

Set datatype

- It is a collection of elements and it is iterable
it can contain any type of data that means it is heterogeneous.
- But it is unordered. it doesn't have indexing. In this no duplicates are allowed.
how to create set: by using of lower bracket

```
"""
>>> s1 = {1,2,3.4,'jack',3.4,'jack'}
>>> s1
{1, 2, 3.4, 'jack'}
>>> s1[0]
Traceback (most recent call last):
  File "<pyshell#3>", line 1, in <module>
    s1[0]
TypeError: 'set' object is not subscriptable
>>> type(s1)
<class 'set'>
>>>
>>> s2 = set(1,2,3,4,5)
Traceback (most recent call last):
  File "<pyshell#6>", line 1, in <module>
    s2 = set(1,2,3,4,5)
TypeError: set expected at most 1 argument, got 5
>>> |
```

- Indexing and slicing are not allowed because it doesn't have indexing.

```
>>> s4.discard(50)
>>> s4
{20, 40, 10, 30}
>>> s4.add(100)
>>> s4
{20, 100, 40, 10, 30}
>>> s4.add(120)
>>> s4
{20, 100, 40, 10, 120, 30}
```

Set is immutable you can modify or remove but we can't replace by using index that means it is growable.