Python Tuple

Python Tuple is used to store the sequence of immutable Python objects. The tuple is similar to lists since the value of the items stored in the list can be changed, whereas the tuple is immutable, and the value of the items stored in the tuple cannot be changed.

A tuple can be written as the collection of comma-separated (,) values enclosed with the small () brackets. The parentheses are optional but it is good practice to use.

```
T1 = (101, "Peter", 22)
T2 = ("Apple", "Banana", "Orange")
T3 = 10,20,30,40,50

print(type(T1))
print(type(T2))
print(type(T3))
```

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

An empty tuple can be created as follows.
T4 = ()

Creating a tuple with single element is slightly different. We will need to put comma after the element to declare the tuple.

```
tup1 = (“Ashwini")
print(type(tup1))
#Creating a tuple with single element
tup2 = (“Ashwini",)
print(type(tup2))
```

- Output:

- <class 'str'>
- <class 'tuple'>

A tuple is indexed in the same way as the lists. The items in the tuple can be accessed by using their specific index value.

```
tuple1 = (10, 20, 30, 40, 50, 60)
print(tuple1)
count = 0
for i in tuple1:
    print("tuple1[%d] = %d"%(count, i))
    count = count+1
```

Output:

```
(10, 20, 30, 40, 50, 60)
tuple1[0] = 10
tuple1[1] = 20
tuple1[2] = 30
tuple1[3] = 40
tuple1[4] = 50
tuple1[5] = 60
```

```
tuple1 = tuple(input("Enter the tuple elements
 ..."))
print(tuple1)
count = 0
for i in tuple1:
    print("tuple1[%d] = %s"%(count, i))
    count = count+1
```

A tuple is indexed in the same way as the lists. The items in the tuple can be accessed by using their specific index value.

```
Enter the tuple elements
...123456
('1', '2', '3', '4', '5', '6')
tuple1[0] = 1
tuple1[1] = 2
tuple1[2] = 3
tuple1[3] = 4
tuple1[4] = 5
tuple1[5] = 6
```