2 aug

```
[5]  l = [10,20,30,40,"nit",1 + 2j,True,[1,2,3],10]
     l
```
Python

```
[10, 20, 30, 40, 'nit', (1+2j), True, [1, 2, 3], 10]
```

```
[6]  l.count(10)
```
Python

```
2
```

```
[7]  l
```
Python

```
[10, 20, 30, 40, 'nit', (1+2j), True, [1, 2, 3], 10]
```

```
[8]  l.remove(1+2j)
```
Python

```
[9]  l
```
Python

```
[10, 20, 30, 40, 'nit', True, [1, 2, 3], 10]
```

```
[10]  l.pop()
```
Python

```
10
```

```
[11]  l
```
Python

```
[10, 20, 30, 40, 'nit', True, [1, 2, 3]]
```

```
l.pop() #it remove elemnt using index wise /by default last
```
Python

```
[1, 2, 3]
```

```
[14]  l
```
Python

```
[10, 20, 30, 40, 'nit', True]
```

```
l.remove(True)#remove elemnet directly no index required
```
Python

```
[16]
l
```
Python

```
[10, 20, 30, 40, 'nit']
```

```
[17]
l.append(1+2j)
l.append(20)
```
Python

```
[18]
l
```
Python

```
[10, 20, 30, 40, 'nit', (1+2j), 20]
```

```
[19]
l.pop(2)
```
Python

```
30
```

```
[20]
l
```
Python

```
[10, 20, 40, 'nit', (1+2j), 20]
```

```
[21]
l1 = [10,2.3]
```
Python

```
[22]
l.index('nit')
```
Python

```
3
```

```
[23]
l
```
Python

```
[10, 20, 40, 'nit', (1+2j), 20]
```

```
[24]
l.index(20)
```
Python

```
1
```

```
[25]
l.extend([1,2,3])
```
Python

```
[26]
l
```
Python

```
[10, 20, 40, 'nit', (1+2j), 20, 1, 2, 3]
```

```
[27]
l.insert(2, 100)
```
Python

```
[28]  l
                                                                    Python
...   [10, 20, 100, 40, 'nit', (1+2j), 20, 1, 2, 3]

[29]  l.insert(4, 5)
                                                                    Python

[30]  l
                                                                    Python
...   [10, 20, 100, 40, 5, 'nit', (1+2j), 20, 1, 2, 3]

[31]  l.insert(5, 6 )
                                                                    Python
      Generate   + Code   + Markdown
      Add Code Cell

[32]  l
                                                                    Python
...   [10, 20, 100, 40, 5, 6, 'nit', (1+2j), 20, 1, 2, 3]
```

```
[33]  print(l)
      print(l1)
                                                                    Python
...   [10, 20, 100, 40, 5, 6, 'nit', (1+2j), 20, 1, 2, 3]
      [10, 2.3]

[34]  l
                                                                    Python
...   [10, 20, 100, 40, 5, 6, 'nit', (1+2j), 20, 1, 2, 3]

[35]  l.reverse()
                                                                    Python

[36]  l
                                                                    Python
...   [3, 2, 1, 20, (1+2j), 'nit', 6, 5, 40, 100, 20, 10]

      l1.sort() #sort has tow parameter (key and reverse=False[by defaul
                                                                    Python
```

```
[40]  l1                                                    Python
...   [2.3, 10]

[42]  l1.sort(reverse= True)                                Python

[43]  l1                                                    Python
...   [10, 2.3]

[44]  l                                                     Python
...   [1, 2, 3, 20, (1+2j), 'nit', 100, 40, 20, 10, 6, 5]

[45]  l[0] = 100                                            Python

[46]  l                                                     Python
...   [100, 2, 3, 20, (1+2j), 'nit', 100, 40, 20, 10, 6, 5]
```

```
[2]   txt = " abc def ghi "
      print(txt.lstrip())
      print(txt.strip())
      ✓ 0.0s                                                Python
...   abc def ghi
      abc def ghi

[3]   #List Slicing
      mylist = ['one' , 'two' , 'three' , 'four' , 'five' , 'six' , 'sev
      print(mylist[0:3])
      print(mylist[2:5])
      print(mylist[:3])
      print(mylist[:2] )
      print(mylist[-3:] )
      print(mylist[-2:] )
      print(mylist[-1] )
      print(mylist[:])
      ✓ 0.0s                                                Python
...   ['one', 'two', 'three']
      ['three', 'four', 'five']
      ['one', 'two', 'three']
      ['one', 'two']
      ['six', 'seven', 'eight']
      ['seven', 'eight']
      eight
      ['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight']
```

```
mylist
```

