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Module 7. List Methods

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From <https://www.youtube.com/channel/UCRjTEkDLPREZNlREZMlotMQ>

Lesson 15: Automate the boring stuff with python

views on You-tube

Lesson 15 - Python Programming (Automate the Boring Stuff with Python)

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(1) Methods

(2) spam.index('hell.')
spam = ['hell.', 'hi!', 'howdy']

(3) if arg no present, raises indexError

(4) if duplicates values,
index method returns index of first el found

A no method way around this for lists

(5) to add vals, to end of list, use
append method (in place modification)

(6) also insert method.
- just adds at any point in list
spam.insert(1, 'val')

(7) my_list.pop(2) - out of range & Index first)
IndexError if pop(val), say

(8) my_list.remove('bat')
- removes from list
- gives error if value not there
- just remove first found

(9) compare del spam[0]

(10) spam.sort()
spam.sort(reverse True)

spam.sort(reverse=True)

(11) Cannot sort list with strings & integers
← Type error ✓

lists sorted in ASCii - Betical order
- uc come before lc.

```
melist=["tom", "tOM", "Tom", "TOM"]

melist.sort()
melist   //   ['TOM', 'Tom', 'tOM', 'tom']
```

// in place modification
in ascii - betical order

(11+) To sort alphabetically, use
key = str.lower

```
melist=["toma", "tOMb", "Tomc", "TOMz"]

melist.sort()
melist      //   ['TOMz', 'Tomc', 'tOMb', 'toma']

melist.sort(key=str.lower)
melist      //   ['toma', 'tOMb', 'Tomc', 'TOMz']
```

(12) Remove all duplicate elements from list

```
mylist=["cat", "dog", "cat", "mouse", "cat"]

mylist.remove('cat')
mylist      //   ['dog', 'cat', 'mouse', 'cat']

if 'cat' in mylist:
   mylist.remove('cat')

mylist      //   ['dog', 'mouse', 'cat']

mylist=["cat", "dog", "cat", "mouse", "cat"]
while 'cat' in mylist:
```

← remove first occurence of 'cat'

← remove all occurences

```
mylist=["cat", "dog", "cat", "mouse", "cat"]
while 'cat' in mylist:
   mylist.remove('cat')

mylist      //   ['dog', 'mouse']
```

remove all occurences of 'cat' WHILE ✓

```
mylist=["cat", "dog", "cat", "mouse", "cat"]

for 'cat' in mylist:

SyntaxError: cannot assign to literal
```

/// NOTE This does NOT work

```
for x in mylist:
        if x =='cat':
                mylist.remove('cat')

mylist      //   ['dog', 'mouse']
```

// This works!

(13) In general, list methods operate in place (mutate)