

Python Basic Programming Assignment 10

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

```
In [56]: 1 a=[1,2,3,4,5,6]
          2 total=0
          3 for n in range(len(a)):
          4     total=total +a[n]
          5 print(total)
```

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

```
In [48]: 1 a=[1,2,3,4,5,6,7,8,9,10]
          2 mul=1
          3 for i in a:
          4     mul=mul*i
          5 print(mul)
```

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

```
In [76]: 1 #Craete a list
          2 l=[90,10,5,100,200,650,980,50,98,26]
          3 #Sort the list acending order
          4 k=l.sort()
          5 #extract the first element in the list
          6 print(l)
          7 print("The smallest element in the list is:",l[0])
```

[5, 10, 26, 50, 90, 98, 100, 200, 650, 980]

The smallest element in the list is: 5

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

```
In [80]: 1 #Craete a List
2 l=[90,10,5,100,200,650,980,50,98,26]
3 #Sort the list acending order
4 k=l.sort()
5 #extract the last element in the list
6 print(l)
7 print("The largest element in the list is:",l[-1])
```

```
[5, 10, 26, 50, 90, 98, 100, 200, 650, 980]
The largest element in the list is: 980
```

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

```
In [82]: 1 #Craete a List
2 l=[90,10,5,100,200,650,980,50,98,26]
3 #Sort the list acending order
4 k=l.sort()
5 #extract the second largest element in the list by passing -2 in the list
6 print(l)
7 print("The second largest element in the list is:",l[-2])
```

```
[5, 10, 26, 50, 90, 98, 100, 200, 650, 980]
The second largest element in the list is: 650
```

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

```
In [95]: 1 #create a List
2 l=[90,10,5,100,200,650,980,50,98,26]
3 print(l)
4 #The value of N
5 N=int(input("Enter N value:"))
6 s=l.sort()
7 print("The",N,"largest elements from the list is:",l[-N:])
```

```
[90, 10, 5, 100, 200, 650, 980, 50, 98, 26]
Enter N value:6
The 6 largest elements from the list is: [90, 98, 100, 200, 650, 980]
```

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

```
In [106]: 1 l=[90,1,10,5,7,113,205,60,980,56,98,26]
2 for i in l:
3     # checking the reminder of each the elements in the list is 0. In this way w
4         if (i%2)==0:
5     #If reminder iz 0, then print the same numbers
6         print(i)
7
```

90
10
60
980
56
98
26

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

```
In [111]: 1 l=[10,11,12,13,14,15,16,17,18,19,20]
2 for i in l:
3     # checking the reminder is 1, for each element in the list. In this way we c
4         if (i%2)==1:
5             print(i)
```

11
13
15
17
19

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

```
In [122]: 1 #The list consists of empty elements inside the list
2 lis=[[1,2,3],[],[4,5,6],[],[7,8,9],[],[10,11,12]]
3 #print the list inside the list if the lenght of the list is greater than 0
4 print(list(filter(lambda i:len(i)>0,lis)))
```

[[1, 2, 3], [4, 5, 6], [7, 8, 9], [10, 11, 12]]

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

```
In [123]: 1 list1=[1,2,3,4,5,6,7,8]
2 new_list=list(list1)
3 print(list1)
4 #Coppied list
5 print(new_list)
```

[1, 2, 3, 4, 5, 6, 7, 8]
[1, 2, 3, 4, 5, 6, 7, 8]

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

In [138]:

```
1 list2=[1,1,2,3,4,5,5,6,7,8,9,10,10,11,12,13,14,14,15,15,15,16,17,18,19,20,20
2 #To find the total number of occurrences of an element in a list,we can use
3 print("The occurance of number 20 is",list2.count(20))
4 print("The occurance of number 15 is",list2.count(15))
```

The occurance of number 20 is 4

The occurance of number 15 is 3

In []:

```
1
```