#### **Programming Assignment\_10**

1. Write a Python program to find sum of elements in list?
2. Write a Python program to Multiply all numbers in the list?
3. Write a Python program to find smallest number in a list?
4. Write a Python program to find largest number in a list?
5. Write a Python program to find second largest number in a list?
6. Write a Python program to find N largest elements from a list?
7. Write a Python program to print even numbers in a list?
8. Write a Python program to print odd numbers in a List?
9. Write a Python program to Remove empty List from List?
10. Write a Python program to Cloning or Copying a list?
11. Write a Python program to Count occurrences of an element in a list?

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

Solution :

**def list\_sum(lis):  
 sum = 0  
 for i in lis:  
 sum += i  
  
 return sum  
  
if \_\_name\_\_ == "\_\_main\_\_":  
 lis = [1,2,3,4,5,6,7,8,9]  
 print("Total Sum of element in lis is {}".format(list\_sum(lis)))**

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

Solution :

**def list\_mul(lis):  
 mul = 1  
 for i in lis:  
 mul \*= i  
  
 return mul  
  
if \_\_name\_\_ == "\_\_main\_\_":  
 lis = [1,2,3,4,5,6,7,8,9]  
 print("Total Multiple of element in list is {}".format(list\_mul(lis)))**

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

Solution:

**def small\_lis(lis):  
 lis.sort()  
 return lis[0]  
  
if \_\_name\_\_ == "\_\_main\_\_":  
 lis = [11,27,3,45,5,64,7,82,9]  
 print("Smallest element in list is {}".format(small\_lis(lis)))**

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

Solution :

**def large\_lis(lis):  
 lis.sort()  
 return lis[-1]  
  
if \_\_name\_\_ == "\_\_main\_\_":  
 lis = [11,27,3,45,5,64,7,82,9]  
 print("Largest element in list is {}".format(large\_lis(lis)))**

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

Solution :

**def second\_large\_lis(lis):  
 lis.sort()  
 return lis[-2]  
  
if \_\_name\_\_ == "\_\_main\_\_":  
 lis = [11,27,3,45,5,64,7,82,9]  
 print("Second Largest element in list is {}".format(second\_large\_lis(lis)))**

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

Solution :

**def N\_large\_lis(lis, n):  
 lis.sort()  
 return lis[-n:]  
  
if \_\_name\_\_ == "\_\_main\_\_":  
 lis = [11,27,3,45,5,64,7,82,9]  
 n = int(input("Enter Number les than {} : ".format(len(lis))))  
 print("{} Largest number of list is {}".format(n, N\_large\_lis(lis ,n)))**

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

Solution :

**def even\_lis(lis):  
 for i in lis:  
 if i%2 == 0:  
 yield i  
if \_\_name\_\_ == "\_\_main\_\_":  
 lis = [11,27,3,45,5,64,7,82,9]  
 print("Even number in list {} is : ".format(lis), end=" ")  
 for i in even\_lis(lis):  
 print(i, end=", " )**

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

Solution :

**def odd\_lis(lis):  
 for i in lis:  
 if i%2 != 0:  
 yield i  
if \_\_name\_\_ == "\_\_main\_\_":  
 lis = [11,27,3,45,5,64,7,82,9]  
 print("Odd number in list {} is : ".format(lis), end=" ")  
 for i in odd\_lis(lis):  
 print(i, end=", " )**

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

Solution :

**def remove\_empty\_lis(lis):  
 for i in lis:  
 if type(i) == list and len(i) == 0:  
 lis.remove(i)  
 return lis  
  
if \_\_name\_\_ == "\_\_main\_\_":  
 lis = [11,27,3,45,[],5,64,7,82,9,"hello", (4,5,6), [6,7,9], [], 84]  
 print("Parents list before removal of empty list : {}".format(lis))  
 print("Parents list after removal of empty list : {}".format(remove\_empty\_lis(lis)))**

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

Solution :

**lis = [11,27,3,45,5,64,7,82,9,"hello", (4,5,6), [6,7,9], 84]  
cloneList = lis  
print("Original list : {}".format(lis))  
print("Cloned list : {}".format(cloneList))**

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

Solution :

**def occurrence\_count(lis, val):  
 count = 0  
 for i in lis:  
 if i == val :  
 count += 1  
 return count  
  
lis = [11,27,3,45,5,64,7, 84,82,9,"hello", (4,5,6), [6,7,9], 84]  
val = int(input("Enter any value to count its occurrences : "))  
print("{} is present {} times in given list.".format(val, occurrence\_count(lis, val)))**