Python Sets & Dictionaries Cheat Sheet

◇ Set Functions and Methods

Sets are unordered collections of unique elements.

- add(x)

Description: Adds element x to the set

Example: s.add(3)

- update(iterable)

Description: Adds elements from an iterable

Example: s.update([1, 2])

- remove(x)

Description: Removes x; raises KeyError if not found

Example: s.remove(2)

- discard(x)

Description: Removes x if found; does nothing otherwise

Example: s.discard(5)

- pop()

Description: Removes and returns an arbitrary element

Example: s.pop()

- clear()

Description: Removes all elements

Example: s.clear()

- copy()

Description: Returns a shallow copy

Example: s2 = s.copy()

- union(other)

Description: Returns the union (|)

Example: s.union({4,5}) or s | {4,5}

- intersection(other)

Description: Returns common elements (&)

Example: s.intersection({1,2}) or s & {1,2}

- difference(other)

Description: Returns elements in s but not in other (-)

Example: s.difference({2,3}) or s - {2,3}

- symmetric_difference(other)

Description: Returns elements in one but not both (^)

Example: s.symmetric_difference({3,4}) or s ^ {3,4}

- issubset(other)

Description: Checks if set is a subset

Example: s.issubset({1,2,3})

- issuperset(other)

Description: Checks if set is a superset

Example: s.issuperset({1,2})

- isdisjoint(other)

Description: Checks for no common elements

Example: s.isdisjoint({7,8})

Dictionary Functions and Methods

> ***Dictionaries are key-value pairs. Keys must be unique and immutable.***

- get(key[, default])

Description: Returns the value for key, or default if key not found

Example: d.get('x', 0)

- keys()

Description: Returns a view of the keys

Example: d.keys()

- values()

Description: Returns a view of the values

Example: d.values()

- items()

Description: Returns view of (key, value) pairs

Example: d.items()

- pop(key[, default])

Description: Removes specified key and returns value

Example: d.pop('x')

- popitem()

Description: Removes and returns last inserted pair

Example: d.popitem()

- setdefault(key[, default])

Description: Returns value if key exists, otherwise sets it

Example: d.setdefault('x', 10)

- update([other])

Description: Updates dictionary with key/value pairs from other

Example: d.update({'a': 1})

- clear()

Description: Removes all items

Example: d.clear()

- copy()

  Description: Returns a shallow copy

  Example: new_d = d.copy()

- fromkeys(seq[, val])

  Description: Creates a new dict with keys from seq and value val

  Example: dict.fromkeys(['a', 'b'], 0)