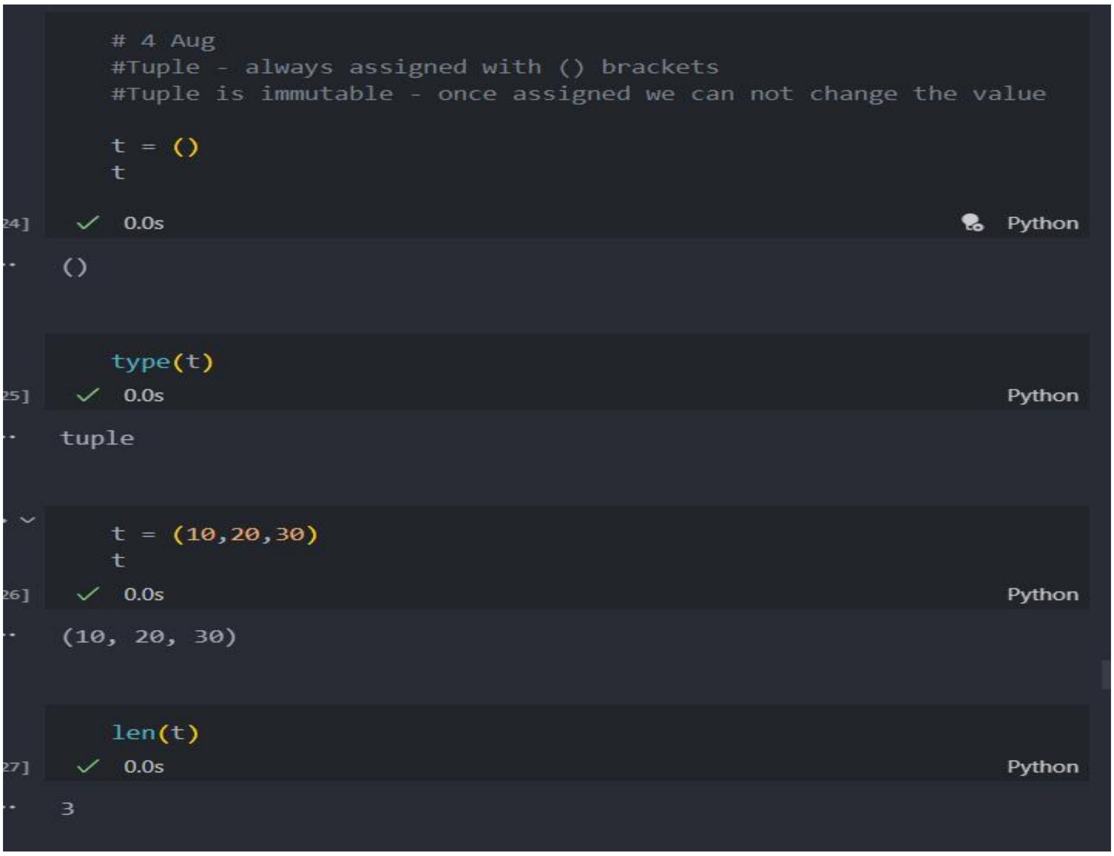
#Tuple in python



```
# 4 Aug
#Tuple - always assigned with () brackets
#Tuple is immutable - once assigned we can not change the value

t = ()
t
```

```
()
```

```
type(t)
```

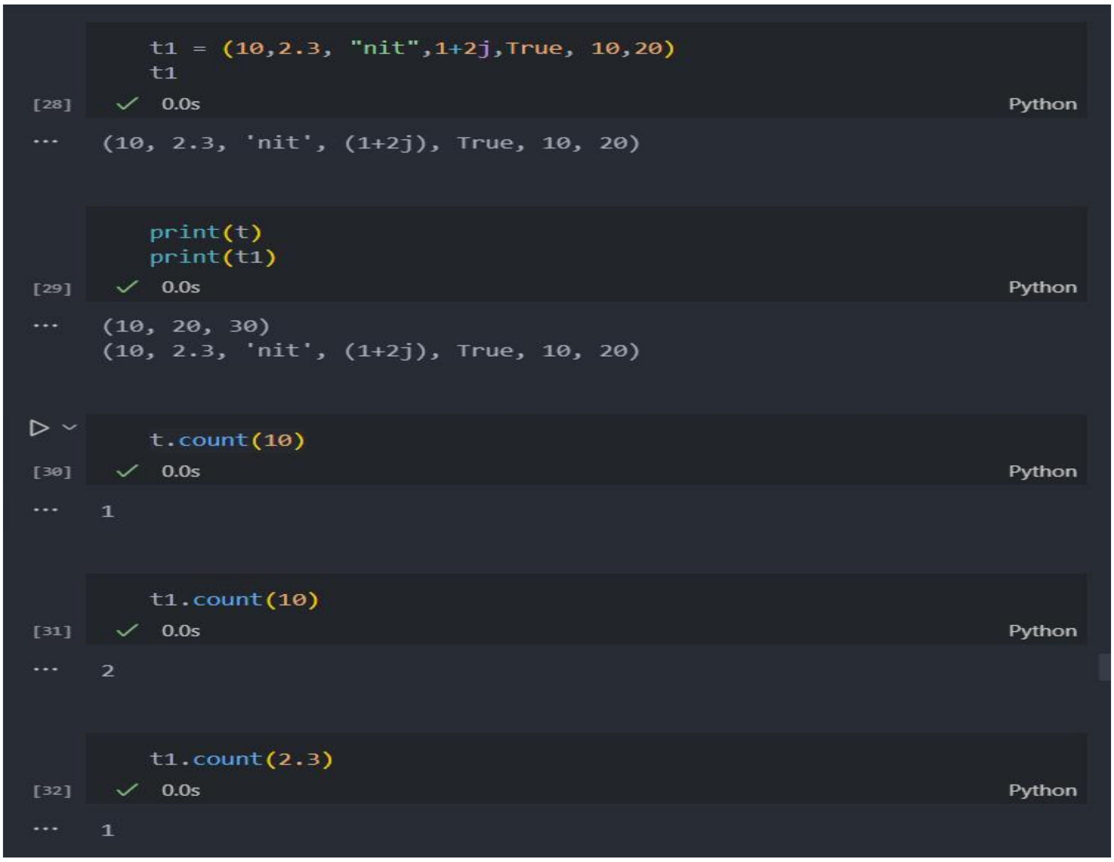
```
tuple
```

```
t = (10,20,30)
t
```

```
(10, 20, 30)
```

```
len(t)
```

```
3
```



```
t1 = (10,2.3, "nit",1+2j,True, 10,20)
t1
```

```
(10, 2.3, 'nit', (1+2j), True, 10, 20)
```

```
print(t)
print(t1)
```

```
(10, 20, 30)
(10, 2.3, 'nit', (1+2j), True, 10, 20)
```

```
t.count(10)
```

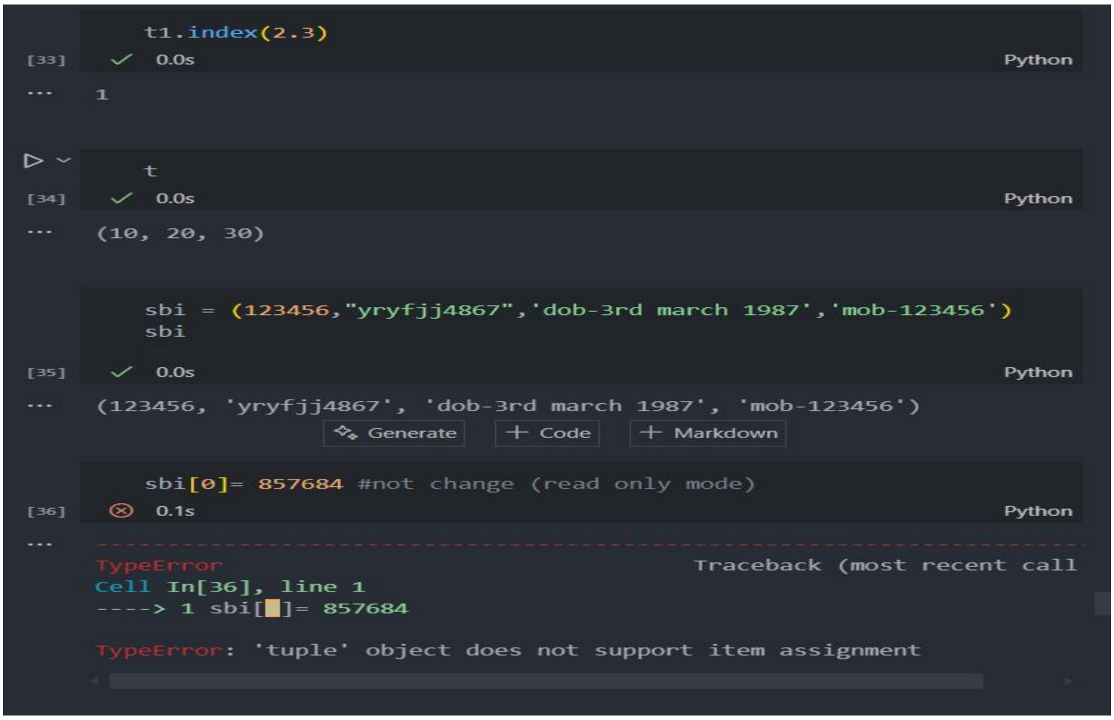
```
1
```

```
t1.count(10)
```

```
2
```

```
t1.count(2.3)
```

```
1
```



```
t1.index(2.3)
```

```
1
```

```
t
```

```
(10, 20, 30)
```