0.0s Python

```
['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight']
```

```
#Add , Remove and Change items
mylist.append('nine') # Add an item to the end of the list
print(mylist)

mylist.insert(9,'ten') # Add item at index location 9
print(mylist)

mylist.insert(1,'ONE')
print(mylist)

mylist.remove('ONE')
print(mylist)

mylist.pop()
print(mylist)

mylist.pop(8)
print(mylist)

mylist[0] = 1
mylist[1] = 2
mylist[2] = 3
print(mylist)
```

0.0s Python

```
['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight', 'nine
['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight', 'nine
['one', 'ONE', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight
['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight', 'nine
['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight', 'nine
['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight']
[1, 2, 3, 'four', 'five', 'six', 'seven', 'eight']
```

```
#Copy List
mylist = ['one', 'two', 'three', 'four', 'five', 'six', 'seven', '
mylist
```

[9] 0.0s Python

```
['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight', 'nine
```

```
mylist1 = mylist
mylist1
```

[12] 0.0s Python

```
['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight', 'nine
```

```
id(mylist) , id(mylist1)
```

[14] 0.0s Python

```
(1564198501824, 1564198501824)
```

```
[15]  mylist2 = mylist.copy()
      ✓ 0.0s  Python

[16]  id(mylist2)
      ✓ 0.0s  Python
...   1564206654400

[19]  mylist[0] = 1
      print(mylist)
      print(mylist1)
      print(mylist2)
      ✓ 0.0s  Python
...   [1, 'two', 'three', 'four', 'five', 'six', 'seven', 'eight', 'nine']
      [1, 'two', 'three', 'four', 'five', 'six', 'seven', 'eight', 'nine']
      ['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight', 'nin

[20]  #Join List
      list1 = ['one', 'two', 'three', 'four']
      list2 = ['five', 'six', 'seven', 'eight']
      ✓ 0.0s  Python

[21]  list3 = list1 + list2
      list3
      ✓ 0.0s  Python
...   ['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight']

[22]  list1.extend(list2) #Append list2 with list1
      list1
      ✓ 0.0s  Python
...   ['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight']

[66]  #List Membership
      list1
      ✓ 0.0s  Python
...   ['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight']

[68]  'one' in list1
      ✓ 0.0s  Python
...   True

[69]  'ten' in list1
      ✓ 0.0s  Python
...   False
```

```python
if 'three' in list1: # Check if 'three' exist in the list
  print('Three is present in the list')
else:
  print('Three is not present in the list')
```

[70] ✓ 0.0s Python

```
Three is present in the list
```

```python
if 'eleven' in list1: # Check if 'eleven' exist in the list
  print('eleven is present in the list')
else:
  print('eleven is not present in the list')
```

[71] ✓ 0.0s Python

```
eleven is not present in the list
```

```python
#Reverse and Sort List
list1
```

[72] ✓ 0.0s Python

```
['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight']
```

```python
list1.reverse() # Reverse the list
list1
```

[73] ✓ 0.0s Python

```
['eight', 'seven', 'six', 'five', 'four', 'three', 'two', 'one']
```

```python
list1 = list1[::-1] # Reverse the list
list1
```

[74] ✓ 0.0s Python

```
['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight']
```

```python
mylist3 = [9,5,2,99,12,88,34]
mylist3.sort() # Sort list in ascending order
mylist3
```

[75] ✓ 0.0s Python

```
[2, 5, 9, 12, 34, 88, 99]
```

```python
mylist3 = [9,5,2,99,12,88,34]
mylist3.sort(reverse=True) # Sort list in descending order
mylist3
```

[76] ✓ 0.0s Python

```
[99, 88, 34, 12, 9, 5, 2]
```

```python
mylist4 = [88,65,33,21,11,98]
sorted(mylist4)
```

[78] ✓ 0.0s Python

```
[11, 21, 33, 65, 88, 98]
```

```
print(mylist4)
```

[79] ✓ 0.0s Python

```
[88, 65, 33, 21, 11, 98]
```

```
#Loop through a list
list1
```

[80] ✓ 0.0s Python

```
['one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight']
```

Generate + Code + Markdown

Add Markdown Cell

```
for i in list1:
    print(i)
```

[81] ✓ 0.0s Python

```
one
two
three
four
five
six
seven
eight
```