**BASIC PROGRAMMING ASSIGNMENT\_9-SUBMITTED BY SAMUEL DEVDAS**

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

Ans. input1=int(input('Enter the length of the list:'))

list1=[]

for i in range(input1):

input2=int(input('enter integers into the list one at a time:'))

list1.append(input2)

print('The numbers entered are:',list1)

print('The sum of the numbers equals:',sum(list1))

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

Ans. input1=int(input('Enter the length of the list:'))

list1=[]

for i in range(input1):

input2=int(input('enter integers into the list one at a time:'))

list1.append(input2)

print('The numbers entered are:',list1)

prod=1

for num in range(len(list1)):

prod=list1[num]\*prod

print('Multiplication of all numbers in the list:',prod)

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

Ans. input1=int(input('Enter the length of the list:'))

list1=[]

for i in range(input1):

input2=int(input('enter integers into the list one at a time:'))

list1.append(input2)

print('The numbers entered are:',list1)

print('The smallest number in the list is:',min(list1))

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

Ans. input1=int(input('Enter the length of the list:'))

list1=[]

for i in range(input1):

input2=int(input('enter integers into the list one at a time:'))

list1.append(input2)

print('The numbers entered are:',list1)

print('The largest number in the list is:',max(list1))

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

Ans. input1=int(input('Enter the length of the list:'))

list1=[]

for i in range(input1):

input2=int(input('enter integers into the list one at a time:'))

list1.append(input2)

print('The numbers entered are:',list1)

print('The largest number in the list is:',max(list1))

list2=[]

for i in list1:

if i<max(list1):

list2.append(i)

print('The second largest number in the list is:',max(list2))

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

Ans. input1=int(input('Enter the number of elements in the list:'))

list1=[]

Nlargest=int(input('Enter N or number of largest elements to be extracted:'))

for i in range(input1):

input2=float(input('Enter the numbers into the list one at a time:'))

list1.append(input2)

print('The numbers entered are:',list1)

sortedlist1=sorted(list1)

set1=set(sortedlist1)

nlar=list(set1)

print('The',Nlargest,'largest numbers are:')

for num in range(Nlargest):

pop1=nlar.pop()

print(pop1)

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

Ans. input1=int(input('Enter the number of elements in the list:'))

list1=[]

for i in range(input1):

input2=float(input('Enter the numbers into the list one at a time:'))

list1.append(input2)

print('The numbers entered are:',list1)

print('The even numbers in the list are:')

for num in list1:

if num%2==0:

print(num)

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

Ans. input1=int(input('Enter the number of elements in the list:'))

list1=[]

for i in range(input1):

input2=float(input('Enter the numbers into the list one at a time:'))

list1.append(input2)

print('The numbers entered are:',list1)

print('The odd numbers in the list are:')

for num in list1:

if num%2==1:

print(num)

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

Ans. empty=[1,2,[],3,[4],[5],[]]

print('A List with empty nested lists:',empty)

for i in empty:

if i==[]:

empty.remove(i)

else:

continue

print('The same List with empty nested lists removed:',empty)

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

Ans. input1=(input('Enter the number of elements in the list:'))

list1=[]

for i in range(int(input1)):

input2=(input('Enter the elements into the list one at a time:'))

list1.append(input2)

print('The elements in list1 are:',list1)

list1copy=list1.copy()

print('The copy of list1 is list1copy:',list1copy)

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

Ans. input1=(input('Enter the number of elements in the list:'))

list1=[]

for i in range(int(input1)):

input2=(input('Enter the elements into the list one at a time:'))

list1.append(input2)

print('The elements entered are:',list1)

counter=input('Enter the element to be counted:')

print('The occurences of',counter,'are:',list1.count(counter))