Tuple Eng

February 6, 2023

```
[1]: t = ()
 [2]: type(t)
 [2]: tuple
 [3]: t1 = (1,2,3,4,45,45.45 , 45+7j , "sudh" , True)
 [4]: type(t1)
 [4]: tuple
 [5]: 1 = [1,2,3,4]
 [6]: type(1)
 [6]: list
 [7]: t1
 [7]: (1, 2, 3, 4, 45, 45.45, (45+7j), 'sudh', True)
 [8]: t1[0]
 [8]: 1
 [9]: t1[7]
 [9]: 'sudh'
[10]: t1[::-1]
[10]: (True, 'sudh', (45+7j), 45.45, 45, 4, 3, 2, 1)
[11]: t1 = t1[::-1]
[12]: t1
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[12]: (True, 'sudh', (45+7j), 45.45, 45, 4, 3, 2, 1)
[14]: t1[0:3]
[14]: (True, 'sudh', (45+7j))
[15]: t1
[15]: (True, 'sudh', (45+7j), 45.45, 45, 4, 3, 2, 1)
[16]: t1.count(4)
[16]: 1
[17]: t1.count("abc")
[17]: 0
[18]: t1.index(1)
[18]: 0
[19]: t1.index("sudh")
[19]: 1
[20]: t1
[20]: (True, 'sudh', (45+7j), 45.45, 45, 4, 3, 2, 1)
[21]: t1.count(True)
[21]: 2
[22]: t1.count(1)
[22]: 2
[24]: t1
[24]: (True, 'sudh', (45+7j), 45.45, 45, 4, 3, 2, 1)
[25]: 1
[25]: [1, 2, 3, 4]
[26]: t1[0]
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[26]: True
     ""Tuple are basically follows Immutability concepts where it is not going to allow to change any
     element at a perticular index"","
[27]: t1[0] = 345
                                                   Traceback (most recent call last)
       TypeError
       Cell In[27], line 1
       ---> 1 t1[0] = 345
       TypeError: 'tuple' object does not support item assignment
[28]: 1
[28]: [1, 2, 3, 4]
[29]: 1[0]
[29]: 1
[30]: |1[0] = 100
[31]: 1
[31]: [100, 2, 3, 4]
[32]: t1
[32]: (True, 'sudh', (45+7j), 45.45, 45, 4, 3, 2, 1)
[35]: for i in t1:
          print(i , type(i))
     True <class 'bool'>
     sudh <class 'str'>
     (45+7j) <class 'complex'>
     45.45 <class 'float'>
     45 <class 'int'>
     4 <class 'int'>
     3 <class 'int'>
     2 <class 'int'>
     1 <class 'int'>
[36]: t2 = (1,2,3,3,4)
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[37]: t2
[37]: (1, 2, 3, 3, 4)
[38]: t2 * 3
[38]: (1, 2, 3, 3, 4, 1, 2, 3, 3, 4, 1, 2, 3, 3, 4)
[39]: max(t2)
[39]: 4
[40]: min(t2)
[40]: 1
[41]: t1 = (1,2,32,4)
      t2 = (4,5,6,7,8)
[42]: t3 = (t1,t2)
[43]: t3
[43]: ((1, 2, 32, 4), (4, 5, 6, 7, 8))
[44]: t4 = ((1,2,3,4,5), [1,3,5,6,7,8])
[45]: t4
[45]: ((1, 2, 3, 4, 5), [1, 3, 5, 6, 7, 8])
[46]: del t4
[47]: t4
      NameError
                                                 Traceback (most recent call last)
      Cell In[47], line 1
      ----> 1 t4
      NameError: name 't4' is not defined
[48]: t1
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[48]: (1, 2, 32, 4)

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[49]: len(t1)
[49]: 4
[50]: t1
[50]: (1, 2, 32, 4)
[51]: "sudh" in t1
[51]: False
[52]: 2 in t1
[52]: True
[ ]:
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