

13th Nov

- Set Operation
- Union & Intersection

```
In [52]: a = {1,2,3,4,5}
         b = {4,5,6,7,8}
         c = {8,9,10}
```

```
In [10]: a | b
```

```
Out[10]: {1, 2, 3, 4, 5, 6, 7, 8}
```

```
In [14]: b | c
```

```
Out[14]: {4, 5, 6, 7, 8, 9, 10}
```

```
In [16]: a.union(b)
```

```
Out[16]: {1, 2, 3, 4, 5, 6, 7, 8}
```

```
In [18]: b.union(c)
```

```
Out[18]: {4, 5, 6, 7, 8, 9, 10}
```

```
In [20]: b.union(a)
```

```
Out[20]: {1, 2, 3, 4, 5, 6, 7, 8}
```

```
In [22]: b.union(a,c)
```

```
Out[22]: {1, 2, 3, 4, 5, 6, 7, 8, 9, 10}
```

```
In [26]: a1 = {'a','b'}
         b1 = {'c','d'}
```

```
In [30]: a1 | b1
```

```
Out[30]: {'a', 'b', 'c', 'd'}
```

```
In [32]: a.update(b)
```

```
In [34]: c.update(b)
```

In [36]: `c`

Out[36]: `{4, 5, 6, 7, 8, 9, 10}`

In [38]: `a`

Out[38]: `{1, 2, 3, 4, 5, 6, 7, 8}`

In [40]: `a.update(b,c)`

In [42]: `a`

Out[42]: `{1, 2, 3, 4, 5, 6, 7, 8, 9, 10}`

In [44]: `len(a)`

Out[44]: `10`

In [50]: `a & b`

Out[50]: `{4, 5, 6, 7, 8}`

In [72]: `a = {1,2,3,4,5}`
`b = {4,5,6,7,8}`
`c = {4,5,6,7,8,9,10}`

In [66]: `a & b`

Out[66]: `{4, 5}`

In [74]: `b & c`

Out[74]: `{4, 5, 6, 7, 8}`

In [76]: `b.intersection(c)`

Out[76]: `{4, 5, 6, 7, 8}`

In [78]: `a.intersection_update(b)`

In [80]: `a`

Out[80]: `{4, 5}`

In [82]: `a2 = {1,2,3,4,5}`
`b2 = {4,5,6,7,8}`
`c2 = {8,9,10}`

```
In [84]: a2 - b2
```

```
Out[84]: {1, 2, 3}
```

```
In [86]: a2 - c2
```

```
Out[86]: {1, 2, 3, 4, 5}
```

```
In [88]: b2.difference(c2)
```

```
Out[88]: {4, 5, 6, 7}
```

```
In [90]: b2.difference_update(a2)
```

```
In [92]: b2
```

```
Out[92]: {6, 7, 8}
```

```
In [98]: b2.add(5)
```

```
In [100... b2
```

```
Out[100... {5, 6, 7, 8}
```

```
In [105... a = {1,2,3,4,5}
```

```
b = {4,5,6,7,8}
```

```
c = {8,9,10}
```

```
In [107... a3 = {1,2,3,4,5,6,7,8,9}
```

```
b3 = {3,4,5,6,7,8}
```

```
c3 = {10,20,30,40}
```

```
In [109... b3.issubset(a3)
```

```
Out[109... True
```

```
In [111... b3.issuperset(a3)
```

```
Out[111... False
```

```
In [113... c3.isdisjoint(a3)
```

```
Out[113... True
```

```
In [117... list(enumerate(a))
```

```
Out[117... [(0, 1), (1, 2), (2, 3), (3, 4), (4, 5)]
```

```
In [ ]:
```

DICT

In [123... `d = {}`

In [125... `type(d)`

Out[125... `dict`

In [133... `d = {1:'one',2:'two',3:'three',4:'four'}`

In [135... `d.values()`

Out[135... `dict_values(['one', 'two', 'three', 'four'])`

In [137... `d.items()`

Out[137... `dict_items([(1, 'one'), (2, 'two'), (3, 'three'), (4, 'four')])`

In [139... `d[1]`

Out[139... `'one'`

In [141... `for i in d:
 print(i)`

1
2
3
4

In []: