

(10) sets:

- sets are used to store multiple items in a single variable.
- sets are used to store collection of data.
- sets is a collection which is both unordered and unindexed.
- sets are written with curly brackets.
- set is an unordered collection of data type that is iterable, mutable and has no duplicates elements.
- major advantages of set; as opposed to a list.
- set has highly optimized method for checking whether a specific element is contained in the set.
- set can create using built-in set() function with an iterable object.

Note : set cannot have mutable elements like a list, set or dictionary, as its elements

(i) create set

```
thisset = {"apple", "banana", "cherry"}  
print(thisset)
```

(ii) set items

- set items are unordered, unchangeable (immutable) and do not allow duplicates.

(iii) unordered.

- unordered means that the do not have a defined order.
- cannot be referred to by index or key.

(iv) Unchangeable :

- set cannot change the item after the set has been created.

② set method.

| Method | Description. |
|-----------------------------------|---|
| 1) add() | add an Element to set. |
| 2) clear() | Remove all elements from set. |
| 3) copy() | Return copy of set |
| 4) difference() | difference between two or more set. |
| 5) difference_update() | Remove item in this set that are also include in another. |
| 6) discard() | Remove all specified item. |
| 7) intersection() | Return set, that is intersection of two other sets. |
| 8) intersection_update() | Remove item in this set that are not present in other. |
| 9) isdisjoint() | Return whether two sets have intersection or not. |
| 10) issubset() | Return whether set contain this set or not. |
| 11) issuperset() | Return whether this set contain another set or not. |
| 12) pop() | Remove an element from set. |
| 13) remove() | Remove specified element. |
| 14) symmetric_difference() | symmetric difference of two sets. |
| 15) symmetric_difference_update() | insert symmetric difference from this set and another. |
| 16) union() | Return a set containing union of sets. |
| 17) update() | Update sets with union of this set and others. |