

```
In [5]: def is_Sublist(list_a, list_b):
        if len(list_b) == 0:
            return True
        if len(list_a) == 0:
            return False
        if list_b == list_a:
            return True
        if len(list_b) > len(list_a):
            return False
        for i in range(len(list_a)):
            if list_a[i] == list_b[0]:
                if list_a[i:i+len(list_b)] == list_b:
                    return True
        return False
a = [2, 4, 3, 5, 7]
b = [4, 3]
c = [3, 7]
print(is_Sublist(a, b))
print(is_Sublist(a, c))
```

```
True
False
```

```
In [7]: def find_common_items(list1, list2):
        set1 = set(list1)
        set2 = set(list2)
        common_items = set1.intersection(set2)
        return common_items
color1 = ["Red", "Green", "Orange", "White"]
color2 = ["Black", "Green", "White", "Pink"]
common_colors = find_common_items(color1, color2)
print(common_colors)
```

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{'Green', 'White'}
```

```
In [9]: def get_list_difference(list1, list2):
        set1 = set(list1)
        set2 = set(list2)
        difference = set1.difference(set2)
        difference_list = list(difference)
        return difference_list
list1 = [1, 2, 3, 4]
list2 = [1, 2]
result = get_list_difference(list1, list2)
print(result)
```

```
[3, 4]
```

```
In [10]: import itertools

def generate_permutations(lst):
    permutations = list(itertools.permutations(lst))
    return permutations
input_list = [1, 2, 3]
permutations = generate_permutations(input_list)
print(permutations)
```

```
[(1, 2, 3), (1, 3, 2), (2, 1, 3), (2, 3, 1), (3, 1, 2), (3, 2, 1)]
```

```
In [11]: def remove_duplicates(lst):
        unique_list = list(set(lst))
        return unique_list
a = [10, 20, 30, 20, 10, 50, 60, 40, 80, 50, 40]
result = remove_duplicates(a)
print(result)
```

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[40, 10, 80, 50, 20, 60, 30]
```