Tuples :-

Tuples is same as the list it is uses to store multiple value of different types i.e:- int , string etc

→ Tuples is immutable in nature i.e: once element is added or tuple is created it cant be changed where as in lists it is changed ; added new one

→ Tuple is one of 4 built-in data types used to store collections of data . It is a collection of data which is Ordered , and unchangeable.

→ tuple data is written under '( )' as in list we use '[ ]'

Ordered :-

. Tuples are ordered , it means that the items have a defined order , and that order will not change.

```
thistuple = ("apple", "banana", "cherry")
print(len(thistuple))
```

use to find length o/p → 3

Tuple items can be of any data type.

tuple 1 = ("apple", "banana", "cherry")

" 2 = (1, 5, 7, 9, 3)

" 3 = (True, False, True)

" 1 = ("abc", 34, True, 40, "male")

Access tuple items:-

Accessing is also same as in string:

thistuple = ("apple", "banana", "cherry")
print (thistuple [1])

↳ o/p = banana

thistuple = ("apple", "banana", "cherry")
print (thistuple [-1])

change tuple value:

Tuple is immutable in nature so it can't be change but if we want to make changes in values than first we have to type casting tuple as a list and after making changes again we have to typecasting it in tuple.

Ex:-

```
x = ("apple", "banana", "cherry")
y = list (x)
y [1] = "kiwi"
x = tuple (y)
print (x)
```

o/p:-

→ Adding items in tuples :—

For this we also need to typecast tuple in list and after performing append() func^n we typecast it in tuple.

Ex :—

```
thistuple = ("apple", "banana", "cherry")
y = list(thistuple)
y.append("orange")
thistuple = tuple(y)
print(thistuple)
```

O/P :—

('apple', 'banana', 'cherry', 'orange')

→ Remove the item :— For performing the remove() we have typecast it into list then after performing remove func^n again we typecast it into tuple.

Ex :—

```
thistuple = ("apple", "banana", "cherry")
y = list(thistuple)
y.remove("apple")
thistuple = tuple(y)
```

O/P

('banana', 'cherry')

→ To del the tuple completely :—

del tuplename

→ Unpacking the tuple :—

```
fruits = ("apple", "banana", "cherry")
(green, yellow, red) = fruits
print (green)
print (yellow)
print (red)
```

o/p

apple
banana
cherry

→ Count and Index :

count() → It return the number of times a specific value occurs in a tuple

index() → It serches the index value or return it where the given value is stored.