

SET

Definition

A **set** in Python is an **unordered collection** of **unique** elements. It is defined using curly braces {} or the set() function.

Simple Code with Sets

```
my_set = {1, 2, 3, 4, 5}
print("Original Set:", my_set)
```

```
for num in my_set:
    print(num, end=" ") # Output: 1 2 3 4 5 (order may vary)
print()
```

```
set1 = {1, 2, 3}
set2 = {3, 4, 5}
union_set = set1.union(set2)
print("Union:", union_set) # Output: {1, 2, 3, 4, 5}
```

```
set1.update(set2)
print("Updated Set1:", set1) # Output: {1, 2, 3, 4, 5}
```

```
set3 = {3, 4, 5, 6}
intersect_set = set1.intersection(set3)
print("Intersection:", intersect_set) # Output: {3, 4, 5}
```

```
set1.add(10)
print("After add(10):", set1) # Output: {1, 2, 3, 4, 5, 10}
```

```
removed_element = set1.pop()
print("Popped Element:", removed_element)
print("After pop:", set1)
```

```
set1.remove(4)
print("After remove(4):", set1)
```

```
set1.discard(100)
del set1
```

```
set2.clear()
print("After clear():", set2) # Output: set()
```