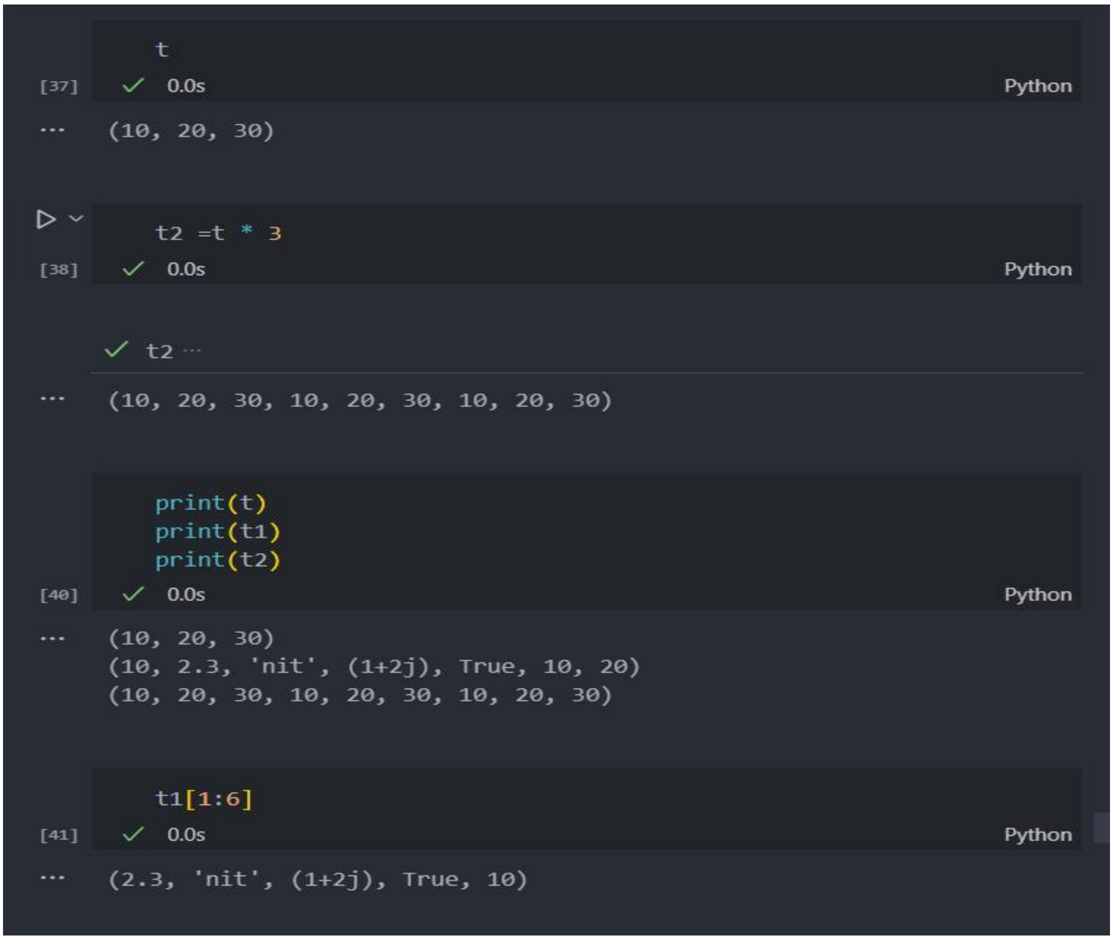
```
sbi = (123456,"yryfjj4867",'dob-3rd march 1987','mob-123456')
sbi
```

```
(123456, 'yryfjj4867', 'dob-3rd march 1987', 'mob-123456')
```

```
sbi[0]= 857684 #not change (read only mode)
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call
Cell In[36], line 1
----> 1 sbi[0]= 857684

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



