Lists are ordered sequences that can hold a variety of object types.

they use [] brackets and commas to separate objects in the list.

```python
In [1]: my_list = [1,2,3]
```

```python
In [2]: my_lsit = ['STRING',100,23.2]
```

```python
In [3]: len(my_list)
```
Out[3]: 3

```python
In [4]: mylist = ['one','two','three']
```

```python
In [5]: mylist[0]
```
Out[5]: 'one'

```python
In [6]: mylist[1:]
```
Out[6]: ['two', 'three']

```python
In [7]: mylist
```
Out[7]: ['one', 'two', 'three']

```python
In [8]: another_list = ['four','five']
```

```python
In [9]: mylist + another_list
```
Out[9]: ['one', 'two', 'three', 'four', 'five']

```python
In [10]: mylist
```
Out[10]: ['one', 'two', 'three']

```python
In [11]: another_list
```
Out[11]: ['four', 'five']

```python
In [14]: new_list = mylist + another_list
```

```python
In [15]: new_list
```
Out[15]: ['one', 'two', 'three', 'four', 'five']

```python
In [16]: new_list[0] = 'ONE ALL CAPS'
```

```python
In [17]: new_list
```
Out[17]: ['ONE ALL CAPS', 'two', 'three', 'four', 'five']

```python
In [18]: new_list.append('six')
```

```python
In [19]: new_list
```
Out[19]: ['ONE ALL CAPS', 'two', 'three', 'four', 'five', 'six']

```python
In [20]: new_list.pop()
```
Out[20]: 'six'

```python
In [21]: new_list
```
Out[21]: ['ONE ALL CAPS', 'two', 'three', 'four', 'five']

```python
In [22]: popped_items = new_list.pop()
```

```python
In [23]: popped_items
```
Out[23]: 'five'

```python
In [24]: new_list
```
Out[24]: ['ONE ALL CAPS', 'two', 'three', 'four']

```python
In [25]: new_list.pop()
```
Out[25]: 'four'

```python
In [27]: new_list = ['a','e','x','b','c']
         num_list = [4,1,8,3]
```

```python
In [28]: new_list.sort()
```

```python
In [29]: new_list
```
Out[29]: ['a', 'b', 'c', 'e', 'x']

```python
In [30]: my_sorted_list = new_list.sort()
```

```python
In [31]: type(my_sorted_list)
```
Out[31]: NoneType

```python
In [32]: None
```

```python
In [33]: new_list.sort()
         my_sorted_list = new_list
```

```python
In [34]: my_sorted_list
```
Out[34]: ['a', 'b', 'c', 'e', 'x']

```python
In [35]: num_list
```
Out[35]: [4, 1, 8, 3]

```python
In [36]: num_list.sort()
```

```python
In [37]: num_list
```
Out[37]: [1, 3, 4, 8]

```python
In [38]: num_list.reverse()
```

```python
In [39]: num_list
```
Out[39]: [8, 4, 3, 1]

```python
In [ ]:
```