



Sets

```
In [15]: a={"Lovely" ,"world"}
         for x in a:
             print(x)
         print(a)
         print(type(a))
```

```
Lovely
world
{'Lovely', 'world'}
<class 'set'>
```

duplicate is not allowed

```
In [ ]: b={"Lovely" ,"world","lovley","dehar","world"}
         print(b)
```

1 and true have same value

```
In [17]: setb={"Lovely" ,"world","lovley","dehar","world",1,True,True,False}
         print(setb)
```

```
{False, 1, 'Lovely', 'dehar', 'lovley', 'world'}
```

Get the length

```
In [18]: setb={"Lovely" ,"world","lovley","dehar","world",1,True,True,False}
         print(setb)
         print(len(setb))
```

```
{False, 1, 'Lovely', 'dehar', 'lovley', 'world'}
```

6

Set items data type

```
In [20]: setb={"Lovely" ,"world","lovley","dehar","world",1,True,True,False,1.2,1.4}
         print(setb)
```

```
{False, 1, 1.2, 1.4, 'Lovely', 'dehar', 'lovley', 'world'}
```

```
In [24]: set_={1,2,3}
         print(set_)
```

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

The Set() Constructor

```
In [26]: create_set=set((1,2,3,4,5,5,6))
         print(create_set)
         print(type(create_set))
```

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

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

```
In [28]: a={}
a=set()
print(a)
print(type(a))
```

```
set()
<class 'set'>
```

Access Items

```
In [35]: a={"a","b","c","d"}
for x in a:
    print(x)
```

```
d
a
c
b
```

```
In [3]: set_={1,2,3,4,4,5}
x=int(input("Enter a number"))
print(x in set_)
```

```
False
```

add item,update and remove

```
In [17]: new_set={1,2,3,4,"new",5}
new_set.add(10)
print(new_set)
new_set.update({13,14,15,16})
print(new_set)
new_set.remove(13)
print(new_set)
new_set.pop()
print(new_set)
```

```
{1, 2, 3, 4, 5, 'new', 10}
{1, 2, 3, 4, 5, 10, 13, 14, 15, 16, 'new'}
{1, 2, 3, 4, 5, 10, 14, 15, 16, 'new'}
{2, 3, 4, 5, 10, 14, 15, 16, 'new'}
```

Join Two sets

```
In [19]: set1={1,2,3,4,5,6}
set2={"a","b","c","d","e"}
set3=set2.union(set1)
print(set3)
```

```
{1, 2, 3, 4, 5, 6, 'e', 'a', 'd', 'c', 'b'}
```

```
In [29]: set4={1,34,454,2,12,32,3323,123}
print(max(set4))
print(min(set4))
print(len(set4))
```

```
z=tuple(set4)
print(z)
print(type(z))
y=list(set4)
print(y)
print(type(y))
```

```
3323
1
8
(32, 1, 34, 2, 454, 12, 3323, 123)
<class 'tuple'>
[32, 1, 34, 2, 454, 12, 3323, 123]
<class 'list'>
```

```
In [26]: set5={1,23,4,433,431,3,4,5}
          set6={1,2,3,4,5,6,7,7,8}
          print(set5.intersection(set6))
```

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

```
In [ ]:
```