In [1]:
```
"""
@author: Bhanu Prakash

set will not allow duplicates

collection of unique elements

index based operations set doesn't support

insertion order wont be maintained

"""

b=set()

b={1,2,3,4,5,1} #list can be represented by square brackets

print(type(b)) #type give the class of object
```

```
<class 'set'>
```

In [4]:
```
b=set()

b={1,2,3,4,5,1} #set will not allow duplicates

print(b)
```

```
{1, 2, 3, 4, 5}
```

In [60]:
```
b=set()

b={1,2,3,4,5,1}

print(b[0]) #index based operations set doesn't support
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
<ipython-input-60-a523f3495f58> in <module>
      3 b={1,2,3,4,5,1}
      4
----> 5 print(b[0]) #index based operations set doesn't support
```

```
TypeError: 'set' object is not subscriptable
```

In [85]:
```
b=set()

b={1,2,3,4,5,1}

b.add(6) #add

print(b) #insertion order wont be maintained
```

```
{1, 2, 3, 4, 5, 6}
```

In [63]:
```
b=set()

b={1,2,3,4,5,1}

b.remove(5)

b.
print(b) #remove
```

```
{1, 2, 3, 4}
```

In [64]:
```
b=set()

b={1,2,3,4,5,1}

a={6,7,8,1,2}

print(a.intersection(b)) #intersection
```

```
{1, 2}
```

In [65]:
```
b=set()

b={1,2,3,4,5,1}

a={6,7,8,1,2}

print(a.union(b)) #union
```

```
{1, 2, 3, 4, 5, 6, 7, 8}
```

In [66]:
```
b=set()
b={1,2,3,4,5,1}
a={6,7,8,1,2}
print(a.copy()) #copy
```

```
{1, 2, 6, 7, 8}
```

In [67]:
```
b=set()
b={1,2,3,4,5,1}
a={6,7,8,1,2}
print(a.difference(b)) #difference
```

```
{8, 6, 7}
```

In [69]:
```
b=set()
b={1,2,3,4,5,1}
a={6,7,8,1,2}
b.clear() #clear
print(b)
```

```
set()
```

In [71]:
```
b=set()
b={1,2,3,4,5,1}
a={6,7,8,1,2}
a.pop() #pop
print(a)
```

```
{2, 6, 7, 8}
```

In [72]:
```
b=set()
b={1,2,3,4,5,1}
a={6,7,8,1,2}
print(a.symmetric_difference(b)) #symmetric_difference
```

```
{3, 4, 5, 6, 7, 8}
```

In [75]:
```
b=set()
b={1,2,3,4,5,1}
a={6,7,8,1,2}
print(a.difference_update(b)) #difference_update
```

```
None
```

In [76]:
```
b=set()
b={1,2,3,4,5,1}
a={6,7,8,1,2}
print(a.intersection_update(b)) #intersection_update
```

```
None
```

In [77]:
```
b=set()
b={1,2,3,4,5,1}
a={6,7,8,1,2}
b.discard(1)
print(b) #discard
```

```
{2, 3, 4, 5}
```

In [78]:
```
b=set()
```

```
b={1,2,3,4,5,1}

a={6,7,8,1,2}

print(a.issubset(b)) #issubset
```

```
False
```

In [79]:

```
b=set()

b={1,2,3,4,5,1}

a={6,7,8,1,2}

print(b.issuperset(a)) #issuperset
```

```
False
```

In [80]:

```
b=set()

b={1,2,3,4,5,1}

a={6,7,8,1,2}

print(a.isdisjoint(b)) #isdisjoint
```

```
False
```

In [83]:

```
b=set()

b=frozenset([1,2,3,4,5,1])

a=frozenset([6,7,8,1,2])

a.add(9)

print(a) #frozenset doesn't perform any changes
```

```
---------------------------------------------------------------------------
AttributeError                            Traceback (most recent call last)
<ipython-input-83-d50b064b6cf2> in <module>
      5 a=frozenset([6,7,8,1,2])
```

```
      6
----> 7 a.add(9)
      8
      9 print(a) #frozenset doesn't perform any changes

AttributeError: 'frozenset' object has no attribute 'add'
```

In [ ]: