Tuple

In [10]:

```python
tup1 = ()
```

In [12]:

```python
tup2 = (1,2,3)
```

In [14]:

```python
tup3 = (5.5,6.7,7.6,8.9)
```

In [25]:

```python
tup4 = ('one','two','three')
```

In [31]:

```python
tup5 = ('kavya', 1 ,(1,2),(3,5))
```

In [33]:

```python
tup6 = (100,'kavya', 2.5)
```

In [36]:

```python
tup7 = ('kavya', 2 ,[20, 10], {'Nikitha', 'Sania'}, (3,4,5))
```

In [38]:

```python
len(tup7)
```

Out[38]:

    5

Tuple indexing

In [41]:

```python
tup2[0]
```

Out[41]:

    1

In [43]:

```python
tup4[0]
```

Out[43]:

    'one'

In [45]:

```python
tup5[-1]
```

Out[45]:

    (3, 5)

In [47]:

```python
tup4[0][0]
```

Out[47]:

```
'o'
```

In [51]:

```python
tup6[-1]
```

Out[51]:

```
2.5
```

Tuple slicing

In [120]:

```python
mytuple = ('one' , 'two' , 'three' , 'four' , 'five' , 'six' , 'seven' , 'eight')
```

In [87]:

```python
mytuple[0:3]
```

Out[87]:

```
('one', 'two', 'three')
```

In [89]:

```python
mytuple[2:5]
```

Out[89]:

```
('three', 'four', 'five')
```

In [95]:

```python
mytuple[:3] # Return first three items
```

Out[95]:

```
('one', 'two', 'three')
```

In [97]:

```python
mytuple[:2] # Return first two items
```

Out[97]:

```
('one', 'two')
```

In [99]:

```python
mytuple[-3:] # Return last three items
```

Out[99]:

```
('six', 'seven', 'eight')
```

In [101]:

```python
mytuple[-2:] # Return last two items
```

Out[101]:

```
('seven', 'eight')
```

In [103]:

```python
mytuple[-1] # Return last item of the tuple
```

Out[103]:

```
'eight'
```

In [105]:

```python
mytuple[:] # Return whole tuple
```

Out[105]:

```
('one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight')
```

Remove & chnage items

In [107]:

```python
mytuple
```

Out[107]:

```
('one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight')
```

In [109]:

```python
del mytuple[0]
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
Cell In[109], line 1
----> 1 del mytuple[0]

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

In [111]:

```python
mytuple[0] = 1
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
Cell In[111], line 1
----> 1 mytuple[0] = 1

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

In [113]:

```python
del mytuple
```

LOOP

In [122]:

```python
mytuple
```

Out[122]:

    ('one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight')

In [124]:

```python
for i in mytuple:
    print(i)
```

    one
    two
    three
    four
    five
    six
    seven
    eight

In [126]:

```python
for i in enumerate(mytuple):
    print(i)
```

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

COUNT

In [129]:

```python
mytuple1 =('one', 'two', 'three', 'four', 'one', 'one', 'two', 'three')
```

In [131]:

```python
mytuple1.count('one')
```

Out[131]:

    3

In [133]:

```python
mytuple1.count('two')
```

Out[133]:

    2

In [135]:

```python
mytuple1.count('four')
```

Out[135]:

    1

Tuple membriship

In [140]:

```
mytuple
```

Out[140]:

```
('one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight')
```

In [142]:

```
'one' in mytuple
```

Out[142]:

```
True
```

In [144]:

```
'ten' in mytuple
```

Out[144]:

```
False
```

In [146]:

```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 [148]:

```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
```

Indexpostion

In [151]:

```
mytuple
```

Out[151]:

```
('one', 'two', 'three', 'four', 'five', 'six', 'seven', 'eight')
```

In [153]:

```
mytuple.index('one')
```

Out[153]:

```
0
```

In [155]:

```
mytuple.index('five')
```

Out[155]:

    4

In [157]:

```
mytuple1
```

Out[157]:

    ('one', 'two', 'three', 'four', 'one', 'one', 'two', 'three')

In [159]:

```
mytuple1.index('one')
```

Out[159]:

    0

sorting

In [162]:

```
mytuple2 = (43,67,99,12,6,90,67)
```

In [164]:

```
sorted(mytuple2)
```

Out[164]:

    [6, 12, 43, 67, 67, 90, 99]

In [166]:

```
sorted(mytuple2, reverse=True)
```

Out[166]:

    [99, 90, 67, 67, 43, 12, 6]

In [ ]:

In [ ]: