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

Ans.

total = 0

a = [2, 3, 4, 5, 6, 7, 8, 9]

for ele in range(0, len(a)):

total = total + a[ele]

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

OUTPUT:

Sum of all elements in given list: 44

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

Ans.

def multiplyList(a):

result = 1

for x in a:

result = result \* x

return result

a = [1, 2, 3, 4, 5, 6]

b = [3, 2, 4, 5, 6, 7]

print(multiplyList(a))

print(multiplyList(b))

OUTPUT:

720

5040

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

Ans.

a = [1,2,3,4,5,6,7,8,9]

a.sort()

print("Smallest element is:", \*a[:1])

OUTPUT:

Smallest element is: 1

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

Ans.

a = [1,2,3,4,5,6,7,8,9]

a.sort()

print("Largest element is:", a[-1])

OUTPUT:

Largest element is: 9

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

Ans.

a = [1,2,3,4,5,6,7,8,9]

mx = max(a[0], a[1])

secondmax = min(a[0], a[1])

n = len(a)

for i in range(2, n):

if a[i] > mx:

secondmax = mx

mx = a[i]

elif a[i] > secondmax and \

mx != a[i]:

secondmax = a[i]

elif mx == secondmax and \

secondmax != a[i]:

secondmax = a[i]

print("Second highest number is : ", \

str(secondmax))

OUTPUT:

Second highest number is : 8

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

Ans.

def Nmaxelements(list1, N):

final\_list = []

for i in range(0, N):

max1 = 0

for j in range(len(list1)):

if a[j] > max1:

max1 = a[j];

a.remove(max1);

final\_list.append(max1)

print(final\_list)

a = [1,2,3,4,5,6,7,8,9]

N = 2

Nmaxelements(a, N)

OUTPUT:

[9, 8]

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

Ans.

a = [1,2,3,4,5,6,7,8,9]

for num in a:

if num % 2 == 0:

print(num, end=" ")

OUTPUT:

2 4 6 8

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

Ans.

a = [1,2,3,4,5,6,7,8,9]

for num in a:

if num % 2 != 0:

print(num, end=" ")

OUTPUT:

1 3 5 7 9

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

Ans.

a= [1,2,3,[],4,5,4,[],6,4,5,[],7,8,9]

print("The original list is : " + str(a))

res = [ele for ele in a if ele != []]

print("List after empty list removal : " + str(res))

OUTPUT:

The original list is : [1, 2, 3, [], 4, 5, 4, [], 6, 4, 5, [], 7, 8, 9]

List after empty list removal : [1, 2, 3, 4, 5, 4, 6, 4, 5, 7, 8, 9]

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

Ans.

def Cloning(a1):

a\_copy = a[:]

return a\_copy

a = [1,2,3,4,5,6,7,8,9]

b = Cloning(a)

print("Original List:", a)

print("After Cloning:", b)

OUTPUT:

Original List: [1, 2, 3, 4, 5, 6, 7, 8, 9]

After Cloning: [1, 2, 3, 4, 5, 6, 7, 8, 9]

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

Ans.

def countX(a, x):

count = 0

for ele in a:

if (ele == x):

count = count + 1

return count

a = [1, 1, 2, 3, 4, 4, 4, 4, 2, 4, 5, 6, 5, 5, 4, 4, 2, 4, 5]

x = 4

print('{} has occurred {} times'.format(x, countX(a, x)))

OUTPUT:

4 has occurred 8 times