

Sets in Python

A Set in Python programming is an unordered collection data type that is iterable, mutable and has no duplicate elements.

Set are represented by { } (values enclosed in curly braces)

The major advantage of using a set, as opposed to a list, is that it has a highly optimized method for checking whether a specific element is contained in the set. This is based on a data structure known as a hash table. Since sets are unordered, we cannot access items using indexes as we do in lists.

Ex—1

Type Casting with Python Set method

The Python set() method is used for type casting.

Ex -2

Check unique and Immutable with Python Set

Python sets cannot have a duplicate value and once it is created we cannot change its value.

Ex -3

Heterogeneous Element with Python Set

Python sets can store heterogeneous elements in it, i.e., a set can store a mixture of string, integer, boolean, etc datatypes.

Ex -4

Python Frozen Sets

Frozen sets in Python are immutable objects that only support methods and operators that produce a result without affecting the frozen set or sets to which they are applied. It can be done with `frozenset()` method in Python.

While elements of a set can be modified at any time, elements of the frozen set remain the same after creation.

If no parameters are passed, it returns an empty frozenset.

Ex -- 5