```
t
```

```
(10, 20, 30)
```

```
t2 =t * 3
```

```
t2
```

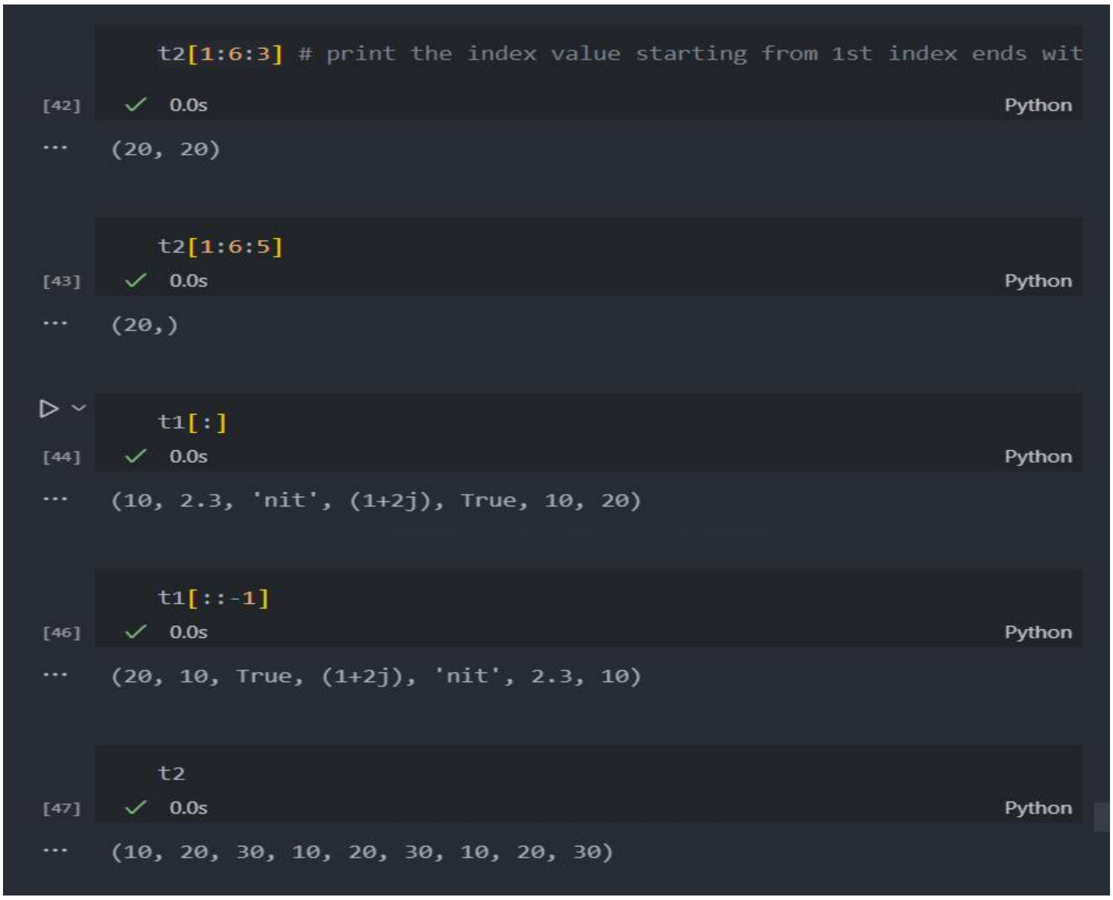
```
(10, 20, 30, 10, 20, 30, 10, 20, 30)
```

