

08-12-23

Tuple

Day 63

- ↳ Sequence data type
- ↳ Comma separated (,)
- ↳ Parenthesis ()
- ↳ Immutable (can't be modified, changed)
- ↳ Read only.
- ↳ indexed by integers.

Creation of tuples.

① tuple with single element.

```
t1 = 'a',
```

```
print(type(t)) # <class 'tuple'>
```

② tuple () function

```
t2 = tuple() # Empty tuple.
```

③ Built-in function

```
t3 = tuple("computer")  
print(t)      # ('c', 'o', 'm', 'p', 'u', 't', 'e', 'r')
```

Operations on Tuple.

① Bracket Operator []
- Indexes an element.

```
t = (10, 20, 30)  
print(t[1])
```

② slice [:]

```
t = (10, 20, 30, 40, 50, 60)  
print(t[:])  
print(t[:2])  
print(t[2:])  
print(t[2:5])  
print(t[-1:-3])  
print(t[::2])
```

③ Concatenation (+)

```
t1 = (1, 2, 3)  
t2 = ('a', 'b', 'c')  
t3 = t1 + t2      # (1, 2, 3, 'a', 'b', 'c')
```

④ Relational

```
t1 = (5, 10, 15)  
t2 = (10, 15, 20)  
print(t1 < t2)    # True
```

Looping through tuple elements.

- for loop

```
t = (1, 2, 3, 4)  
for x in t:  
    print(x)
```



```
for x in range(len(t):  
    Print (t[x])
```

Tuple Assignment.

Eg1. `addr = 'effie@python.org'`
`uname, domain = addr.split('@')`