

22nd May 2025 - Sets

```
In [9]: s = {}  
s  
  
Out[9]: {}  
  
In [11]: type(s)  
  
Out[11]: dict  
  
In [15]: s = set()  
s  
  
Out[15]: set()  
  
In [17]: type(s)  
  
Out[17]: set  
  
In [19]: s1 = {90, 80, 3, 13, 47, 100, 1}  
s1  
  
Out[19]: {1, 3, 13, 47, 80, 90, 100}  
  
In [21]: type(s1)  
  
Out[21]: set  
  
In [26]: s2 = {4, 'nit', 2.3, True, 1+2j}  
s2  
  
Out[26]: {(1+2j), 2.3, 4, True, 'nit'}  
  
In [32]: s1  
  
Out[32]: {1, 3, 13, 47, 80, 90, 100}  
  
In [34]: s1.add(200)  
s1  
  
Out[34]: {1, 3, 13, 47, 80, 90, 100, 200}  
  
In [36]: s1.add(100)  
s1  
  
Out[36]: {1, 3, 13, 47, 80, 90, 100, 200}  
  
In [41]: s3 = s1.copy();  
s3  
  
Out[41]: {1, 3, 13, 47, 80, 90, 100, 200}  
  
In [52]: s1 == s3  
  
Out[52]: True  
  
In [54]: len(s3)  
  
Out[54]: 8  
  
In [56]: s3.clear()  
  
In [58]: s3  
  
Out[58]: set()  
  
In [60]: len(s3)  
  
Out[60]: 0  
  
In [70]: s1.pop()  
  
Out[70]: 80  
  
In [72]: s1  
  
Out[72]: {1, 3, 13, 47, 90, 100, 200}  
  
In [74]: s1[0]  
  
-----  
TypeError                                Traceback (most recent call last)  
Cell In[74], line 1  
----> 1 s1[0]  
  
TypeError: 'set' object is not subscriptable  
  
In [76]: s1[:]
```

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TypeError                                Traceback (most recent call last)  
Cell In[76], line 1  
----> 1 s1[:]  
  
TypeError: 'set' object is not subscriptable
```

```
In [88]: s1.pop()
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```
Out[88]: 1
```

```
In [90]: s1
```

```
Out[90]: {3, 13, 47, 90, 100, 200}
```

```
In [99]: s1.pop(1)
```

```
-----  
TypeError                                Traceback (most recent call last)  
Cell In[99], line 1  
----> 1 s1.pop(1)  
  
TypeError: set.pop() takes no arguments (1 given)
```

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In [109... s1.remove(1000)
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KeyError                                Traceback (most recent call last)  
Cell In[109], line 1  
----> 1 s1.remove(1000)  
  
KeyError: 1000
```

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In [111... s1.discard(1000)
```

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In [113... s1.remove(47)
```

```
In [115... s1
```

```
Out[115... {3, 13, 90, 100, 200}
```

```
In [123... for i in s1:  
          print(i)
```

```
3  
100  
200  
90  
13
```

```
In [127... for i in enumerate(s1):  
          print(i)
```

```
(0, 3)  
(1, 100)  
(2, 200)  
(3, 90)  
(4, 13)
```

```
In [133... s1
```

```
Out[133... {3, 13, 90, 100, 200}
```

```
In [138... s1.update([1,2])
```

```
In [140... s1
```

```
Out[140... {1, 2, 3, 13, 90, 100, 200}
```

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In [ ]:
```

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In [ ]:
```

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In [ ]:
```

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In [ ]:
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