

(3) Python Program to Find Factorial of Number Using Recursion.

```
In [7]: def rec_factorial(n):  
        if n == 1:  
            return n  
        else:  
            return n*rec_factorial(n-1)  
  
        n = int(input("you have enter the number :"))  
        if n < 0:  
            print("negative number not allowed :")  
        elif n == 0:  
            print("factorial is 1.")  
        else:  
            print("factorial is",rec_factorial(n))
```

```
you have enter the number :3  
factorial is 6
```

(2) Counting the frequencies in a list using dictionary in Python. Input : [1, 1, 1, 5, 5, 3, 1, 3, 3, 1, 4, 4, 4, 2, 2, 2, 2]
Expected output : 1 : 5 , 2 : 4 , 3 : 3 , 4 : 3 , 5 : 2

```
In [1]: list1 = [1, 1, 1, 5, 5, 3, 1, 3, 3, 1, 4, 4, 4, 2, 2, 2, 2]  
list2 = []  
  
dict1 = {}  
for i in list1:  
    if i not in list2:  
        list2.append(i)  
print(list2)  
for j in list2:  
    c = 0  
    for i in list1:  
        if j == i:  
            c += 1  
        else:  
            continue  
    dict1[j] = c  
  
print(dict1)
```

```
[1, 5, 3, 4, 2]  
{1: 5, 5: 2, 3: 3, 4: 3, 2: 4}
```

(4) Write a Python function that takes a list and returns a new list with unique elements of the first list.

```
In [1]: list1 = [1,2,3,4,5,6,7,7,7,5,6]
list2 = []
for i in list1:
    if list1.count(i)==1:
        list2.append(i)
    else:
        pass
print("list2 is:",list2)
```

list2 is: [1, 2, 3, 4]

In []: (5) Write a Python function to check whether a string **is** a pangram **or not**.

```
In [2]: import string
def ispangram(str):
    alphabet = "abcdefghijklmnopqrstuvwxyz"
    for char in alphabet:
        if char not in str.lower():
            return False
    return True

string = 'krishna.'
if(ispangram(string) == True):
    print("Yes")
else:
    print("No")
```

No