

# Python Basic Programming Assignment 10

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

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

```
[6]: n=int(input("Enter the number of elements for list:")) ##no. of input
list1=[]
for i in range(0,n):
    element=int(input("Enter element:"))## elements
    list1.append(element)

print('elements of a list : ' , list1)# list created

total = 0
# Iterate each element in list
# and add them in variable total
for j in range(0, len(list1)):
    total = total + list1[j]

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

```
Enter the number of elements for list: 3
Enter element: 1
Enter element: 3
Enter element: 2
elements of a list : [1, 3, 2]
Sum of all elements in given list: 6
```

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

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

```
[9]: n=int(input("Enter the number of elements for list:")) ##no. of input
list1=[]
for i in range(0,n):
    element=int(input("Enter element:"))## elements
    list1.append(element)

print('elements of a list : ' , list1)# list created

result = 1
for j in range(0, len(list1)):
    result = result * list1[j]

print("multiplication of all elements in given list: ", result)
```

```
Enter the number of elements for list: 2
Enter element: 3
Enter element: 2
elements of a list : [3, 2]
multiplication of all elements in given list: 6
```

## 3. Write a Python program to find the smallest number in a list?

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

```
[10]: n=int(input("Enter the number of elements for list:")) ##no. of input
list1=[]
for i in range(0,n):
    element=int(input("Enter element:"))## elements
    list1.append(element)

print('elements of a list : ' , list1)# list created

list1.sort()
# printing the first element
print("Smallest element is:", list1[0])
```

```
Enter the number of elements for list: 3
Enter element: 2
Enter element: 6
Enter element: 1
elements of a list : [2, 6, 1]
Smallest element is: 1
```

## 4. Write a Python program to find the largest number in a list?

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

```
[12]: n=int(input("Enter the number of elements for list:")) ##no. of input
list1=[]
for i in range(0,n):
    element=int(input("Enter element:"))## elements
    list1.append(element)

print('elements of a list : ' , list1)# list created

list1.sort()
# printing the first element
print("largest element is:", list1[-1])
```

```
Enter the number of elements for list: 4
Enter element: 2
Enter element: 1
Enter element: 7
Enter element: 3
elements of a list : [2, 1, 7, 3]
largest element is: 7
```

## 5. Write a Python program to find the second largest number in a list?

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

```
[14]: n=int(input("Enter the number of elements for list:")) ##no. of input
list1=[]
for i in range(0,n):
    element=int(input("Enter element:"))## elements
    list1.append(element)

print('elements of a list : ' , list1)# list created

list1.sort()
# printing the first element
print("second largest element is:", list1[-2])
```

```
Enter the number of elements for list: 3
Enter element: 2
Enter element: 6
Enter element: 1
elements of a list : [2, 6, 1]
second largest element is: 2
```

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

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

```
[2]: el = int(input("Enter the number of elements for list:"))
    ##no. of input
    list1=[]
    for i in range(0,el):
        element=int(input("Enter element:"))## elements
        list1.append(element)

    print('elements of a list : ' , list1)# list created

    N = int(input("Enter the number upto find largest element from the list :"))
    list1.sort()
    print(f'{N} largest elements from the list : ' , list1[-N:] )
```

```
Enter the number of elements for list: 4
Enter element: 1
Enter element: 5
Enter element: 3
Enter element: 2
elements of a list : [1, 5, 3, 2]
Enter the number upto find largest element from the list : 2
2 largest elements from the list : [3, 5]
```

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

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

```
[10]: el = int(input("Enter the number of elements for list:"))
    ##no. of input
    list1=[]
    for i in range(0,el):
        element=int(input("Enter element:"))## elements
        list1.append(element)

    print('elements of a list : ' , list1)# list created

    # iterating each number in list
    evn = []
    for num in list1:
        # checking condition
        if num % 2 == 0:
            evn.append(num)

    print('even elements in a list : ' , evn)
```

```
Enter the number of elements for list: 4
Enter element: 2
Enter element: 3
Enter element: 5
Enter element: 6
elements of a list : [2, 3, 5, 6]
even elements in a list : [2, 6]
```

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

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

```
[11]: el = int(input("Enter the number of elements for list:"))  
      ##no. of input  
      list1=[]  
      for i in range(0,el):  
          element=int(input("Enter element:"))## elements  
          list1.append(element)  
  
      print('elements of a list : ' , list1)# list created  
  
      # iterating each number in list  
      odd = []  
      for num in list1:  
          # checking condition  
          if num % 2 != 0:  
              odd.append(num)  
  
      print('odd elements in a list : ', odd)
```

```
Enter the number of elements for list: 4  
Enter element: 2  
Enter element: 1  
Enter element: 3  
Enter element: 6  
elements of a list : [2, 1, 3, 6]  
odd elements in a list : [1, 3]
```

## 9. Write a Python program to Remove an empty List from the List?

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

```
[17]: # initializing list
el = int(input("Enter the number of elements for list:"))
##no. of input
list1=[]
for i in range(0,el):
    element=str(input("Enter element:"))## elements
    list1.append(element)

##print original list
print("Original list is : " + str(list1))

# using remove() to
# perform removal
while('' in list1):
    list1.remove('')
print("Modified list is : " + str(list1))
```

```
Enter the number of elements for list: 3
Enter element: arti
Enter element:
Enter element: dash
Original list is : ['arti', '', 'dash']
Modified list is : ['arti', 'dash']
```

## 10. Write a Python program to Clone or Copy a list?

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

```
[18]: el = int(input("Enter the number of elements for list:"))
##no. of input
list1=[]
for i in range(0,el):
    element=int(input("Enter element:"))## elements
    list1.append(element)

print('original elements of a list : ' , list1)# list created

copy_list = list1.copy()
print('clone elements of a list : ' , copy_list)## copied list
```

```
Enter the number of elements for list: 4
Enter element: 1
Enter element: 5
Enter element: 7
Enter element: 3
original elements of a list : [1, 5, 7, 3]
clone elements of a list : [1, 5, 7, 3]
```

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

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

```
25]: el = int(input("Enter the number of elements for list:"))
      #no. of input
      list1=[]
      for i in range(0,el):
          element=int(input("Enter element:"))## elements
          list1.append(element)

      print('elements of a list : ' , list1)# list created

      num = int(input("Enter a number in the list want to count how many occurrence : "))

      def countX(list1,num):
          count = 0
          for ele in list1:
              if (ele == num):
                  count = count + 1
          return count ## result of count is the output of function

      total = countX(list1,num)

      print(f'{num} has occurred {total} times !!! ')
```

```
Enter the number of elements for list: 5
Enter element: 3
Enter element: 2
Enter element: 5
Enter element: 7
Enter element: 5
elements of a list : [3, 2, 5, 7, 5]
Enter a number in the list want to count how many occurrence : 5
5 has occurred 2 times !!!
```