

collections

June 25, 2021

```
[1]: t = 1,2,3,4,6.7,5.6,89  
     print(type(t))
```

```
<class 'tuple'>
```

```
[2]: t
```

```
[2]: (1, 2, 3, 4, 6.7, 5.6, 89)
```

```
[3]: t[1]
```

```
[3]: 2
```

```
[4]: t[0]
```

```
[4]: 1
```

```
[5]: t[len(t)-1]
```

```
[5]: 89
```

```
[6]: t[-1]
```

```
[6]: 89
```

```
[7]: t
```

```
[7]: (1, 2, 3, 4, 6.7, 5.6, 89)
```

```
[8]: t[0]
```

```
[8]: 1
```

```
[9]: t[1]
```

```
[9]: 2
```

```
[10]: t[5]
```

[10]: 5.6

```
[11]: len(t)
```

[11]: 7

```
[12]: 1
```

```
-----  
NameError                                Traceback (most recent call last)  
<ipython-input-12-cde25b5e10ad> in <module>  
----> 1 1  
  
NameError: name 'l' is not defined
```

```
[13]: l = [3,4,5,6, 5.6, 6.7, "Hello", (3,4), [6,7], 45]
```

```
[14]: l[0]
```

[14]: 3

```
[15]: l[1]
```

[15]: 4

```
[16]: l[-1]
```

[16]: 45

```
[17]: l
```

[17]: [3, 4, 5, 6, 5.6, 6.7, 'Hello', (3, 4), [6, 7], 45]

```
[18]: l[6]
```

[18]: 'Hello'

```
[19]: s = l[6]  
      s[0]
```

[19]: 'H'

```
[20]: l[6][0]
```

[20]: 'H'

```
[21]: l[6][2]
```

```
[21]: '1'
```

```
[22]: l[7]
```

```
[22]: (3, 4)
```

```
[23]: l[7][0]
```

```
[23]: 3
```

```
[24]: l[8]
```

```
[24]: [6, 7]
```

```
[25]: l[8][-1]
```

```
[25]: 7
```

```
[26]: s = "Hello"  
s[0]
```

```
[26]: 'H'
```

```
[27]: s[-1]
```

```
[27]: 'o'
```

```
[28]: d = {'a':12, 'b':18, 'c':[2,3,4,5], 'd':(4,5), 'f':{'t':45}}
```

```
[29]: d['a']
```

```
[29]: 12
```

```
[30]: d['c']
```

```
[30]: [2, 3, 4, 5]
```

```
[31]: d['c'][3]
```

```
[31]: 5
```

```
[32]: d
```

```
[32]: {'a': 12, 'b': 18, 'c': [2, 3, 4, 5], 'd': (4, 5), 'f': {'t': 45}}
```

[]: