In [9]:

```
###Create a list of size 5 and execute the slicing structure.
x=[1,2,3,4,5]
result1=slice(4)
print(result1)
result2=slice(1,4)
print(result2)
```

```
slice(None, 4, None)
slice(1, 4, None)
```

In [32]:

```
###Write a program to get the sum and multiply of all the items in a given list.
x=[1,2,3,4,5]
total=sum(x)
print('Total=',total)
```

```
Total= 15
```

In [33]:

```
###multiply of all the items in a given list
a=[1,2,3]
multiplication = 1
for i in a:
    multiplication = multiplication * i
print('Multiplication=',multiplication)
```

```
Multiplication= 6
```

In [24]:

```
###Create a list of the 10 elements of four different types of Data Type like int, string, complex and float.
x=[1,2,3,'Chaitali','Choudhari','Python',2+5j,6+8j,9,6]
```

In [35]:

```
###Find the largest and smallest number from a given list.
list1 = [10, 20, 1, 45, 99]
print("Smallest element is:", min(list1))
print("Largest element is:",max(list1))
```

```
Smallest element is: 1
Largest element is: 99
```

In [43]:

```
###Create a new list which contains the specified numbers after removing the even numbers from a predefined list
list1 = [10, 21, 4, 45, 66, 93]
for num in list1:
    if num%2!=0:
        print(num)
```

```
21
45
93
```

In [ ]:

```
###Create a list of first and last 5 elements where the values are square of numbers between 1 and 30 (both included).
```

In [44]:

```
###Write a program to replace the last element in a list with another list.
###Sample data: [[1,3,5,7,9,10],[2,4,6,8]]
###Expected output: [1,3,5,7,9,2,4,6,8]
list1=[1,3,5,7,9,10]
list2=[2,4,6,8]
list3=list1+list2
print(list3)
```

```
[1, 3, 5, 7, 9, 10, 2, 4, 6, 8]
```

In [46]:

```
###Create a new dictionary by concatenating the following two dictionaries
a={1:10,2:20}

b={3:30,4:40}
c={**a,**b}
print(c)
```

```
{1: 10, 2: 20, 3: 30, 4: 40}
```

In [51]:

```
###Create a dictionary that contains a number (between 1 and n) in the form(x,x*x).

d = dict()

for x in range(1,6):
    d[x]=x*x

print(d)
```

```
{1: 1, 2: 4, 3: 9, 4: 16, 5: 25}
```

In [52]:

```
###Write a program which accepts a sequence of comma-separated numbers from console and generate a
list and a tuple which contains every number. Suppose the following input is supplied to the progr
am:
values = input("Input some comma seprated numbers : ")
list = values.split(",")
tuple = tuple(list)
print('List : ',list)
print('Tuple : ',tuple)
```

```
Input some comma seprated numbers : 34,67,55,33,12,98
List :  ['34', '67', '55', '33', '12', '98']
Tuple :  ('34', '67', '55', '33', '12', '98')
```