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

**ANS:-**

**# Python program to find sum of elements in list**

**total = 0**

**# creating a list**

**list1 = [11, 5, 17, 18, 23]**

**# Iterate each element in list**

**# and add them in variable total**

**for ele in range(0, len(list1)):**

**total = total + list1[ele]**

**# printing total value**

**print("Sum of all elements in given list: ", total)**

**Output**

**Sum of all elements in given list: 74**

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

**ANS:-**

**# Python program to multiply all values in the**

**# list using traversal**

**def multiplyList(myList):**

**# Multiply elements one by one**

**result = 1**

**for x in myList:**

**result = result \* x**

**return result**

**# Driver code**

**list1 = [1, 2, 3]**

**list2 = [3, 2, 4]**

**print(multiplyList(list1))**

**print(multiplyList(list2))**

**Output :**

**6**

**24**

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

**ANS:-**

**# Python program to find smallest**

**# number in a list**

**# list of numbers**

**list1 = [10, 20, 4, 45, 99]**

**# sorting the list**

**list1.sort()**

**# printing the first element**

**print("Smallest element is:", list1[0])**

**Output:**

**smallest element is: 4**

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

**ANS:-**

**# Python program to find largest**

**# number in a list**

**# list of numbers**

**list1 = [10, 20, 4, 45, 99]**

**# sorting the list**

**list1.sort()**

**# printing the last element**

**print("Largest element is:", list1[-1])**

**Output**

**Largest element is: 99**

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

**ANS:-**

**# Python program to find second largest**

**# number in a list**

**# list of numbers - length of**

**# list should be at least 2**

**list1 = [10, 20, 4, 45, 99]**

**mx = max(list1[0], list1[1])**

**secondmax = min(list1[0], list1[1])**

**n = len(list1)**

**for i in range(2,n):**

**if list1[i] > mx:**

**secondmax = mx**

**mx = list1[i]**

**elif list1[i] > secondmax and \**

**mx != list1[i]:**

**secondmax = list1[i]**

**elif mx == secondmax and \**

**secondmax != list1[i]:**

**secondmax = list1[i]**

**print("Second highest number is : ",\**

**str(secondmax))**

**Output**

**Second highest number is : 45**

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

**ANS:-**

**# Python program to find N largest**

**# element from given list of integers**

**# Function returns N largest elements**

**def Nmaxelements(list1, N):**

**final\_list = []**

**for i in range(0, N):**

**max1 = 0**

**for j in range(len(list1)):**

**if list1[j] > max1:**

**max1 = list1[j]**

**list1.remove(max1)**

**final\_list.append(max1)**

**print(final\_list)**

**# Driver code**

**list1 = [2, 6, 41, 85, 0, 3, 7, 6, 10]**

**N = 2**

**# Calling the function**

**Nmaxelements(list1, N)**

**Output**

**[85, 41]**

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

**ANS:-**

**# Python program to print Even Numbers in a List**

**# list of numbers**

**list1 = [10, 21, 4, 45, 66, 93]**

**# iterating each number in list**

**for num in list1:**

**# checking condition**

**if num % 2 == 0:**

**print(num, end=" ")**

**Output**

**10 4 66**

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

**ANS:-**

**# Python program to print odd Numbers in a List**

**# list of numbers**

**list1 = [10, 21, 4, 45, 66, 93]**

**# iterating each number in list**

**for num in list1:**

**# checking condition**

**if num % 2 != 0:**

**print(num, end=" ")**

**Output**

**21 45 93**

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

**ANS:-**

**# Python3 code to Demonstrate Remove empty List**

**# from List using list comprehension**

**# Initializing list**

**test\_list = [5, 6, [], 3, [], [], 9]**

**# printing original list**

**print("The original list is : " + str(test\_list))**

**# Remove empty List from List**

**# using list comprehension**

**res = [ele for ele in test\_list if ele != []]**

**# printing result**

**print("List after empty list removal : " + str(res))**

**Output**

**The original list is : [5, 6, [], 3, [], [], 9]**

**List after empty list removal : [5, 6, 3, 9]**

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

**ANS:-**

**# Python program to copy or clone a list**

**# Using the Slice Operator**

**def Cloning(li1):**

**li\_copy = li1[:]**

**return li\_copy**

**# Driver Code**

**li1 = [4, 8, 2, 10, 15, 18]**

**li2 = Cloning(li1)**

**print("Original List:", li1)**

**print("After Cloning:", li2)**

**Output:**

Original List: [4, 8, 2, 10, 15, 18]   
After Cloning: [4, 8, 2, 10, 15, 18]

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

**ANS:-**

**# Python code to count the number of occurrences**

**def countX(lst, x):**

**count = 0**

**for ele in lst:**

**if (ele == x):**

**count = count + 1**

**return count**

**# Driver Code**

**lst = [8, 6, 8, 10, 8, 20, 10, 8, 8]**

**x = 8**

**print('{} has occurred {} times'.format(x,**

**countX(lst, x)))**

**Output**

8 has occurred 5 times