

```
In [1]: tuple=()
```

```
In [3]: tuple
```

```
Out[3]: ()
```

```
In [5]: type(tuple)
```

```
Out[5]: tuple
```

```
In [7]: t1=(89,30.4,'nit',2+5j)
t1
```

```
Out[7]: (89, 30.4, 'nit', (2+5j))
```

```
In [9]: t2=(23,66,'hi',(60,89),(78,23),'sky')
t2
```

```
Out[9]: (23, 66, 'hi', (60, 89), (78, 23), 'sky')
```

```
In [11]: t2[4]
```

```
Out[11]: (78, 23)
```

```
In [13]: t3=('manu',37,[45,87],{'hey','siri'})
t3
```

```
Out[13]: ('manu', 37, [45, 87], {'hey', 'siri'})
```

```
In [15]: t3[5]
```

```
-----
IndexError                                Traceback (most recent call last)
Cell In[15], line 1
----> 1 t3[5]

IndexError: tuple index out of range
```

```
In [17]: t3[3]
```

```
Out[17]: {'hey', 'siri'}
```

```
In [20]: t1
```

```
Out[20]: (89, 30.4, 'nit', (2+5j))
```

```
In [24]: t1[2][0]
```

```
Out[24]: 'n'
```

```
In [26]: t1[2][1]
```

Out[26]: 'i'

In [28]: `t1[2][2]`

Out[28]: 't'

In [30]: `t2`

Out[30]: (23, 66, 'hi', (60, 89), (78, 23), 'sky')

In [32]: `t2[-3]`

Out[32]: (60, 89)

In [34]: `len(t2)`

Out[34]: 6

In [36]: `len(t1)`

Out[36]: 4

In [38]: `len(t3)`

Out[38]: 4

In [40]: `t1`

Out[40]: (89, 30.4, 'nit', (2+5j))

In [42]: `t2`

Out[42]: (23, 66, 'hi', (60, 89), (78, 23), 'sky')

In [44]: `t3`

Out[44]: ('manu', 37, [45, 87], {'hey', 'siri'})

In [46]: `t2[:]`

Out[46]: (23, 66, 'hi', (60, 89), (78, 23), 'sky')

In [48]: `t2[2:5]`

Out[48]: ('hi', (60, 89), (78, 23))

In [50]: `t1[2:4]`

Out[50]: ('nit', (2+5j))

In [52]: `t1.count(t1)`

Out[52]: 0

```
In [56]: t1.count(30.4)
```

Out[56]: 1

```
In [62]: t2.count('hi')
```

Out[62]: 1

```
In [64]: for i in t2:
          print(i)
```

```
23
66
hi
(60, 89)
(78, 23)
sky
```

```
In [66]: sorted(t2)
```

```
-----
TypeError                                Traceback (most recent call last)
Cell In[66], line 1
----> 1 sorted(t2)

TypeError: '<' not supported between instances of 'str' and 'int'
```

```
In [72]: t4=('sri','manu','sha')
          t4
```

Out[72]: ('sri', 'manu', 'sha')

```
In [74]: sorted(t4)
```

Out[74]: ['manu', 'sha', 'sri']

```
In [76]: if 'sha' in t4:
          print('yes')
        else:
          print('no')
```

yes

```
In [78]: if 'shi' in t4:
          print('yes')
        else:
          print('no')
```

no

```
In [80]: t1
```

Out[80]: (89, 30.4, 'nit', (2+5j))

```
In [82]: if 10 in t1:
          print('yes')
        else:
          print('no')
```

no

```
In [ ]:
```