

```
In [2]: l=[]
1
len(l)

Out[2]: 0

In [4]: l=[2,3,4]
1
len(l)

Out[4]: 3

In [9]: l1=[40,40.5,'abc',[20,30,50]]
len(l1)

Out[9]: 4

In [8]: 11

Out[8]: [40, 40.5, 'abc', [20, 30, 50]]

In [10]: l=[5,8,9,10,14,46]
1

Out[10]: [5, 8, 9, 10, 14, 46]

In [14]: l[3]=100
1

Out[14]: [5, 8, 9, 100, 14, 46]

In [12]: l[-3]

Out[12]: 10

In [15]: l[-2]=140
1

Out[15]: [5, 8, 9, 100, 140, 46]

In [20]: 1

Out[20]: [5, 8, 9, 100, 140, 46]

In [17]: l[1:4:1]

Out[17]: [8, 9, 100]

In [19]: l[1:4:2]

Out[19]: [8, 100]

In [21]: l[1:4:3]

Out[21]: [8]

In [22]: l=[2,5,8,9,10,30,60,90,40,600,800]
1

Out[22]: [2, 5, 8, 9, 10, 30, 60, 90, 40, 600, 800]

In [23]: l[:]

Out[23]: [2, 5, 8, 9, 10, 30, 60, 90, 40, 600, 800]

In [24]: l[:6]

Out[24]: [2, 5, 8, 9, 10, 30]

In [25]: l[3:]

Out[25]: [9, 10, 30, 60, 90, 40, 600, 800]

In [26]: l[2:8]

Out[26]: [8, 9, 10, 30, 60, 90]

In [27]: l[0:12:2]

Out[27]: [2, 8, 10, 60, 40, 800]

In [28]: l[0:13:3]

Out[28]: [2, 9, 60, 600]

In [29]: 1

Out[29]: [2, 5, 8, 9, 10, 30, 60, 90, 40, 600, 800]

In [30]: l[-7:-1:1]

Out[30]: [10, 30, 60, 90, 40, 600]

In [31]: l[-7:-1]

Out[31]: [10, 30, 60, 90, 40, 600]

In [32]: l[-7:-1:2]

Out[32]: [10, 60, 40]

In [39]: l=[20,30,50,[20,50,80],'abcd']
1

Out[39]: [20, 30, 50, [20, 50, 80], 'abcd']

In [37]: l[3][-2]

Out[37]: 50

In [38]: [20, 50, 80][-2]

Out[38]: 50

In [40]: l[4]

Out[40]: 'abcd'

In [42]: l[-2][-3]

Out[42]: 20

In [43]: l=[[2,4,6],['abc',[1,2,3]]]
1

Out[43]: [[2, 4, 6], ['abc', [1, 2, 3]]]
```

```
In [46]: l[l][1][1]=2000

In [47]: l

Out[47]: [[2, 4, 6], ['abc', [1, 2000, 3]]]

In [48]: l[l][0]="sdfyugogfrttuyhuigyid5trstrdyty8i8gf7yf"
l

Out[48]: [[2, 4, 6], ['sdfyugogfrttuyhuigyid5trstrdyty8i8gf7yf', [1, 2000, 3]]]

In [56]: l=list(range(0,2001,2))

-----
ValueError                                Traceback (most recent call last)
<ipython-input-56-e42867f2bc30> in <module>
----> 1 l=list(range(0,2001,0))

ValueError: range() arg 3 must not be zero

In [55]: l

Out[55]: [0,
2,
4,
6,
8,
10,
12,
14,
16,
18,
20,
22,
24,
26,
28,
30,
32,
34,
36,
..

In [57]: l=[2,5,7,8]

In [58]: l.append(60)

In [59]: l

Out[59]: [2, 5, 7, 8, 60]

In [60]: l.append(600)

In [61]: l

Out[61]: [2, 5, 7, 8, 60, 600]

In [62]: l.append(40.6)

In [63]: l

Out[63]: [2, 5, 7, 8, 60, 600, 40.6]

In [64]: l.append("nielit")

In [65]: l

Out[65]: [2, 5, 7, 8, 60, 600, 40.6, 'nielit']

In [66]: l.append([1,2,3])

In [67]: l

Out[67]: [2, 5, 7, 8, 60, 600, 40.6, 'nielit', [1, 2, 3]]

In [68]: len(l)

Out[68]: 9

In [69]: l.append(list(range(1,1001)))

In [70]: l

Out[70]: [2,
5,
7,
8,
60,
600,
40.6,
'nielit',
[1, 2, 3],
[1,
2,
3,
4,
5,
6,
7,
8,
9,
10,
..

In [71]: len(l)

Out[71]: 10

In [72]: l[9]

Out[72]: [1,
2,
3,
4,
5,
6,
7,
8,
9,
10,
11,
12,
13,
14,
15,
16,
17,
18,
19,
..
```

```
In [73]: 1
Out[73]: [2,
5,
7,
8,
60,
600,
40.6,
'niellit',
[1, 2, 3],
[1,
2,
3,
4,
5,
6,
7,
8,
9,
10,
--

In [74]: 1.insert(2,["abc","xyz"])
1
Out[74]: [2,
5,
['abc', 'xyz'],
7,
8,
60,
600,
40.6,
'niellit',
[1, 2, 3],
[1,
2,
3,
4,
5,
6,
7,
8,
9,
--

In [75]: 1.insert(3,"gasdghdsfhefgeyfgwegfjerghrjgwe f jg f jghfrjr f rghtyjyu")
1
Out[75]: [2,
5,
['abc', 'xyz'],
'gasdghdsfhefgeyfgwegfjerghrjgwe f jg f jghfrjr f rghtyjyu',
7,
8,
60,
600,
40.6,
'niellit',
[1, 2, 3],
[1,
2,
3,
4,
5,
6,
7,
8,
^

In [78]: 1.index([1,2,3])
Out[78]: 10

In [ ]: 1=[3,45,7]
```