24-10-2025

Tuple creation

```
In [1]:  tup1 = ()
```

```
In [2]:  tup2 = (10,30,60)
```

```
In [3]:  tup3 = (10.77,30.66,60.89)
```

```
In [4]:  tup4 = ('one','two', "three")
```

```
In [5]:  tup5 = ('Asif', 25 ,(50, 100),(150, 90))
```

```
In [6]:  tup6 = (100, 'Asif', 17.765)
```

```
In [7]:  tup7 = ('Asif', 25, [50, 100],[150, 90] , {'John' , 'David'} , (99,22,33))
```

```
In [8]:  len(tup7)
```

```
Out[8]:  6
```

Tuple indexing

```
In [9]:  tup2[0]
```

```
Out[9]:  10
```

```
In [10]:  tup4[0]
```

```
Out[10]:  'one'
```

```
In [12]:  tup4[0][0]
```

```
Out[12]:  'o'
```

```
In [13]:  tup4[-1]
```

```
Out[13]:  'three'
```

```
In [14]:  tup5[-1]
```

```
Out[14]:  (150, 90)
```

Tuple Slicing

```
In [15]:  mytuple = ('one','two','three','four','five','six','seven','eight')
```

```
In [16]:  mytuple[0:3]
```

```
Out[16]:  ('one', 'two', 'three')
```

```
In [17]:  mytuple[2:5]
```

```
Out[17]:  ('three', 'four', 'five')
```

```
In [18]:  mytuple[:3]
```

```
Out[18]:  ('one', 'two', 'three')
```

```
In [19]:  mytuple[:2]
```

```
Out[19]:  ('one', 'two')
```

```
In [20]:  mytuple[-3:]
```

```
Out[20]:  ('six', 'seven', 'eight')
```

```
In [22]:  mytuple[-2:]
```

```
Out[22]:  ('seven', 'eight')
```

```
In [23]:  mytuple[-1]
```

```
Out[23]:  'eight'
```

```
In [24]:  mytuple[:]
```

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

Remove & Change Items

```
In [32]:  mytuple = ('one','two','three','four','five','six','seven','eight')
```

```
In [33]:  mytuple
```

```
Out[33]:  ('one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight')
```

Loop through a tuple

```
In [34]:  mytuple
```

```
Out[34]:  ('one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight')
```

```
In [35]:  for i in mytuple:
              print(i)
```

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

In [36]:
```python
for i in enumerate(mytuple):
        print(i)
```

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

Tuple Membership

In [37]:
```python
mytuple
```

Out[37]: ('one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight')

In [38]:
```python
'one' in mytuple
```

Out[38]: True

In [39]:
```python
'ten' in mytuple
```

Out[39]: False

In [40]:
```python
if 'three' in mytuple:
        print('Three is present in the tuple')
else:
        print('Three is not present in the tuple')
```

```
Three is present in the tuple
```

In [42]:
```python
if 'eleven' in mytuple:
        print('eleven is present in the tuple')
else:
        print('eleven is not present in the tuple')
```

```
eleven is not present in the tuple
```

Index Position

In [43]:
```python
mytuple
```

Out[43]: ('one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight')

In [44]:
```python
mytuple.index('one')
```

```
Out[44]:  0
```

```
In [45]:  mytuple
```

```
Out[45]:  ('one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight')
```

```
In [46]:  mytuple.index('one')
```

```
Out[46]:  0
```

```
In [47]:  mytuple.index('five')
```

```
Out[47]:  4
```

```
In [49]:  mytuple
```

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

```
In [52]:  mytuple
```

```
Out[52]:  ('one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight')
```

```
In [53]:  mytuple.index('one')
```

```
Out[53]:  0
```

Sorting

```
In [54]:  mytuple2 = (43,67,99,12,6,90,67)
```

```
In [55]:  sorted(mytuple2)
```

```
Out[55]:  [6, 12, 43, 67, 67, 90, 99]
```

```
In [56]:  sorted(mytuple2, reverse=True)
```

```
Out[56]:  [99, 90, 67, 67, 43, 12, 6]
```

Remove & Change Items

```
In [57]:  mytuple
```

```
Out[57]:  ('one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight')
```

```
In [58]:  del mytuple[0]
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
Cell In[58], line 1
----> 1 del mytuple[0]

TypeError: 'tuple' object doesn't support item deletion
```

```
In [59]:  mytuple[0] = 1
```

```
-------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
Cell In[59], line 1
----> 1 mytuple[0] = 1

TypeError: 'tuple' object does not support item assignment
```

```
In [60]:  del mytuple
```

```
In [ ]:
```