

## Tuples in Python

```
tuple_1 = (1, 2, 4, 8)
tuple_2 = 1., .5, .25, .125
print(tuple_1)
print(tuple_2)
```

There can be empty tuples

```
one_element_tuple_1 = (1, ) # output: (1,)
one_element_tuple_2 = 1.,
print(one_element_tuple_1)
empty_tuple = () # output: ()
print(empty_tuple)
```

You cannot append or delete elements in a tuple

Accessing

```
my_tuple = (1, 2.0, "string", [3, 4], (5, ), True)
print(my_tuple[3]) # outputs: [3, 4]
```

Importance of comma

```
my_tuple_1 = 1,
print(type(my_tuple_1)) # outputs: <class 'tuple'>

my_tuple_2 = 1 # This is not a tuple.
print(type(my_tuple_2)) # outputs: <class 'int'>
```

Length

```
tuple = (1, 2, 3, 5)
print(len(tuple)) # 4
```

Adding tuples

```
my_tuple = (1, 10, 100)

t1 = my_tuple + (1000, 10000)
print(t1) # output: (1, 10, 100, 1000, 10000)
```

Multiplying tuples

```
my_tuple = (1, 10, 100)

t2 = my_tuple * 3
print(t2) # output: (1, 10, 100, 1, 10, 100, 1, 10, 100)
```

Checking existence

```
my_tuple = (1, 10, 100)
print(10 in my_tuple) # output: True
print(-10 not in my_tuple) # output: True
```

Convert other data types to tuple

```
my_tuple = tuple((1, 2, "string"))
```