

## 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?

```
In [1]: #1. Write a Python program to find sum of elements in list?
l=[9,9,6,8,98,5,6,7]
total=0
for i in l:
    total+=i

print( 'total in list {}'.format(total))
```

total in list 148

```
In [2]: #2. Write a Python program to Multiply all numbers in the list?
l=[9,9,6,8,98,5,6,7]
total=1
for i in l:
    total = total*i

print( 'multipliecation of all numbers in list {}'.format(total))
```

multipliecation of all numbers in list 80015040

```
In [3]: #3.*Write a Python program to find smallest number in a list?
l=[9,9,6,8,98,5,1,4,3,26,7]

least_num=999999
for i in l:
    least_num=i if i<=least_num else least_num

print( 'Least of all numbers in list is {}'.format(least_num))
```

Least of all numbers in list is 1

```
In [4]: #4. Write a Python program to find Largest number in a List?
l=[9,9,6,8,98,5,1,4,3,26,7]

large_num=0
for i in l:
    large_num=i if i>=large_num else large_num

print( 'Largest of all numbers in list is {}'.format(large_num))
```

Largest of all numbers in list is 98

```
In [5]: #5. Write a Python program to find second Largest number in a List?
l=[9,9,6,8,98,5,1,4,3,26,7]
```

```
l.sort()
large2=l[-2]
print( 'Largest of all numbers in list is {}'.format(large2))
```

Largest of all numbers in list is 26

In [6]: *#6. Write a Python program to find N Largest elements from a List?*

```
l=[9,9,6,8,98,5,1,4,3,26,43,23,7,234,654,989]
l.sort()
N=5
largeN=l[-N]
print( '{}th largest of all numbers in list is {}'.format(N,largeN))
```

5th largest of all numbers in list is 43

In [7]: *#7. Write a Python program to print even numbers in a List?*

```
l=[9,9,6,8,98,5,1,4,3,26,7]

for i in l:
    if i%2==0:
        print("Even number: ",i)
```

Even number: 6  
Even number: 8  
Even number: 98  
Even number: 4  
Even number: 26

In [8]: *#8. Write a Python program to print odd numbers in a List?*

```
l=[9,9,6,8,98,5,1,4,3,26,43,23,7,234,654,989]
for i in l:
    if i%2!=0:
        print("Odd number: ",i)
```

Odd number: 9  
Odd number: 9  
Odd number: 5  
Odd number: 1  
Odd number: 3  
Odd number: 43  
Odd number: 23  
Odd number: 7  
Odd number: 989

In [9]: *#9. Write a Python program to Remove empty List from List?*

```
l=[9,9,6,8,98,5,1,4,[],[],[],3,26,43,[23,7,234],654,[989],[]]
print('list with empty list : ',l)
empty=[]
index =0
#finding the indeces of the [] list in the List
for i in l:
    if(type(i)==list):
        if(not i):
            empty.append(index)
        index +=1
#to maintain the indeces intact the last [] element is deleted first
empty.sort(reverse=True)
for i in empty :
    del l[i]

print('list with empty list deleted: ',l)
```

list with empty list : [9, 9, 6, 8, 98, 5, 1, 4, [], [], [], 3, 26, 43, [23, 7, 234], 654, [989], []]  
list with empty list deleted: [9, 9, 6, 8, 98, 5, 1, 4, 3, 26, 43, [23, 7, 234], 654, [989]]

list with empty list deleted: [9, 9, 6, 8, 98, 5, 1, 4, 3, 26, 43, [23, 7, 234], 65  
4, [989]]

In [10]: *#10. Write a Python program to Count occurrences of an element in a List?*

```
def countX(lst, x):  
    return lst.count(x)  
  
# Driver Code  
lst = [8, 6, 8, 10, 8, 20, 10, 8, 8]  
x = 8  
print('{} has occurred {} times'.format(x, countX(lst, x)))
```

8 has occurred 5 times

In [ ]: