集合

```
In : {1, 3, 2, 1}
Out: {1, 2, 3}
```

```
In : set([1, 3, 2, 1])
Out: {1, 2, 3}

In : list({1, 3, 2, 1})
Out: [1, 2, 3]
```

```
In : s = set()

In : s
Out: set()
```

```
In : s.add(1)

In : s
Out: {1}

In : s.add(1)

In : s
Out: {1}

In : s.update([2, 3])

In : s
Out: {1, 2, 3}

In : s.update([3, 4])

In : s
Out: {1, 2, 3, 4}
```

```
In : s.remove(4)

In : s
Out: {1, 2, 3}

In : s.remove(4)
---------------------------------------------------------------------
KeyError                                  Traceback (most recent call last)
<ipython-input-33-737bdeaad795> in <module>()
----> 1 s.remove(4)

KeyError: 4

In : s.discard(4)
```

issubset/issuperset

```
In : set([1]).issubset(set([1, 2]))
Out: True

In : set([1]).issuperset(set([1, 2]))
Out: False

In : set([1, 2]).issuperset(set([1]))
Out: True
```

交集/并集/差集

```
In : s1 = set([1, 2, 3])

In : s2 = set([3, 4, 1])

In : s1 & s2   # 交集
Out: {1, 3}

In : s1 | s2   # 并集
Out: {1, 2, 3, 4}

In : s1 - s2   # 差集
Out: {2}

In : s2 - s1
Out: {4}
```

不变集合

```
In : fs = frozenset('hello')

In : fs
Out: frozenset({'e', 'h', 'l', 'o'})

In : fs.add('a')
---------------------------------------------------------------------------
AttributeError                            Traceback (most recent call last)
<ipython-input-38-09a9d04c7ae3> in <module>()
----> 1 fs.add('a')

AttributeError: 'frozenset' object has no attribute 'add'
```

延伸阅读

1. https://www.geeksforgeeks.org/sets-in-python/