

# Python Set Exercise

*1: Add a list of elements to a given set*

**Given:**

```
sampleSet = {"Yellow", "Orange", "Black"}  
sampleList = ["Blue", "Green", "Red"]
```

**Expected output:**

Note: Set is unordered.

```
{'Green', 'Yellow', 'Black', 'Orange', 'Red', 'Blue'}
```

*2: Return a new set of identical items from a given two set*

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

**Expected output:**

```
{40, 50, 30}
```

*3: Returns a new set with all items from both sets by removing duplicates*

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

**Expected output:**

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

**Note:** set is unordered so not necessary this will be the order of the item.

*4: Given two Python sets, update the first set with items that exist only in the first set and not in the second set.*

```
set1 = {10, 20, 30}  
set2 = {20, 40, 50}
```

**Expected output:**

```
set1 {10, 30}
```

*5: Remove items 10, 20, 30 from the following set at once*

```
set1 = {10, 20, 30, 40, 50}
```

**Expected output:**

```
{40, 50}
```

*6: Return a set of all elements in either A or B, but not both*

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

**Expected output:**

```
{20, 70, 10, 60}
```

*7: Check if two sets have any elements in common. If yes, display the common elements.*

```
set1 = {10, 20, 30, 40, 50}  
set2 = {60, 70, 80, 90, 10}
```

**Expected output:**

```
Two sets have items in common  
  
{10}
```

*8: Update set1 by adding items from set2, except common items*

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

**Expected output:**

```
{70, 10, 20, 60}
```

*9: Remove items from set1 that are not common to both set1 and set2*

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

**Expected output:**

```
{40, 50, 30}
```