

## Tuples in Python...

Tuple is an ordered, heterogeneous, immutable collection of python objects.

- ordered - The sequence of elements is fixed.
- heterogeneous - Can store any type of python objects
- Immutable - once a tuple is made it cannot be modified...

• Tuple is declared using () notation (parenthesis)

• IF you provide multiple values to a container it by default becomes a tuple.

Lets start off with tuple creation.

1) Normal

```
my_tuple = ("Shaill", 1, 3, True, False, 2.7)
```

String   Number   Boolean   Float.

2) without parenthesis (Packing)

```
my_tuple = "Shaill", 1, 3, True, False, 2.7
```

3) Single element tuple.

```
my_tuple = (5,) ← , is important!...
```

#### 4) Empty tuple.

empty\_tuple = ()

#### Accessing elements in Tuples.

We can access elements in tuples using indexing.

for example:

```
my_tuple = ("Shail", "Ajay", 10, 20, True, False);
```

```
print(my_tuple[0]) // "Shail"
```

#### Tuple Operations.

1. Concatenation: Joins two or more tuples together
2. Repetition: Repeats a tuple required number of times.
3. Membership: Python provides 2 Membership operators.
  1. in
  2. not in

1. in - Returns true if an element is present in Tuple.
2. not in - Returns true if an element is not present in Tuple.

## Tuple methods.

Tuple only have 2 methods.

1. `count()`
2. `index()`

1. `count()` returns the count of the specified element.
2. `index()` returns the index of an element with respect to its first occurrence.