Python- Tuples

Q1. What is a tuple in Python?

Tuples are used to store multiple items in a single variable. Tuple is one of 4 built-in data types in Python used to store collections of data, the other 3 are List, Set, and Dictionary, all with different qualities and usage. A tuple is a collection which is ordered and unchangeable.

Q2. How do you create a tuple in Python?

A tuple is created by placing all the items (elements) inside parentheses () , separated by commas. The parentheses are optional, however, it is a good practice to use them. A tuple can have any number of items and they may be of different types (integer, float, list, string, etc.).

Q3. What is the difference between a tuple and a list in Python?

The key difference between tuples and lists is that while tuples are immutable objects, lists are mutable. This means tuples cannot be changed while lists can be modified. Tuples are also more memory efficient than the lists.

Q4. Can a tuple be changed in Python?

Tuples are unchangeable, meaning that you cannot change, add, or remove items once the tuple is created.

Q5. How do you access elements in a tuple?

We can access elements in a tuple in the same way as we do in lists and strings. Hence, we can access elements simply by indexing and slicing. Furthermore, the indexing is simple as in lists, starting from the index zero.

Q6. How do you unpack a tuple in Python?

Unpacking tuples means assigning individual elements of a tuple to multiple variables. Use the * operator to assign remaining elements of an unpacking assignment into a list and assign it to a variable.