```
print(t)
print(t1)
print(t2)
```

```
(10, 20, 30)
(10, 2.3, 'nit', (1+2j), True, 10, 20)
(10, 20, 30, 10, 20, 30, 10, 20, 30)
```

```
t1[1:6]
```

```
(2.3, 'nit', (1+2j), True, 10)
```



```
t2[1:6:3] # print the index value starting from 1st index ends wit
```

```
(20, 20)
```

```
t2[1:6:5]
```

```
(20,)
```

```
t1[:]
```

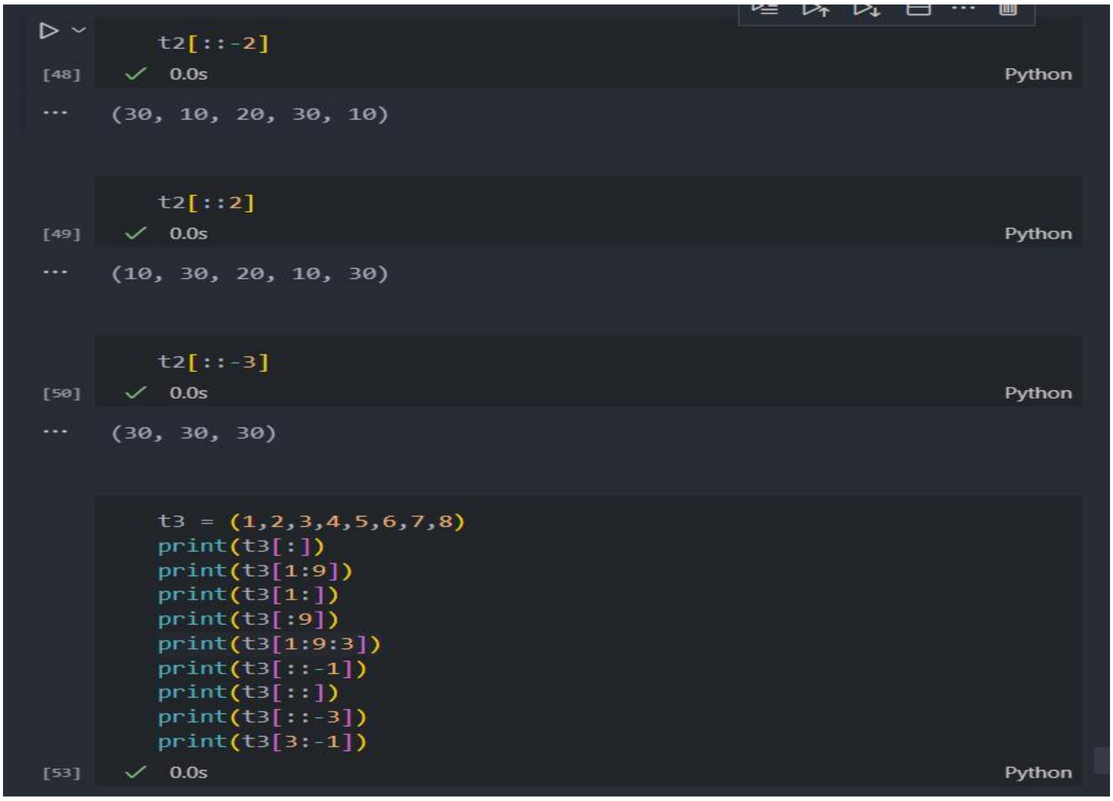
```
(10, 2.3, 'nit', (1+2j), True, 10, 20)
```

