [10, 20, 30], 'c': [10, 20, 30], 'b': [10, 20, 30], 'd': [10, 20, 30]}
```

```
value.append(50)
```

mydict3

```
{'ram': [10, 20, 30, 50],  
'c': [10, 20, 30, 50],  
'b': [10, 20, 30, 50],  
'd': [10, 20, 30, 50]}
```

range(10)

```
range(0, 10)
```

list(range(0,10))

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

list(range(10,20))

```
[10, 11, 12, 13, 14, 15, 16, 17, 18, 19]
```

list(range(10,20,3))

```
[10, 13, 16, 19]
```

list(range(10,20,3,4)) *#three parameters needed*

TypeError Traceback (most recent call last)

Cell In[156], line 1

```
----> 1 list(range(10,20,3,4))
```

TypeError: range expected at most 3 arguments, got 4

```
r = range(1,10)
```

r

```
range(1, 10)
```

```
for i in r:  
    print(i)
```

1

2

3

4

5
6
7
8
9

```
for i in enumerate(r):  
    print(i)
```

(0, 1)
(1, 2)
(2, 3)
(3, 4)
(4, 5)
(5, 6)
(6, 7)
(7, 8)
(8, 9)