

# Assignment 3

## Tuple

```
In [89]: t=() # initize with empty tuple
```

```
In [90]: type(t) # return type
```

```
Out[90]: tuple
```

```
In [91]: t1=(1,2,3,4,5,6,6) #assign values
```

```
In [92]: t1.index(6)# it return index of the item in tuple
```

```
Out[92]: 5
```

```
In [93]: t1.count(6)# it return repeted time of the item or elemnts
```

```
Out[93]: 2
```

```
In [94]: t2=t1*2  
print(t2)
```

```
(1, 2, 3, 4, 5, 6, 6, 1, 2, 3, 4, 5, 6, 6)
```

```
In [95]: t3=(5,[5,6,7],(6,6)) #Nested tuple  
t3
```

```
Out[95]: (5, [5, 6, 7], (6, 6))
```

```
In [96]: len(t2)
```

```
Out[96]: 14
```

## Tuple Indexing

```
In [97]: t4=(143,183.4,"mahesh",34+6j,"all is well","doing what is right", "rest is rust")  
t4
```

```
Out[97]: (143,  
          183.4,  
          'mahesh',  
          (34+6j),  
          'all is well',  
          'doing what is right',  
          'rest is rust')
```

```
In [98]: for i in enumerate(t4):  
          print(i,)
```

```
(0, 143)
(1, 183.4)
(2, 'mahesh')
(3, (34+6j))
(4, 'all is well')
(5, 'doing what is right')
(6, 'rest is rust')
```

```
In [99]: t4[2:]
```

```
Out[99]: ('mahesh', (34+6j), 'all is well', 'doing what is right', 'rest is rust')
```

```
In [100]: print(t4[:7],end="")
```

```
(143, 183.4, 'mahesh', (34+6j), 'all is well', 'doing what is right', 'rest is ru
st')
```

```
In [101]: t4[:5]
```

```
Out[101]: (143, 183.4, 'mahesh', (34+6j), 'all is well')
```

```
In [102]: t4[-5:]
```

```
Out[102]: ('mahesh', (34+6j), 'all is well', 'doing what is right', 'rest is rust')
```

## Removing and changing Items

```
In [68]: for i in enumerate(t4):
          print(i)
```

```
(0, 143)
(1, 183.4)
(2, 'mahesh')
(3, (34+6j))
(4, 'all is well')
(5, 'doing what is right')
(6, 'rest is rust')
```

```
In [61]: del t4[5]
```

```
-----
TypeError                                Traceback (most recent call last)
Cell In[61], line 1
----> 1 del t4[5]

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

```
In [62]: del t4 #we can delete an whole tuple but we cannot delete values in the tuple be
```

```
In [103]: t4=(143,6,183.4,"mahesh",34+6j,"all is well","doing what is right", "rest is rus
t4
```

```
Out[103...] (143,  
             6,  
             183.4,  
             'mahesh',  
             (34+6j),  
             'all is well',  
             'doing what is right',  
             'rest is rust')
```

```
In [104...] for i in t4:  
            print(i)
```

```
143  
6  
183.4  
mahesh  
(34+6j)  
all is well  
doing what is right  
rest is rust
```

```
for i in enumerate(t4): print(i)
```

## membership operator

```
In [105...] 6 in t4 # it checks whether elements is present or not
```

```
Out[105...] True
```

```
In [106...] 4 in t4
```

```
Out[106...] False
```

## index

```
In [107...] t4.index(143)
```

```
Out[107...] 0
```

```
In [ ]: t4.index(13) #ValueError: tuple.index(x): x not in tuple
```

```
In [109...] t4.index("mahesh")
```

```
Out[109...] 3
```

## sort

```
In [110...] t5=(23,2323,232,64687,245345,4352,3532)
```

```
In [111...] sorted(t5) # return th sorted tuple
```

Out[111... [23, 232, 2323, 3532, 4352, 64687, 245345]

In [112... `sorted(t5,reverse=True)` *# return th sorted tuple in decsending order*

Out[112... [245345, 64687, 4352, 3532, 2323, 232, 23]

In [ ]: