```python
# 1. Create a set 'fruits' containing '{"apple", "banana", "cherry"}'. Add "orange" to the set using the '.add()' method and print the s
fruits = {"apple", "banana", "cherry"}
fruits.add("orange")
print("set after adding the fruit 'orange':", fruits)
```

> set after adding the fruit 'orange': {'banana', 'cherry', 'orange', 'apple'}

```python
# 2. Given the set 'numbers = {1, 2, 3, 4, 5}', remove the element '3' using the '.remove()' method and print the set.
numbers = {1, 2, 3, 4, 5}
numbers.remove(3)
print("set after removing the number'3':", numbers)
```

> set after removing the number'3': {1, 2, 4, 5}

```python
# 3. Create two sets 'set1 = {1, 2, 3, 4}' and 'set2 = {3, 4, 5, 6}'. Use the '.union()' method to get the union of the two sets and pri
set1 = {1, 2, 3, 4}
set2 = {3, 4, 5, 6}
u = set1.union(set2)
print("Union of set1 and set2:", u)
```

> Union of set1 and set2: {1, 2, 3, 4, 5, 6}

```python
# 4. Given the sets 'setA = {1, 2, 3}' and 'setB = {2, 3, 4}', use the '.intersection()' method to find the intersection of the two sets
setA = {1, 2, 3}
setB = {2, 3, 4}
intersection = setA.intersection(setB)
print("Intersection of the two sets:", intersection)
```

> Intersection of the two sets: {2, 3}

```python
# 5. Create a set 'colors' with the elements '{"red", "green", "blue"}'. Use the '.discard()' method to remove "green" from the set and
colors = {"red", "green", "blue"}
colors.discard("green")
print("set after discarding 'green':", colors)
```

> set after discarding 'green': {'red', 'blue'}

```python
# 6. Given the sets 'setA = {1, 2, 3}' and 'setB = {3, 4, 5}', use the '.difference()' method to find the difference of 'setA' and 'setE
setA = {1, 2, 3}
setB = {3, 4, 5}
diff = setA.difference(setB)
print("Difference b/w the sets", diff)
```

> Difference b/w the sets {1, 2}

```python
# 7. Create a set 'numbers' containing '{1, 2, 3, 4, 5}'. Use the '.pop()' method to remove and print an arbitrary element from the set.
numbers = {1, 2, 3, 4, 5}
popped_element = numbers.pop()
print("Popped element:", popped_element)
print("Updated set after pop:", numbers)
```

> Popped element: 1
> Updated set after pop: {2, 3, 4, 5}

```python
# 8. Given the sets 'set1 = {1, 2, 3}' and 'set2 = {2, 3, 4}', use the '.symmetric_difference()' method to find the symmetric difference
set1 = {1, 2, 3}
set2 = {2, 3, 4}
symmetricdifference = set1.symmetric_difference(set2)
print("Symmetric difference of thee sets:", symmetricdifference)
```

> Symmetric difference of thee sets: {1, 4}

```
# 9. Create a set 'numbers' with the elements '{1, 2, 3, 4, 5}'. Check if '3' is in the set using the 'in' keyword and print the result.
numbers = {1, 2, 3, 4, 5}
x = 3 in numbers
print("Is 3 in number set?:", x)
```

    Is 3 in number set?: True

```
# 10. Given the sets 'setA = {1, 2, 3, 4}' and 'setB = {3, 4}', use the '.issubset()' method to check if 'setB' is a subset of 'setA' and
setA = {1, 2, 3, 4}
setB = {3, 4}
subsetA = setB.issubset(setA)
print("Is setB a subset of setA ?:",subsetA)
```

    Is setB a subset of setA ?: True

Start coding or generate with AI.