**Programming Assignment 10**

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

Ans.)

l = [2, 4, 1, 5, 6, 7]

total = 0

for i in l:

    total += i

print(total)

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

Ans.)

l = [2, 4, 1, 5, 6, 7]

mul = 1

for i in l:

    mul \*= i

print(mul)

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

Ans.)

l = [2, 0, 1, 1235, 6, -7123]

minimum = l[0]

for i in l:

    if i < minimum:

        minimum = i

print(minimum)

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

Ans.)

l = [2, 0, 1, 1235, 6, -7123]

maximum = l[0]

for i in l:

    if i > maximum:

        maximum = i

print(maximum)

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

Ans.)

l = [2, 0, 1, 1235, 6, -7123]

l.sort(reverse=True)

print("Second largest number:", l[1])

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

Ans.)

def findLarge(lst, n):

    lst.sort(reverse = True)

    return lst[n-1]

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

Ans.)

l = [2, 0, 1, 1235, 6, -7123, 21, 54, 12, -23, -42]

[ i for i in l if i%2 == 0]

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

Ans.)

l = [2, 0, 1, 1235, 6, -7123, 21, 54, 12, -23, -42]

[ i for i in l if i%2 == 1]

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

Ans.)

l = [[], 12, 31, [1,2, -23] , [1], [], [123.23], [], 2, 321]

result = []

for i in l:

    if type(i) == list:

        if len(i) != 0:

            result.append(i)

    else:

        result.append(i)

result

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

Ans.)

list1 = [2,1, 31, 3, 412, 3, 4667, [2,3,1]]

list2 = []

for i in list1:

    list2.append(i)

print(list2)

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

Ans.)

l = [1,1,1, 3, 4, 1, 7, 8, 6,6,2,1]

def occurrences(lst, element):

    count = 0

    for i in lst:

        if i == element:

            count += 1

    return count