

Programming Assignment_10

Eshant Das

In []:

Q1. Write a Python program to find sum of elements in list?

Answer:

```
In [3]: l=list(map(int,input("Enter the elements of the list seperated by space ").split()))
#1st Way
s=0
for i in l:
    s+=i
print("Sum of all the elements in the list = ",s)
Enter the elements of the list seperated by space 2 5 10
Sum of all the elements in the list = 17
```

```
In [5]: #2nd Way
ss=sum(l)
print("Sum of all the elements in the list = ",ss)
Sum of all the elements in the list = 17
```

In []:

In []:

Q2. Write a Python program to Multiply all numbers in the list?

Answer:

```
In [6]: l=list(map(int,input("Enter the elements of the list seperated by space ").split()))
m=1
for i in l:
    m*=i
print("After the multiplication of all the numbers in the list the answer turns out to come = ",m)
Enter the elements of the list seperated by space 4 5 10
After the multiplication of all the numbers in the list the answer turns out to come = 200
```

In []:

In []:

Q3. Write a Python program to find smallest number in a list?

Answer:

```
In [8]: l=list(map(int,input("Enter the elements of the list seperated by space ").split()))
m=min(l)
print("The smallest number in the list = ",m)
Enter the elements of the list seperated by space 23 5423 34 100 3 984
The smallest number in the list = 3
```

In []:

In []:

Q4. Write a Python program to find largest number in a list?

Answer:

```
In [9]: l=list(map(int,input("Enter the elements of the list seperated by space ").split()))
m=max(l)
print("The Largest number in the list = ",m)
Enter the elements of the list seperated by space 23 453 100 1 344 5000 132 99
The Largest number in the list = 5000
```

In []:

In []:

Q5. Write a Python program to find second largest number in a list?

Answer:

```
In [10]: l=list(map(int,input("Enter the elements of the list seperated by space ").split()))
l=sorted(l)
m=l[-2]
print("The Second Largest number in the list = ",m)
Enter the elements of the list seperated by space 144 500 1000 2 30
The Second Largest number in the list = 500
```

In []:

In []:

Q6. Write a Python program to find N largest elements from a list?

Answer:

```
In [14]: l=list(map(int,input("Enter the elements of the list seperated by space ").split()))
n=int(input("Enter the value for N to get N alrgest elements from a list"))
l=sorted(l)
m=l[-n:len(l)]
print(f"{n} largest element from the list are = {m}")
Enter the elements of the list seperated by space 34 65 132 543 7865 345 10000 12 90 56
Enter the value for N to get N alrgest elements from a list4
4 largest element from the list are = [345, 543, 7865, 10000]
```

In []:

```
In [15]: l=list(map(int,input("Enter the elements of the list seperated by space ").split()))
n=int(input("Enter the value for N to get N alrgest elements from a list"))
l=sorted(l)
m=l[-n:len(l)]
print(f"{n} largest element from the list are = {m}")
Enter the elements of the list seperated by space 1000 324 23 76 342 78 959 345 1234 564
Enter the value for N to get N alrgest elements from a list2
2 largest element from the list are = [1000, 1234]
```

In []:

In []:

Q7. Write a Python program to print even numbers in a list?

Answer:

```
In [17]: l=list(map(int,input("Enter the elements of the list seperated by space ").split()))
for i in l:
    if(i%2==0):
        print(i,end=' ')
print()
print("These are all the even numbers present in the list")
Enter the elements of the list seperated by space 34 54 142 54321 13 19 88 65 101
34 54 142 88
These are all the even numbers present in the list
```

In []:

In []:

Q8. Write a Python program to print odd numbers in a List?

Answer:

```
In [18]: l=list(map(int,input("Enter the elements of the list seperated by space ").split()))
for i in l:
    if(i%2!=0):
        print(i,end=' ')
print()
print("These are all the odd numbers present in the list")
Enter the elements of the list seperated by space 1441 23 44 64 101 66 66 57
1441 23 101 57
These are all the odd numbers present in the list
```

In []:

In []:

Q9. Write a Python program to Remove empty List from List?

Answer:

```
In [20]: l=['gsfd',23,[],113,'Eshant',[],[],100]
print("The original list is : " + str(l))
l1 = [i for i in l if i != []]
print("List after empty list removal : " + str(l1))
The original list is : ['gsfd', 23, [], 113, 'Eshant', [], [], 100]
List after empty list removal : ['gsfd', 23, 113, 'Eshant', 100]
```

In []:

In []:

Q10. Write a Python program to Cloning or Copying a list?

Answer:

```
In [21]: l=list(map(str,input("Enter the elements of the list seperated by space ").split()))
a=l[:]
print("Original List = ",l)
print("After clonning = ",a)
Enter the elements of the list seperated by space 34 675 134 Eshant hello 100
Original List = ['34', '675', '134', 'Eshant', 'hello', '100']
After clonning = ['34', '675', '134', 'Eshant', 'hello', '100']
```

In []:

In []:

Q11. Write a Python program to Count occurrences of an element in a list?

Answer:

```
In [22]: l=list(map(str,input("Enter the elements of the list seperated by space ").split()))
c=input("Enter the element which you want to count ")
print("You list = ",l)
print("Element which you want to count = ",c)
e=l.count(c)
print(f"{c} is present in the list {e} times... So the count of the number of occurence is {e}")
Enter the elements of the list seperated by space 34 54 576 Eshant 13 Eshant 213 432 100 Eshant
Enter the element which you want to count Eshant
You list = ['34', '54', '576', 'Eshant', '13', 'Eshant', '213', '432', '100', 'Eshant']
Element which you want to count = Eshant
Eshant is present in the list 3 times... So the count of the number of occurence is 3
```

In []: