# Day 16: Lists methods

## Adding list items

### append() method

To add an item to the end of the list, use the append() method.

```
thislist = ["apple", "banana", "cherry"]
thislist.append("orange")
print(thislist)
```

### insert() method

To insert a list item at a specified index, use the `insert()` method.

```
thislist = ["apple", "banana", "cherry"]
thislist.insert(1, "orange")
print(thislist)
```

### extend() method

To append elements from *another list* to the current list, use the `extend()` method.

```
thislist = ["apple", "banana", "cherry"]
tropical = ["mango", "pineapple", "papaya"]
thislist.extend(tropical)
print(thislist)
```

---

## Remove items for the list

### remove() method

```
thislist = ["apple", "banana", "cherry"]
thislist.remove("banana")
print(thislist)
```

### Remove specified index

The pop() method removes the specific index.

```
thislist = ["apple", "banana", "cherry"]
thislist.pop(1)
print(thislist)
```

### del() method

The `del` keyword also removes the specified index.

```
thislist = ["apple", "banana", "cherry"]
del thislist[0]
print(thislist)
```

## clear() method

The `clear()` method empties the list.

The list still remains, but it has no content.

```
thislist = ["apple", "banana", "cherry"]
thislist.clear()
print(thislist)
```

---

## Sort list

```
# ascending order
thislist = ["orange", "mango", "kiwi", "pineapple", "banana"]
```

```
thislist.sort()
print(thislist)

thislist = [100, 50, 65, 82, 23]
thislist.sort()
print(thislist)

# descending order
thislist = ["orange", "mango", "kiwi", "pineapple", "banana"]
thislist.sort(reverse = True)
print(thislist)

thislist = [100, 50, 65, 82, 23]
thislist.sort(reverse = True)
print(thislist)
```

### Reverse order

The `reverse()` method reverses the current sorting order of the elements.

```
thislist = ["banana", "Orange", "Kiwi", "cherry"]
thislist.reverse()
print(thislist)
```

---

## Copy a List

You cannot copy a list simply by typing `list2 = list1`, because: `list2` will only be a *reference* to `list1`, and changes made in `list1` will automatically also be made in `list2`.

### copy() method

Make a copy of a list with the `copy()` method:

```
thislist = ["apple", "banana", "cherry"]
mylist = thislist.copy()
```

```
print(mylist)
```

---

## Join lists

```
# +
list1 = ["a", "b", "c"]
list2 = [1, 2, 3]

list3 = list1 + list2
print(list3)

# extend() method
```