```
t1[::-1]
```

```
(20, 10, True, (1+2j), 'nit', 2.3, 10)
```

```
t2
```

```
(10, 20, 30, 10, 20, 30, 10, 20, 30)
```



```
t2[::-2]
```

```
(30, 10, 20, 30, 10)
```

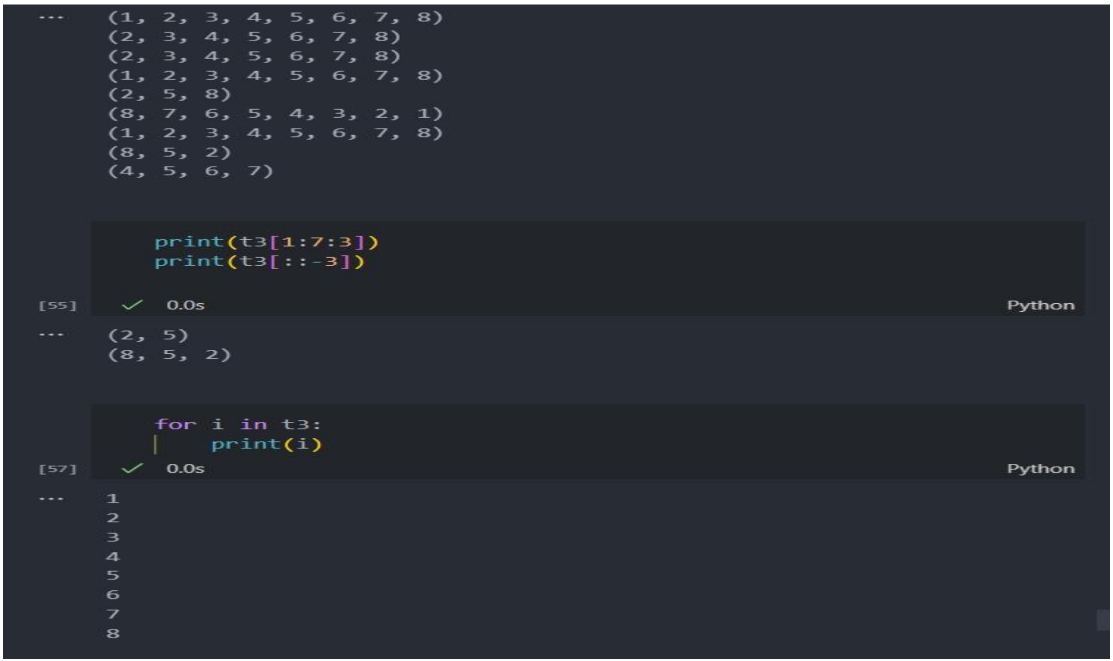
```
t2[::2]
```

```
(10, 30, 20, 10, 30)
```

```
t2[::-3]
```

```
(30, 30, 30)
```

```
t3 = (1,2,3,4,5,6,7,8)
print(t3[:])
print(t3[1:9])
print(t3[1:])
print(t3[:9])
print(t3[1:9:3])
print(t3[::-1])
print(t3[::])
print(t3[::-3])
print(t3[3:-1])
```



```
(1, 2, 3, 4, 5, 6, 7, 8)
(2, 3, 4, 5, 6, 7, 8)
(2, 3, 4, 5, 6, 7, 8)
(1, 2, 3, 4, 5, 6, 7, 8)
(2, 5, 8)
(8, 7, 6, 5, 4, 3, 2, 1)
(1, 2, 3, 4, 5, 6, 7, 8)
(8, 5, 2)
(4, 5, 6, 7)
```

