Assignment-10

1. **Write a Python program to find sum of elements in list?**

```python
list1 = [2,3,4,5]
sum=0
for i in list1:
    sum += i;
print(sum)
```

2. **Write a Python program to Multiply all numbers in the list?**

```python
list1 = [2,3,4,5]
mul=1
for i in list1:
    mul *= i;
print(mul)
```

3. **Write a Python program to find smallest number in a list?**

```python
list1 = [2,3,4,5]
list1.sort()
print("smallest element is:", list1[:1])
```

4. **Write a Python program to find largest number in a list?**

```python
list1 = [2,3,4,5]
list1.sort(reverse=True)
print("smallest element is:", list1[:1])
```

5. **Write a Python program to find second largest number in a list?**

```python
list1 = [2,3,4,5]
list1.sort(reverse=True)
print("smallest element is:", list1[1])
```

6. **Write a Python program to find N largest elements from a list?**

```python
list1 = [2,3,4,5]
n = int(input("Enter nth element to find nth largest number:"))
list1.sort(reverse=True)
print("smallest element is:", list1[n-1])
```

7. **Write a Python program to print even numbers in a list?**

```python
list1 = [2,3,4,5]

for i in list1:
    if i % 2 == 0:
        print(i)
```

8. **Write a Python program to print odd numbers in a List?**

```python
list1 = [2,3,4,5]

for i in list1:
    if i % 2 != 0:
        print(i)
```

9. **Write a Python program to Remove empty List from List?**

```
test_list = [5, 6, [], 3, [], [], 9]
print("The original list is : " + str(test_list))
res = list(filter(None, test_list))
print ("List after empty list removal : " + str(res))
```

10. **Write a Python program to Cloning or Copying a list?**

```
def Cloning(li1):
    li_copy =[]
    li_copy = li1.copy()
    return li_copy

li1 = [4, 8, 2, 10, 15, 18]
li2 = Cloning(li1)
print("Original List:", li1)
print("After Cloning:", li2)
```

11. **Write a Python program to Count occurrences of an element in a list?**

```
def countX(lst, x):
    return lst.count(x)

lst = [2,4,5,9,8,7,5,4,3,1,2,4,7,4,5,4,9,6,3,1,4,2,4,7]
x = 4
print('{} has occurred {} times'.format(x, countX(lst, x)))
```