

```
In [1]: l=[2,4,6]
        l.append("strghjk")

In [2]: 1
Out[2]: [2, 4, 6, 'strghjk']

In [3]: l.insert(2,6789)
        1
Out[3]: [2, 4, 6789, 6, 'strghjk']

In [4]: l.pop()
Out[4]: 'strghjk'

In [5]: 1
Out[5]: [2, 4, 6789, 6]

In [6]: l.pop(1)
Out[6]: 4

In [7]: 1
Out[7]: [2, 6789, 6]

In [8]: l.clear()

In [9]: 1
Out[9]: []

In [10]: l1=[2,4,8]
         l2=[10,12,18]
         l1+l2
Out[10]: [2, 4, 8, 10, 12, 18]

In [11]: l2+l1
Out[11]: [10, 12, 18, 2, 4, 8]

In [12]: l1*3
Out[12]: [2, 4, 8, 2, 4, 8, 2, 4, 8]

In [13]: l1=[13,14,16]
         l2=[20,21,22]
         l1.extend(l2)

In [14]: l1
Out[14]: [13, 14, 16, 20, 21, 22]

In [15]: l=[ [2,3],[4,5] ]
         l[0]
Out[15]: [2, 3]

In [ ]:

In [16]: l[1]
Out[16]: [4, 5]

In [21]: t=()
         len(t)
Out[21]: 0

In [19]: type(t)
Out[19]: tuple

In [20]: l=[]
         type(l)
Out[20]: list

In [28]: l=[2]
         type(l)
Out[28]: list

In [26]: t=(2,)
         type(t)
Out[26]: tuple

In [29]: t=(2,4.5,"abcdg",[2,6,7])
         t
Out[29]: (2, 4.5, 'abcdg', [2, 6, 7])

In [30]: t=(2,5,6)
         t
Out[30]: (2, 5, 6)

In [33]: l=[10,12,13,(2,5,6),[1,2,3]]
         len(l)
Out[33]: 5

In [32]: l[3]
Out[32]: (2, 5, 6)

In [34]: t=(2,8,9)
         type(t)
Out[34]: tuple

In [35]: t=2,8,9
         type(t)
Out[35]: tuple

In [38]: t1=(2,4)
         type(t1)
Out[38]: tuple
```

```
In [39]: l=[2,4,8]
         l[1]=400
         l
Out[39]: [2, 400, 8]

In [40]: t=(2,4,8)
         t[1]=400
         t
-----
TypeError                                Traceback (most recent call last)
<ipython-input-40-0065d33277a6> in <module>
      1 t=(2,4,8)
----> 2 t[1]=400
      3 t
TypeError: 'tuple' object does not support item assignment

In [44]: t=(2,4,8,[1,2,3])
         t[3][2]=300
         t
Out[44]: (2, 4, 8, [1, 2, 300])

In [46]: t=(3,8,(5,7,8,(1,2,3),[10,20,30]),[[1,4,8],[50,90,70]])
         len(t)
Out[46]: 4

In [48]: t[2][4][2]=3000
Out[48]:

In [49]: t
Out[49]: (3, 8, (5, 7, 8, (1, 2, 3), [10, 20, 3000]), [[1, 4, 8], [50, 90, 70]])

In [52]: t[3][1][-2]=9000
         t
Out[52]: (3, 8, (5, 7, 8, (1, 2, 3), [10, 20, 3000]), [[1, 4, 8], [50, 9000, 70]])

In [53]: t[1]=80
         t
-----
TypeError                                Traceback (most recent call last)
<ipython-input-53-c0bd42727d1c> in <module>
----> 1 t[1]=80
      2 t
TypeError: 'tuple' object does not support item assignment

In [56]: t=(2,5,6,2)
         t
Out[56]: (2, 5, 6, 2)

In [57]: t.count(2)
Out[57]: 2

In [58]: t.index(6)
Out[58]: 2

In [60]: d={}
         d
         type(d)
Out[60]: dict

In [61]: d={1:2,2:4}
         d
Out[61]: {1: 2, 2: 4}

In [62]: d={'A':[2,3,4],'B':(1,10,11)}
         d
Out[62]: {'A': [2, 3, 4], 'B': (1, 10, 11)}

In [63]: d={10.5:30.4,20.5:60.7}
         d
Out[63]: {10.5: 30.4, 20.5: 60.7}

In [67]: d={10.4:20.3,'A':(2,6)}
         d
         type(d)
         len(d)
Out[67]: 2

In [70]: d={"A":{"a":10,"b":[2,8,9]],"B":20,"C":(2,6,7),"D":[[2,8],[20,90]]}
         len(d)
Out[70]: 4

In [71]: d
Out[71]: {'A': ('a': 10, 'b': [2, 8, 9]),
          'B': 20,
          'C': (2, 6, 7),
          'D': [[2, 8], [20, 90]]}

In [72]: l=[{'a':10,'b':20},[2,4,5],[3,7,8),10,10.5,"agfghfhjgjkhkj"]
         l[0]
Out[72]: {'a': 10, 'b': 20}

In [73]: l[-6]
Out[73]: {'a': 10, 'b': 20}

In [74]: t=({'a':10,'b':20},[2,4,5],[3,7,8),10,10.5,"agfghfhjgjkhkj")
         t[0]
Out[74]: {'a': 10, 'b': 20}

In [75]: t[-6]
Out[75]: {'a': 10, 'b': 20}

In [76]: t[-3]
Out[76]: 10
```

In [77]:

t[-5]

Out[77]:

[2, 4, 5]

In []: