

Python Tuples

Python Tuples

Python Tuple is a collection of items.

Python Tuple is Ordered

Items in a Tuple are stored in an order. Therefore, we can access items in a Tuple based on index.

Python Tuple is Immutable

We cannot modify a Tuple. In other words, we cannot add items to a Tuple, cannot update items of a Tuple using index, or cannot remove items from a Tuple.

Create Python Tuple

To create a Tuple in Python, use parenthesis `()` as shown in the following example.

```
tuple_1 = (item_1, item_2, item_3)
```

Place as many items as required inside curly braces and assign it to a variable.

We can also use `tuple()` builtin function to create a Python Tuple. Pass an iterable to `tuple()` function, and it returns a Tuple created from the items in that iterable.

```
tuple_1 = tuple(iterable)
```

Example

In the following program, we create two tuples: `tuple_1` and `tuple_2` using parenthesis and `tuple()` function respectively.

Python Program

```
#create tuple using parenthesis
tuple_1 = (2, 4, 6)
print(tuple_1)

#create tuple using tuple() builtin function
x = ['a', 'b', 'c']
tuple_2 = tuple(x)
print(tuple_2)
```

Output

```
(2, 4, 6)
('a', 'b', 'c')
```

Access Items of Python Tuple

Python Tuple is ordered and an iterable. Therefore, we can access items using index, and iterate over items using for loop or while loop.

Example – Access using Index

In the following program, we create a tuple with three items, and print items one at a time by accessing them using index.

Python Program

```
tuple_1 = (2, 4, 6)
print(tuple_1[0])
print(tuple_1[1])
print(tuple_1[2])
```

Output

```
2
4
6
```

Example – Access using For Loop

In the following program, we create a tuple with three items, and print items one at a time by accessing them using for loop.

Python Program

```
tuple_1 = (2, 4, 6)
for item in tuple_1:
    print(item)
```

Output

```
2
4
6
```

Conclusion

In this [Python Tutorial](#), we learned what Python Tuples are, how to create them, how to access items in a Tuple,

and methods of Python Tuple.

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