

hp-06

July 1, 2023

1. Write a Python program to check whether a list contains a sublist.

```
[31]: a = [2,4,3,5,7]
      b = [4,3]
      c = [3,7]

      def is_Sublist(a,y):
          temp = 0
          res = False
          for i in y:
              if i in a:
                  temp += 1
          if(temp == len(y)):
              res = True
          print("Does list contains a sublist? ", str(res))

      is_Sublist(a,b)
      is_Sublist(a,c)
```

Does list contains a sublist? True

Does list contains a sublist? True

2. Write a Python program to find common items from two lists.

```
[12]: color1 = ["Red", "Green", "Orange", "White"]
      color2 = ["Black", "Green", "White", "Pink"]

      color3 = [i for i in color1 if i in color2]

      print(color3)
```

['Green', 'White']

3. Write a Python program to get the difference between the two lists.

```
[9]: list1 = [1, 2, 3, 4]
      list2 = [1, 2]

      set_dif = set(list1).symmetric_difference(set(list2))
      list3 = list(set_dif)
```

```
print(list3)
```

[3, 4]

4. Write a Python program to generate all permutations of a list in Python.

```
[21]: from itertools import permutations
a = list(input("Enter the list: ").split())
perm = list(permutations(a))

print(perm,end = '')
```

Enter the list: 1 2 3

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

5. Write a Python program to remove duplicates from a list.

```
[5]: a = [10,20,30,20,10,50,60,40,80,50,40]
a = list(set(a))
a
```

```
[5]: [40, 10, 80, 50, 20, 60, 30]
```