

2.OCCURANCE OF EACH ELEMENT:

```
In [4]: sampleList = [11, 45, 8, 11, 23, 45, 23, 45, 89]
print("Original list ", sampleList)

countDict = dict()
for item in sampleList:
    if(item in countDict):
        countDict[item] += 1
    else:
        countDict[item] = 1

print("Printing count of each item ",countDict)
```

Original list [11, 45, 8, 11, 23, 45, 23, 45, 89]
Printing count of each item {11: 2, 45: 3, 8: 1, 23: 2, 89: 1}

3.REMOVE DUPLICATE FROM A LIST AND CREATE A TUPILE AND FIND THE MINIMUM AND MAXIMUM NUMBER:

```
In [5]: sampleList = [87, 52, 44, 53, 54, 87, 52, 53]

print("Original list", sampleList)

sampleList = list(set(sampleList))
print("unique list", sampleList)

tuple = tuple(sampleList)
print("tuple ", tuple)
```

```
print("Minimum number is: ", min(tuple))
print("Maximum number is: ", max(tuple))
```

Original list [87, 52, 44, 53, 54, 87, 52, 53]
unique list [44, 52, 53, 54, 87]
tuple (44, 52, 53, 54, 87)
Minimum number is: 44
Maximum number is: 87

4.CREATE A FUNCTION SHOWEMPLOYEE():

```
In [6]: def showEmployee(name, salary=50000):
        print("Employee", name, "salary is:", salary)

showEmployee("eddy", 50000)
showEmployee("eddy")
```

Employee eddy salary is: 50000
Employee eddy salary is: 50000

5.INNER FUNCTION TO CALCULATE THE ADDITION:

```
In [7]: def outerFun(a, b):
        square = a**2
        def innerFun(a,b):
            return a+b
        add = innerFun(a, b)
        return add+5

result = outerFun(5, 10)
print(result)
```

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6.RECURSIVE FUNCTION TO PRINT THE FIBONACCI SERIES OF N NUMBERS:

```
In [8]: def recur_fibo(n):  
        if n <= 1:  
            return n  
        else:  
            return(recur_fibo(n-1) + recur_fibo(n-2))  
  
        nterms = 10  
  
        if nterms <= 0:  
            print("Plese enter a positive integer")  
        else:  
            print("Fibonacci sequence:")  
            for i in range(nterms):  
                print(recur_fibo(i))
```

Fibonacci sequence:

0
1
1
2
3
5
8
13
21
34