

## Sets

- A Set is unordered, unindexed, with no duplicate elements that can be of different types
- A Set is created with curly braces

$$set1 = \{5, 3, 9\}$$

A Set can be created with a constructor

Number of elements in the Set

len(set1)

Delete a Set

del set1

Check if an element exists in a Set

if 9 in set1:
print("9 is in the set")

The elements of a Set can be accessed with a for loop

for value in set1: print(value)



## Sets

Set built-in methods:

set1.add(value) Adds an element to the set

set1.clear() Clears all the elements from the set

set1.copy() Returns a copy of the set

set1.difference(set2) Returns a set with the elements that exist in set1 but not in set2, ...

set1.difference update(set2) Removes from set1 the elements that exist in set2, ...

set1.discard(value) Removes the value from the set

set1.intersection(set2) Returns a set with the elements that exist in set2, ...

set1.intersection\_update(set2) Removes the elements in set1 that are not present in set2, ...

set1.isdisjoint(set2) Returns whether the two sets have common elements

set1.issubset(set2) Returns whether set2 contains set1

set1.issuperset(set2) Returns whether set1 contains set2

set1.pop() Removes and returns a random element from the set

set1.remove(value) Removes the value from the set

set1.union(set2) Returns a set containing the elements from both sets

set1.update(set2) Updates set1 with the elements from set2