**Assignment-10**

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

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

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

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

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

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

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

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

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

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

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

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])

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

list1 = [2,3,4,5]  
  
for i in list1:  
 if i % 2 == 0:  
 print(i)

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

list1 = [2,3,4,5]  
  
for i in list1:  
 if i % 2 != 0:  
 print(i)

1. **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))

1. **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)

1. **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)))