```
# Creating a set
example_set = \{1, 2, 3, 4, 5\}
# Adding an element to the set
example_set.add(6)
# Removing an element from the set (raises KeyError if element is not found)
example set.remove(3)
# Discarding an element from the set (doesn't raise an error if element is
not found)
example_set.discard(7)
# Popping an element from the set (removes and returns an arbitrary element)
popped element = example_set.pop()
# Clearing all elements from the set
example set.clear()
# Creating a new set to demonstrate other functions
set_a = \{1, 2, 3\}
set_b = \{3, 4, 5\}
# Union of two sets (elements present in either set)
union_set = set_a.union(set_b)
# Intersection of two sets (elements present in both sets)
intersection_set = set_a.intersection(set_b)
# Difference between two sets (elements present in the first set but not in
the second)
difference set = set a.difference(set b)
# Symmetric difference between two sets (elements present in either set, but
not in both)
symmetric difference set = set a.symmetric difference(set b)
# Checking if set a is a subset of set b
is_subset = set_a.issubset(set_b)
# Checking if set a is a superset of set b
is_superset = set_a.issuperset(set_b)
# Checking if set a is disjoint from set b (no common elements)
is_disjoint = set_a.isdisjoint(set_b)
# Copying a set
copied set = set a.copy()
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# Printing results
print(f"Initial set: {example_set}")
print(f"Popped element: {popped_element}")
print(f"Union: {union_set}")
print(f"Intersection: {intersection set}")
print(f"Difference: {difference_set}")
print(f"Symmetric Difference: {symmetric_difference_set}")
print(f"Is Subset: {is subset}")
print(f"Is Superset: {is_superset}")
print(f"Is Disjoint: {is_disjoint}")
print(f"Copied Set: {copied_set}")
Initial set: set()
Popped element: 1
Union: {1, 2, 3, 4, 5}
Intersection: {3}
Difference: {1, 2}
Symmetric Difference: {1, 2, 4, 5}
Is Subset: False
Is Superset: False
Is Disjoint: False
Copied Set: {1, 2, 3}
```