

# Python - Tuple

What is Tuple? full explanation.

tuple is a data structure which is also called collection of items, in which we can store anything like string, float, integer.

syntax:

```
tuple-name = (item1, item2,....., item n)
```

note: - 1. we write the item of the tuple inside paranthesis "()" and each item is separated by comma ","  
2. duplicates are allowed.  
3. immutable in nature.

```
# create a tuple
var = ()
print(type(var))

# create a tuple with items
var = (1,2,3,4,5)
print(var)

# create tuple with different types of items
var = (1,2,3,4,5,True,"Like")
print(var)

# create tuple using without paranthesis
var = 1,2,3,4,True,"Like"
print(var)

# check data type of items
var = 1,"Like"
print(type(var))

# find the length of tuple
var = 1,2,3,4,True,"Like"
print(len(var))

# copy one tuple variable to another variable
var = 1,2,3,4,True,"Like"
l = var.index(4)
print(l)

# find index value of tuple
var = 1,2,3,4,True,"Like"
var2 = var
print(var2)
```

```
# --- Tuple is Immutable --- #
```

```
ex 1: -
```

```
var = 1,2,3,4,True,"Like"
```

```
var[1] = "Right"
```

```
print(var)
```

```
#tuple don't support item assignment
```

```
ex 2: - AttributeError
```

```
var = 1,2,3,4,True,"Like"
```

```
var.append("Right")
```

```
print(var)
```

```
#'tuple' object has no attribute 'append'
```