```
print(t3[1:7:3])
print(t3[::-3])
```

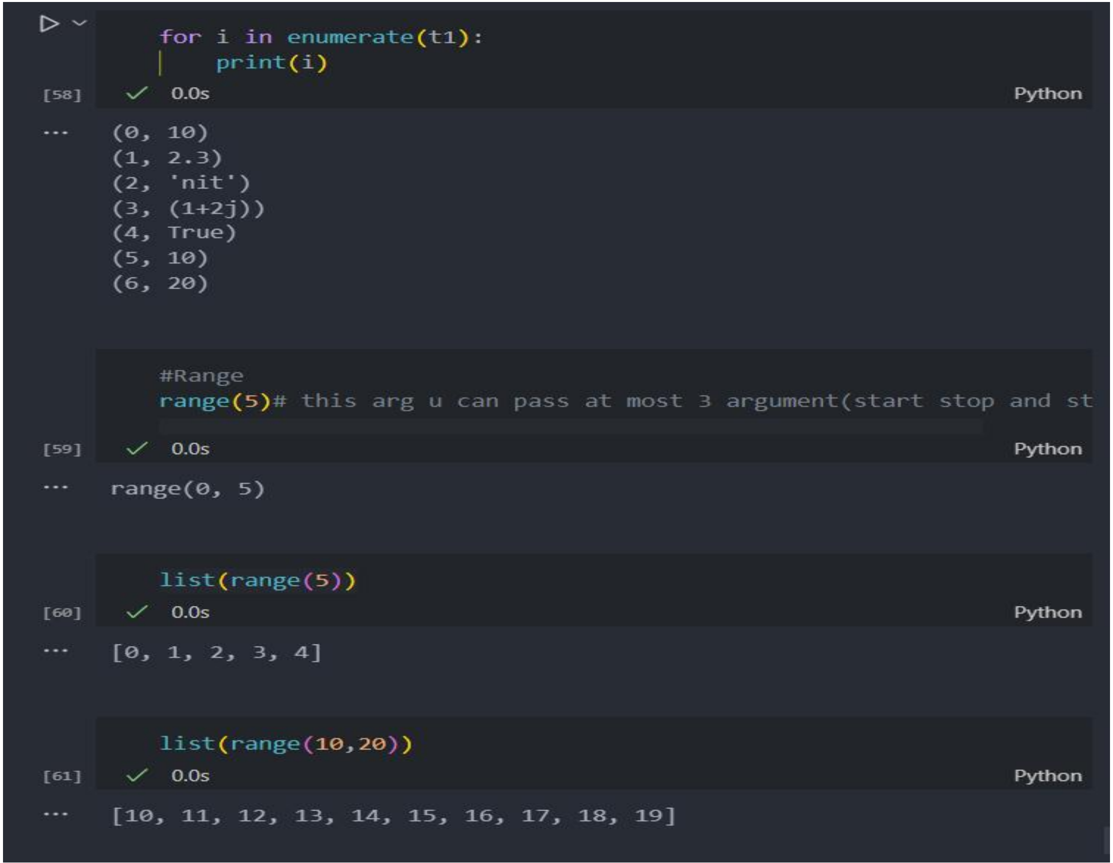
[55] ✓ 0.0s Python

```
(2, 5)
(8, 5, 2)
```

```
for i in t3:
    print(i)
```

[57] ✓ 0.0s Python

```
1
2
3
4
5
6
7
8
```



```
for i in enumerate(t1):
    print(i)
```

[58] ✓ 0.0s Python

```
(0, 10)
(1, 2.3)
(2, 'nit')
(3, (1+2j))
(4, True)
(5, 10)
(6, 20)
```

```
#Range
range(5)# this arg u can pass at most 3 argument(start stop and st
```

[59] ✓ 0.0s Python

```
range(0, 5)
```

```
list(range(5))
```

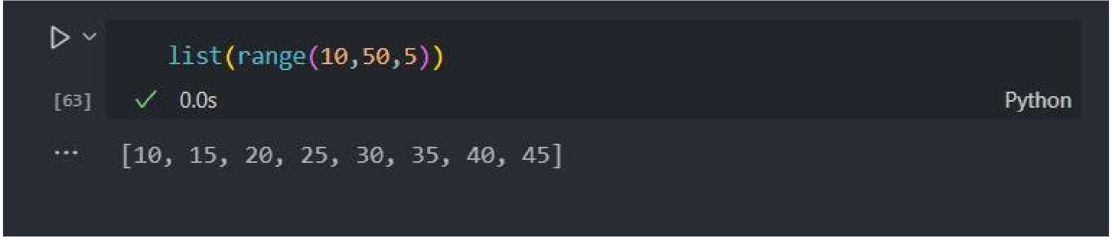
[60] ✓ 0.0s Python

```
[0, 1, 2, 3, 4]
```

```
list(range(10,20))
```

[61] ✓ 0.0s Python

```
[10, 11, 12, 13, 14, 15, 16, 17, 18, 19]
```



```
list(range(10,50,5))
```

[63] ✓ 0.0s Python

```
[10, 15, 20, 25, 30, 35, 40, 45]
```