Programming_Assingment10

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

```python
n = int(input("Enter the lenth of your list : "))
lst = []

for i in range(n):
    lst.append(int(input()))
print("The List is ",lst)
print("Sum of elements in List",sum(lst))
```

Enter the lenth of your list : 5
1
3
4
5
6
The List is [1, 3, 4, 5, 6]
Sum of elements in List 19

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

```python
n = int(input("Enter the lenth of your list : "))
lst = []

for i in range(n):
    lst.append(int(input()))
print("The List is ",lst)
product = 1
for ele in lst:
    product = product*ele
print("Product of elements in List is :",product)
```

Enter the lenth of your list : 5
2
4
6
8
10
The List is [2, 4, 6, 8, 10]
Product of elements in List is : 3840

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

```python
n = int(input("Enter the lenth of your list : "))
lst = []

for i in range(n):
    lst.append(int(input()))
print("The List is ",lst)
print("The Smallest element in the list is :",min(lst))
```

```
Enter the lenth of your list : 2
3
2
The List is  [3, 2]
The Smallest element in the list is : 2
```

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

```python
n = int(input("Enter the lenth of your list : "))
lst = []

for i in range(n):
    lst.append(int(input()))
print("The List is ",lst)
print("The largest element in the list is :",max(lst))
```

```
Enter the lenth of your list : 9
1
2
3
4
5
3
5
35
8
The List is  [1, 2, 3, 4, 5, 3, 5, 35, 8]
The largest element in the list is : 35
```

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

```python
n = int(input("Enter the lenth of your list : "))
```

```
lst = []

for i in range(n):
    lst.append(int(input()))
print("The List is ",lst)
lst.sort()
print("The sorted list is ",lst)
print("The second largest element in the list is ",lst[-2])
```

Enter the lenth of your list : 5
2
7
45
64
77
The List is [2, 7, 45, 64, 77]
The sorted list is [2, 7, 45, 64, 77]
The second largest element in the list is 64

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

```
n = int(input("Enter the lenth of your list : "))
lst = []

for i in range(n):
    lst.append(int(input()))
print("The List is ",lst)
lst.sort()
print("The sorted list is ",lst)
nlargest = int(input("Enter how many largest number u want to see in from the list :"))

if n < nlargest :
    print("enterted value is larger then that list length")
else:
    print(nlargest,"largest elements from the list are :",lst[(n-nlargest):])
```

Enter the lenth of your list : 6
2
56
33
55
34
78
The List is [2, 56, 33, 55, 34, 78]

The sorted list is [2, 33, 34, 55, 56, 78]
Enter how many largest number u want to see in from the list :3
3 largest elements from the list are : [55, 56, 78]

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

```python
n = int(input("Enter the lenth of your list : "))
lst = []

for i in range(n):
    lst.append(int(input()))
print("The List is ",lst)
evenlist =[]

for i in lst:
    if i % 2 == 0:
        evenlist.append(i)
print("The even numbers in the list are :",evenlist)
```

Enter the lenth of your list : 5
2
4
2
1
1
The List is [2, 4, 2, 1, 1]
The even numbers in the list are : [2, 4, 2]

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

```python
n = int(input("Enter the lenth of your list : "))
lst = []

for i in range(n):
    lst.append(int(input()))
print("The List is ",lst)
oddlist =[]

for i in lst:
    if i % 2 != 0:
        oddlist.append(i)
print("The odd numbers in the list are :",oddlist)
```

```
Enter the lenth of your list : 5
1
3
2
2
2
The List is  [1, 3, 2, 2, 2]
The odd numbers in the list are : [1, 3]
```

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

```python
lst = [2,[],4,5,[],6,8,[],3]
print("The List :",lst)
removedlist = [ele for ele in lst if ele != []]
print("The list after removing empty lists")
print(removedlist)
```

```
The List : [2, [], 4, 5, [], 6, 8, [], 3]
The list after removing empty lists
[2, 4, 5, 6, 8, 3]
```

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

```python
n = int(input("Enter the lenth of your list : "))
lst = []

for i in range(n):
    lst.append(int(input()))
print("The List is ",lst)

print("The cloned/copied list :")

#Method 1
lstcopy = lst[:]
print("Cloning By list slicing lst[:] ",lstcopy)

#method2
lst2 = lst.copy()
print("Cloning By list copying lst.copy() ",lst2)


#Method3
lstcomprah = [i for i in lst]
```

```python
print("Cloning By list Comprahention ",lstcomprah)



#method4
lstappend=[]
for i in lst : lstappend.append(i)
print("Cloning By list append ",lstappend)
```

Enter the lenth of your list : 3
1
2
3
The List is [1, 2, 3]
The cloned/copied list :
Cloning By list slicing lst[:] [1, 2, 3]
Cloning By list copying lst.copy() [1, 2, 3]
Cloning By list Comprahention [1, 2, 3]
Cloning By list append [1, 2, 3]

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

```python
n = int(input("Enter the lenth of your list : "))
lst = []

for i in range(n):
    lst.append(int(input()))
print("The List is ",lst)
ele= int(input("Enter the element to find its occurance : "))
print(ele,"has occured {} times in the list ".format(lst.count(ele)))
```

Enter the lenth of your list : 5
3
4
5
2
6
The List is [3, 4, 5, 2, 6]
Enter the element to find its occurance : 3
3 has occured 1 times in the list