

Set

A set is an unordered collection of items. Every element is unique (no duplicates) and must be immutable (which cannot be changed).

However, the set itself is mutable. We can add or remove items from it.

Sets can be used to perform mathematical set operations like union, intersection, symmetric difference etc.

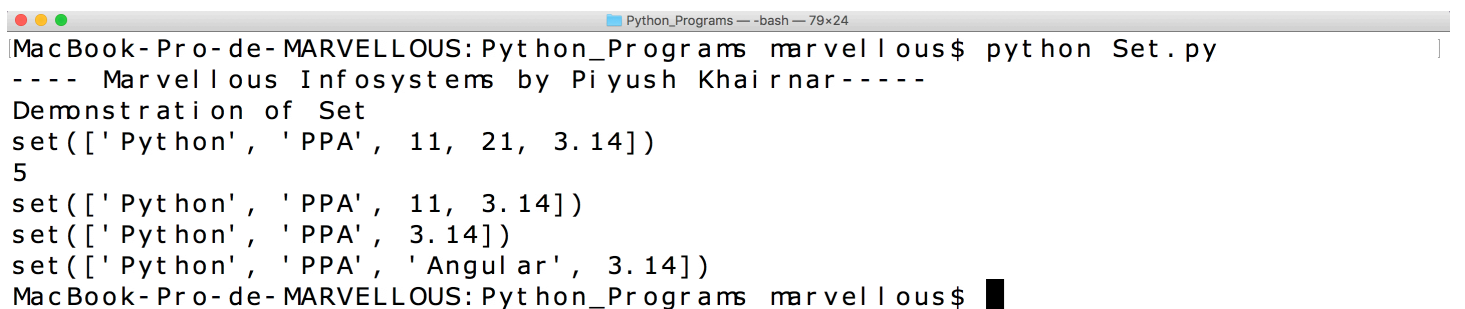
Set is unordered unindexed collection of Heterogeneous objects

- Heterogeneous
- Unordered
- Unindexed
- Immutable
- Duplicate not allowed

Consider below application which demonstrate concept of Set

```
print("---- Marvellous Infosystems by Piyush Khairnar----")  
  
print("Demonstration of Set")  
  
MarvellousSet = {11,"PPA",21,3.14,"Python"}  
  
print(MarvellousSet)  
print(len(MarvellousSet))  
MarvellousSet.remove(21)  
print(MarvellousSet)  
MarvellousSet.discard(11)  
print(MarvellousSet)  
MarvellousSet.add("Angular")  
print(MarvellousSet)
```

Output of above application



```
Python_Programs -- -bash -- 79x24  
MacBook-Pro-de-MARVELLOUS: Python_Programs marvellous$ python Set.py  
---- Marvellous Infosystems by Piyush Khairnar----  
Demonstration of Set  
set(['Python', 'PPA', 11, 21, 3.14])  
5  
set(['Python', 'PPA', 11, 3.14])  
set(['Python', 'PPA', 3.14])  
set(['Python', 'PPA', 'Angular', 3.14])  
MacBook-Pro-de-MARVELLOUS: Python_Programs marvellous$
```