

# LIST METHODS ( 4 MARCH)

```
In [7]: l=[10,20,30,30,40]  
l
```

```
Out[7]: [10, 20, 30, 30, 40]
```

```
In [9]: for i in l:  
        print(i)
```

```
10  
20  
30  
30  
40
```

```
In [11]: l.append([1,2,3,'hi'])    #nested list  
l
```

```
Out[11]: [10, 20, 30, 30, 40, [1, 2, 3, 'hi']]
```

```
In [13]: l.remove(30)    #remove the 1st element if duplicate are there  
l
```

```
Out[13]: [10, 20, 30, 40, [1, 2, 3, 'hi']]
```

```
In [15]: l.pop()
```

```
Out[15]: [1, 2, 3, 'hi']
```

```
In [21]: l1=[10,20,30,40,40, 2,3, True, (1+2j)]  
l1
```

```
Out[21]: [10, 20, 30, 40, 40, 2, 3, True, (1+2j)]
```

```
In [23]: l1.pop()
```

```
Out[23]: (1+2j)
```

```
In [25]: l1.pop()
```

```
Out[25]: True
```

```
In [27]: l1.pop()
```

```
Out[27]: 3
```

```
In [29]: l1.pop(4)
```

```
Out[29]: 40
```

```
In [35]: l1.pop(4)
```

Out[35]: 2

```
In [37]: print(l)
         print(l1)
```

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

```
In [39]: l.pop(-1)
```

Out[39]: 40

```
In [41]: l.insert(50)
```

```
-----
TypeError                                Traceback (most recent call last)
Cell In[41], line 1
----> 1 l.insert(50)

TypeError: insert expected 2 arguments, got 1
```

```
In [43]: l
```

Out[43]: [10, 20, 30]

```
In [47]: l.append(40)
```

```
In [49]: l
```

Out[49]: [10, 20, 30, 40]

```
In [51]: l.insert(2,20)
```

```
In [53]: l
```

Out[53]: [10, 20, 20, 30, 40]

```
In [55]: l.remove(20)
```

```
In [57]: l
```

Out[57]: [10, 20, 30, 40]

```
In [59]: l2=[]
         l2
```

Out[59]: []

```
In [63]: l2.extend(l1)
         l2
```

Out[63]: [10, 20, 30, 40, 10, 20, 30, 40]

```
In [65]: print(l)
         print(l1)
         print(l2)
```

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

```
In [69]: l.extend(l)  
l
```

```
Out[69]: [10, 20, 30, 40, 10, 20, 30, 40, 10, 20, 30, 40, 10, 20, 30, 40]
```

```
In [75]: print(l)  
l
```

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

```
Out[75]: [10, 20, 30, 40, 10, 20, 30, 40, 10, 20, 30, 40, 10, 20, 30, 40]
```

```
In [77]: l1.index(30)  
l1
```

```
Out[77]: [10, 20, 30, 40]
```

```
In [79]: l
```

```
Out[79]: [10, 20, 30, 40, 10, 20, 30, 40, 10, 20, 30, 40, 10, 20, 30, 40]
```

```
In [81]: l.sort()  
l
```

```
Out[81]: [10, 10, 10, 10, 20, 20, 20, 20, 30, 30, 30, 30, 40, 40, 40, 40]
```

```
In [83]: l.sort(reverse=True)  
l
```

```
Out[83]: [40, 40, 40, 40, 30, 30, 30, 30, 20, 20, 20, 20, 10, 10, 10, 10]
```

```
In [85]: l3= [100 , 80 ,60]  
l3
```

```
Out[85]: [100, 80, 60]
```

```
In [89]: l3.sort()  
l3
```

```
Out[89]: [60, 80, 100]
```

```
In [91]: l3.sort(reverse=True)  
l3
```

```
Out[91]: [100, 80, 60]
```

```
In [93]: i4=[1,2,3,4,'k', 1+5j]    #similar types of values only possible  
i4.sort()
```

```
-----  
TypeError                                Traceback (most recent call last)  
Cell In[93], line 2  
      1 i4=[1,2,3,4,'k', 1+5j]  
----> 2 i4.sort()  
  
TypeError: '<' not supported between instances of 'str' and 'int'
```

```
In [95]: l1
```

```
Out[95]: [10, 20, 30, 40]
```

```
In [97]: l1.reverse()
```

```
In [99]: l1
```

```
Out[99]: [40, 30, 20, 10]
```

```
In [101... l1[::-1]
```

```
Out[101... [10, 20, 30, 40]
```

```
In [103... l1
```

```
Out[103... [40, 30, 20, 10]
```

```
In [105... l1.reverse()  
l1
```

```
Out[105... [10, 20, 30, 40]
```

```
In [ ]:
```