



```
In [2]: t=()  
t
```

```
Out[2]: ()
```

```
In [3]: type(t)
```

```
Out[3]: tuple
```

```
In [4]: t1=(10,20,30)  
t1
```

```
Out[4]: (10, 20, 30)
```

```
In [5]: t2=(3.2,5.1,67.23)  
t2
```

```
Out[5]: (3.2, 5.1, 67.23)
```

```
In [6]: t3=('one','two','three')  
t3
```

```
Out[6]: ('one', 'two', 'three')
```

```
In [7]: t4=('aaa',23,(23,12),(13,62))  
t4
```

```
Out[7]: ('aaa', 23, (23, 12), (13, 62))
```

```
In [8]: t5=(60,'one',38.63)  
t5
```

```
Out[8]: (60, 'one', 38.63)
```

```
In [ ]: len(t1)
```

```
Out[ ]: 3
```

```
In [10]: t1
```

```
Out[10]: (10, 20, 30)
```

```
In [11]: t1[1]
```

```
Out[11]: 20
```

```
In [12]: t3
```

```
Out[12]: ('one', 'two', 'three')
```

```
In [13]: t3[1][1]
```

```
Out[13]: 'w'
```

```
In [14]: t3[-1]
```

```
Out[14]: 'three'
```

```
In [15]: t4
```

```
Out[15]: ('aaa', 23, (23, 12), (13, 62))
```

```
In [16]: t4[2][0]
```

```
Out[16]: 23
```

```
In [17]: t4[-1]
```

```
Out[17]: (13, 62)
```

```
In [20]: t9=('one','two','three','four','five','six','seven','eight','nine')  
t9
```

```
Out[20]: ('one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight', 'nine')
```

```
In [21]: t9[2:5]
```

```
Out[21]: ('three', 'four', 'five')
```

```
In [22]: t9[:6]
```

```
Out[22]: ('one', 'two', 'three', 'four', 'five', 'six')
```

```
In [24]: t9[:]
```

```
Out[24]: ('one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight', 'nine')
```

```
In [25]: t9[-1]
```

```
Out[25]: 'nine'
```

```
In [26]: t9[-3:]
```

```
Out[26]: ('seven', 'eight', 'nine')
```

```
In [30]: t9.count(42)
```

```
Out[30]: 0
```

```
In [31]: t9.count('one')
```

Out[31]: 1

In [32]: `t9.remove('one')`

```
-----  
AttributeError                                Traceback (most recent call last)  
Cell In[32], line 1  
----> 1 t9.remove('one')  
  
AttributeError: 'tuple' object has no attribute 'remove'
```

In [33]: `t9.index('five')`

Out[33]: 4

In [34]: `del t9[4]`

```
-----  
TypeError                                Traceback (most recent call last)  
Cell In[34], line 1  
----> 1 del t9[4]  
  
TypeError: 'tuple' object doesn't support item deletion
```

In [35]: `t3`

Out[35]: ('one', 'two', 'three')

In []: `del t3`

In [37]: `t3`

```
-----  
NameError                                Traceback (most recent call last)  
Cell In[37], line 1  
----> 1 t3  
  
NameError: name 't3' is not defined
```

In [38]: `t9`

Out[38]: ('one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight', 'nine')

In [39]: `t1`

Out[39]: (10, 20, 30)

In [42]: `t10=t1*3`
`t10`

Out[42]: (10, 20, 30, 10, 20, 30, 10, 20, 30)

```
In [43]: t10.count(10)
```

```
Out[43]: 3
```

```
In [44]: t9
```

```
Out[44]: ('one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight', 'nine')
```

```
In [49]: t9
```

```
Out[49]: ('one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight', 'nine')
```

```
In [50]: for i in t9:
          print(i)
```

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

```
In [51]: for i in enumerate(t9):
          print(i)
```

```
(0, 'one')
(1, 'two')
(2, 'three')
(3, 'four')
(4, 'five')
(5, 'six')
(6, 'seven')
(7, 'eight')
(8, 'nine')
```

```
In [58]: t11=(23,2,56,37,81,25,38,71,12)
          t11
```

```
Out[58]: (23, 2, 56, 37, 81, 25, 38, 71, 12)
```

```
In [59]: sorted(t11)
```

```
Out[59]: [2, 12, 23, 25, 37, 38, 56, 71, 81]
```

```
In [60]: sorted(t11,reverse=True)
```

```
Out[60]: [81, 71, 56, 38, 37, 25, 23, 12, 2]
```