

## Lists

`list.append(x)`

Add an item to the end of the list; equivalent to `a[len(a):] = [x]`.

`list.extend(L)`

Extend the list by appending all the items in the given list; equivalent to `a[len(a):] = L`.

`list.insert(i, x)`

Insert an item at a given position. The first argument is the index of the element before which to insert, so `a.insert(0, x)` inserts at the front of the list, and `a.insert(len(a), x)` is equivalent to `a.append(x)`.

`list.remove(x)`

Remove the first item from the list whose value is `x`. It is an error if there is no such item.

`list.pop([i])`

Remove the item at the given position in the list, and return it. If no index is specified, `a.pop()` removes and returns the last item in the list.

`list.index(x)`

Return the index in the list of the first item whose value is `x`. It is an error if there is no such item.

`list.count(x)`

Return the number of times `x` appears in the list.

`list.sort()`

Sort the items of the list, in place.

`list.reverse()`

Reverse the elements of the list, in place.

```
>>> a = [66.25, 333, 333, 1, 1234.5]
>>> print a.count(333), a.count(66.25), a.count('x')
2 1 0
>>> a.insert(2, -1)
>>> a.append(333)
>>> a
[66.25, 333, -1, 333, 1, 1234.5, 333]
>>> a.index(333)
1
>>> a.remove(333)
>>> a
[66.25, -1, 333, 1, 1234.5, 333]
>>> a.reverse()
>>> a
[333, 1234.5, 1, 333, -1, 66.25]
>>> a.sort()
>>> a
[-1, 1, 66.25, 333, 333, 1234.5]
```

# Dictionary

`c = dict(zip(['one', 'two', 'three'], [1, 2, 3]))`

**max**(mydict, key=mydict.get)

Returns the key of the maximum value in dictionary

`mydict[key] = mydict.setdefault(key, 0) + 1`

If item in dictionary, increment it, otherwise, set it to 1

**len**(d)

**del d[key]**

Remove `d[key]` from `d`. Raises a **KeyError** if `key` is not in the map.

**key not in d**

**clear**()

Remove all items from the dictionary.

**get**(key[, default])<sup>¶</sup>

Return the value for `key` if `key` is in the dictionary, else `default`. If `default` is not given, it defaults to **None**, so that this method never raises a **KeyError**.

**has\_key**(key)<sup>¶</sup>

Test for the presence of `key` in the dictionary. **has\_key()** is deprecated in favor of `key in d`.

**items**()<sup>¶</sup>

Return a copy of the dictionary's list of (key, value) pairs.

**keys**()<sup>¶</sup>

Return a copy of the dictionary's list of keys. See the note for **dict.items()**.

**pop**(key[, default])<sup>¶</sup>

If `key` is in the dictionary, remove it and return its value, else return `default`. If `default` is not given and `key` is not in the dictionary, a **KeyError** is raised.

**popitem**()<sup>¶</sup>

Remove and return an arbitrary (key, value) pair from the dictionary.

**setdefault**(key[, default])<sup>¶</sup>

If `key` is in the dictionary, return its value. If not, insert `key` with a value of `default` and return `default`. `default` defaults to **None**.

# Strings

`ord('a') -> 97`

`chr(97) -> 'a'`