# Lab Assignment 15

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**Topic : Sets**

Q1. Write a Python program to Get Only unique items from two sets.

Input: set1 = {10, 20, 30, 40, 50} set2 = {30, 40, 50, 60, 70}

Output: {70, 40, 10, 50, 20, 60, 30}

Code:

lab15.py > ...

```python
# Define two sets with some common and unique elements
set1 = {10, 20, 30, 40, 50}
set2 = {30, 40, 50, 60, 70}

# To get all unique elements from both sets (union), we use the '|' operator
# or we could use the union() method: set1.union(set2)
unique_items = set1 | set2

# Output the result, which includes all elements from both sets, with duplicates removed
print("Output:", unique_items)
```

Output:

```
Output: {70, 40, 10, 50, 20, 60, 30}
```

Q 2. Write a Python program to Return a set of elements present in Set A or B, but not both.

Input: set1 = {10, 20, 30, 40, 50} set2 = {30, 40, 50, 60, 70}

Output: {20, 70, 10, 60}

Code:

lab15.py > ...

```python

# Define two sets with some common and unique elements
set1 = {10, 20, 30, 40, 50}
set2 = {30, 40, 50, 60, 70}

# Use the symmetric_difference() method to find elements present in one set, but not both
# Symmetric difference means items that are either in set1 or set2, but not in both.
result = set1.symmetric_difference(set2)

# Output the result, which includes elements only found in one of the sets
print("Output:", result)

```

Output: