Manipulating Lists

You can modify the items within a list. Modifying a list means tochange an item, or add a new item, or remove an existing item. Here are some methods of the built-in List class that help in modifying lists. Read through each function and then try it out in IDLE.

append()

Adds an item at the end of the list.

```
>>> L2=['Tailor Swift', 'Ed Sheeran', 'Imagine Dragons', 'Pink', 'Maroon 5']
>>> L2.append('Halsey')
>>> L2
['Tailor Swift', 'Ed Sheeran', 'Imagine Dragons', 'Pink', 'Maroon 5', 'Halsey']
>>>
```

insert()

Inserts an item in list at the specified index.

```
>>> L2=['Tailor Swift', 'Ed Sheeran', 'Imagine Dragons', 'Pink', 'Maroon 5']
>>> L2.insert(2, 'Halsey')
>>> L2
['Tailor Swift', 'Ed Sheeran', 'Halsey', Imagine Dragons', 'Pink', 'Maroon 5']
>>>
```

remove()

Removes the specified item from the list.

```
>>> L2=['Python', 'Perl', 'Java', 'C++'
>>> L2.remove('Java')
>>> L2
['Python', 'Perl', 'C++']
>>>
```

pop()

Removes and returns the last object in list.

```
>>> L2=['Python', 'Perl', 'Java', 'C++'
```

```
>>> L2.pop()'C++'
>>> L2
['Python', 'Perl', 'Java']
>>>
```

reverse()

Reverses the order of items in a list.

```
>>> L2=['Python', 'Perl', 'Java', 'C++'
>>> L2.reverse()
>>> L2
['C++', 'Java', 'Perl', 'Python']
>>>
```

sort()

Rearranges items in the list according to alphabetical order. Default is ascending order. For descending order put reverse=True as argument in function bracket.

```
>>> L2=['Python', 'C++', 'Java', 'Ruby'>>> L2.sort()
>>> L2
['C++', 'Java', 'Python', 'Ruby']
>>>
>>> L2.sort(reverse=True)
>>> L2
['Ruby', 'Python', 'Java', 'C++']
>>>
```

Converting One Sequence Type to Another

The Following utility functions help in converting one sequence data type to other.

list()

Converts a tuple or string to a list.

```
>>> t2=('python', 'java', 'c++')
```

```
>>> list(t2)
['python', 'java', 'c++']
>>> s1="Internshala"
>>> list(s1)
['I', 'n', 't', 'e', 'r', 'n', 's', 'h', 'a', 'l', 'a']
>>>
```

tuple()

Converts a list or string to a tuple.

```
>>> L2=['C++', 'Java', 'Python', 'Ruby']
>>> tuple(L2)
('C++', 'Java', 'Python', 'Ruby')
>>> s1="Internshala"
>>> tuple(s1)
('I', 'n', 't', 'e', 'r', 'n', 's', 'h', 'a', 'l', 'a')
>>>
```