## Sets

```
In [1]: | s = {}
         type(s)
 Out[1]: dict
 In [2]: s = \{1,2,3,4,5\}
         print(s)
         {1, 2, 3, 4, 5}
 In [3]: s = \{1,2,3.4,5,\text{"akhil"}\}
         print(s)
          {1, 2, 3.4, 5, 'akhil'}
 In [6]: s.add(6)
         print(s)
         {1, 2, 3.4, 5, 6, 'akhil'}
 In [7]: set = {1,2,3,4}
         print(set)
          {1, 2, 3, 4}
 In [8]: set.add(9)
          print(set)
          {1, 2, 3, 4, 9}
In [11]: set.update(s)
         print(set)
          {1, 2, 3, 4, 3.4, 5, 6, 9, 'akhil'}
In [12]: print(set)
          {1, 2, 3, 4, 3.4, 5, 6, 9, 'akhil'}
In [15]: | set.remove(9)
          print(set)
         {1, 2, 3, 4, 3.4, 5, 6, 'akhil'}
```

```
In [16]: set.pop()
Out[16]: 1
In [17]: set
Out[17]: {2, 3, 3.4, 4, 5, 6, 'akhil'}
In [21]: set.difference(s)
Out[21]: {3, 4}
In [19]: s1 = \{1,2,3,4\}
In [20]: | set.difference(s1)
Out[20]: {3.4, 5, 6, 'akhil'}
In [24]: | set.copy()
Out[24]: {2, 3, 3.4, 4, 5, 6, 'akhil'}
In [26]: set.union(s1)
Out[26]: {1, 2, 3, 3.4, 4, 5, 6, 'akhil'}
In [27]: set.intersection(s1)
Out[27]: {2, 3, 4}
In [28]: set.intersection()
Out[28]: {2, 3, 3.4, 4, 5, 6, 'akhil'}
In [29]: set.symmetric_difference(s1)
Out[29]: {1, 3.4, 5, 6, 'akhil'}
In [30]: s1.clear()
```

## **Dictionaries**

```
In [31]: d = {}
type(d)

Out[31]: dict
```

```
In [1]: d = {"name":"Akhil", "moblie name":"oneplus nord", "age":"22"}
         print(d)
         {'name': 'Akhil', 'moblie name': 'oneplus nord', 'age': '22'}
 In [2]: | d1 = {'name':'jack', 'age':'24', 'moblie name':'redmi'}
         print(d1)
         {'name': 'jack', 'age': '24', 'moblie name': 'redmi'}
 In [3]: |d1.clear()
         print(d1)
         {}
 In [4]: d.copy()
 Out[4]: {'name': 'Akhil', 'moblie name': 'oneplus nord', 'age': '22'}
In [12]: d.fromkeys('name')
Out[12]: {'n': None, 'a': None, 'm': None, 'e': None}
In [17]: d.get(0)
In [16]: d.items()
Out[16]: dict items([('name', 'Akhil'), ('moblie name', 'oneplus nord'), ('age', '22')])
In [18]: d.keys()
Out[18]: dict_keys(['name', 'moblie name', 'age'])
In [20]: d.update()
Out[20]: {'name': 'Akhil', 'moblie name': 'oneplus nord', 'age': '22'}
In [21]: d.values()
Out[21]: dict_values(['Akhil', 'oneplus nord', '22'])
In [24]: |d.setdefault(1)
Out[24]: {'name': 'Akhil', 'moblie name': 'oneplus nord', 'age': '22', 1: None}
```

```
In [26]: d.pop(1)
d
Out[26]: {'name': 'Akhil', 'moblie name': 'oneplus nord', 'age': '22'}
In [28]: d.popitem()
d
Out[28]: {'name': 'Akhil', 'moblie name': 'oneplus nord'}
In []:
```