ASSIGNMENT 3

1] Write a Python program to sum all the items in a list.

```
mylist = [1,2,3,4,5,6]
sum=0
for item in mylist : sum = sum + item
print(sum)
```

2] Write a Python program to check a list is empty or not.

```
mylist = []
if(len(mylist)==0):
    print("List is empty")
else:
    print("List is not empty")
```

3] Write a Python program to print a specified list after removing the 0th, 4th and 5th elements.

```
mylist = [1,2,3,'Python',57,'Hello']
mylist.pop(0)
mylist.pop(4-1)
mylist.pop(5-2)
print(mylist)
```

4] Write a Python program to shuffle and print a specified list. (Hint: from random import shuffle).

```
from random import shuffle
mylist = [2,3,4,5,1,6,7]
shuffle(mylist)
print(mylist)
```

5] Write a Python program to convert a string to a list.

```
mystr = "Darshan"
mylist = list(mystr)
```

6] Write a Python program to extend a list without append.

```
x = [10,20,30]
y = [40,50,60]
x[len(x):] = y
print(x)
```

7] Write a Python program to insert a given string at the beginning of all items in a list
Sample list : [1,2,3,4], string : emp Expected output : ['emp1', 'emp2', 'emp3', 'emp4']

```
mylist = [1,2,3,4]
mystr = "Darshan"
for i in range(len(mylist)):
    mylist[i] = mystr + str(mylist[i])
print(mylist)
```

8] Write a Python 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 = [1,2,3,4,5]
list2 = [7,8,9,10]
list1.pop()
list1[len(list1):] = list2
print(list1)
```

9] Write a Python program to get the frequency of the elements in a list.

```
mylist = [2,3,3,4,6,7,8,8,5,5]
newlist = []
for item in mylist:
    if(item not in newlist):
        newlist.append(item)
for item in newlist:
    print("Frequency of ",item," : ",mylist.count(item))
```

10] Write a Python program to clone or copy a list.

```
mylist = [2,3,4,2,1,5,5]
listcopy = mylist.copy()
print(listcopy)
```