

Sets

Sets are used to store multiple items in a single variable.

A set is a collection which is unordered, unchangeable, and unindexed.

Set items are unchangeable, but you can remove items and add new items.

```
thisset = {"apple", "banana", "cherry"}  
print(thisset)
```

```
thisset1 = {"apple", "banana", "cherry", "apple"}  
print(thisset1)
```

```
#len()  
#type()
```

```
MySet = set(("apple", "banana", "cherry")) # note the double round-brackets  
print(MySet)
```

```
MySet = {"apple", "banana", "cherry"}
```

```
for x in MySet:  
    print(x)
```

```
thisset = {"apple", "banana", "cherry"}  
thisset.add("orange")  
print(thisset) # sets are unordered collections.
```

```
thisset = {"apple", "banana", "cherry"}  
tropical = {"pineapple", "mango", "papaya"}  
thisset.update(tropical)  
print(thisset)
```

```
thisset = {"apple", "banana", "cherry"}  
thisset.remove("banana")  
print(thisset)
```

```
thisset = {"apple", "banana", "cherry"}  
thisset.discard("banana")  
print(thisset)
```

```
thisset = {"apple", "banana", "cherry"}  
x = thisset.pop()  
print(x)  
print(thisset)
```

```
thisset = {"apple", "banana", "cherry"}  
thisset.clear()
```

```
print(thisset)
```

```
thisset = {"apple", "banana", "cherry"}
```

```
del thisset
```

```
print(thisset) #throw exception
```

```
#Join two sets
```

```
set1 = {"a", "b", "c"}
```

```
set2 = {1, 2, 3}
```

```
set3 = set1.union(set2)
```

```
print(set3)
```

```
set1 = {"a", "b", "c"}
```

```
set2 = {1, 2, 3}
```

```
set1.update(set2)
```

```
print(set1)
```

```
x = {"apple", "banana", "cherry"}
```

```
y = {"google", "microsoft", "apple"}
```

```
x.intersection_update(y)
```

```
print(x)
```

```
x = {"apple", "banana", "cherry"}
```

```
y = {"google", "microsoft", "apple"}
```

```
z = x.intersection(y)
```

```
print(z)
```

```
x = {"apple", "banana", "cherry"}
```

```
y = {"google", "microsoft", "apple"}
```

```
x.symmetric_difference_update(y)
```

```
print(x)
```

```
x = {"apple", "banana", "cherry"}
```

```
y = {"google", "microsoft", "apple"}
```

```
z = x.symmetric_difference(y)
```

```
print(z)
```