

# Sets

Sets are like dictionaries without values.

## Creating sets

* {1, 2, 3, 4}	Set of elements	fruit = {'apple', 'pear'}
* set([1, 2, 3])	Set from a list (Or other iterable object)	unique_numbers = set([3, 1, 3])
* set()	Empty set - {} is dictionary	letters = set('chocolate')
* frozenset(...)	Set that you can't change	

## Basic operations

len(x)	Number of elements
k in x	Is k element in the set?
* x.copy()	Copy of the set
x.clear()	Empty the set

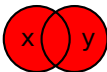
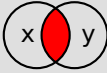
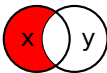
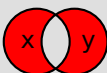
## Elements

x.add(k)	Add element k
x.remove(k)	Remove element (KeyError if k is not in the set)
x.discard(k)	Remove k element only if it's in the set
x.pop()	It will remove and show any element

## Subset

x.isdisjoint(y)	True if sets are disjoint? (tj. they don't have any
x.issubset(y)	Is x subset of y? element in common)
x <= y	
x < y	Only subset (x!=y)
x.issuperset(y)	Is x superset of y?
x >= y	
x > y	Only superset (x!=y)
	Only commands with <b>update</b> will change x, others return result

## Operations on sets

* x.union(y)		
* x   y		
x.update(y)		Union
* x.intersection(y)		
* x & y		Intersection
x.intersection_update(y)		
* x.difference(y)		
* x - y		Difference
x.difference_update(y)		
* x.symmetric_difference(y)		
* x ^ y		Symetric difference
x.symmetric_difference_update(y)		

More info: <https://docs.python.org/3/library/stdtypes.html#set-types-set-frozenset>

\* Function with this sign will create new set