INPUT  
# rearrange the values of alternate location (Ripunjay ,Manasvi)

a = eval(input("Enter a list : "))

print('Original list is : ',a)

s = len(a)

if s%2 != 0:

s = s-1

for i in range(0,s,2) :

print(i,i+1)

a[i],a[i+1] = a[i+1],a[i]

print('list after swapping is :',a)

OUTPUT

Enter a list : [2, 5, 9, 14, 17, 8, 19, 16]

Original list is : [2, 5, 9, 14, 17, 8, 19, 16]

0 1

2 3

4 5

6 7

list after swapping is : [5, 2, 14, 9, 8, 17, 16, 19]

Enter a list : [2,4,5,67,99]

Original list is : [2, 4, 5, 67, 99]

0 1

2 3

list after sawpping is : [4, 2, 67, 5, 99]

INPUT

# replace values of every element with its reverse(Ripunjay ,Manasvi)

a = eval(input('enter a list : '))

l = len(a)

for i in range(0,l) :

n = a[i]

m = 0

while n!= 0 :

r = n%10

m = m\*10 + r

n = n//10

a[i] = m

print(a)

OUTPUT

enter a list : [24,56,7889,34,23455]

[42, 65, 9887, 43, 55432]

enter a list : [1,3,5,7,99]

[1, 3, 5, 7, 99]

enter a list : [2,555,66,78,89,0]

[2, 555, 66, 87, 98, 0]

INPUT  
# concatenation of 2 lists(Ripunjay ,Manasvi)

l1 = eval(input("Enter a list : "))

l2 = eval(input("Enter another list : "))

l3 = []

if len(l1)==len(l2) :

for i in range(0,len(l1)) :

l3.append(l1[i])

l3.append(l2[i])

print("the required list is :",l3)

else :

print("lists not of equal size !!")

OUTPUT

Enter a list : [1,3,5,7,9]

Enter another list : [2,4,6,8,10]

the required list is : [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]

Enter a list : [2,5,7,9,8,113,55]

Enter another list : [31,6,8,99,1111]

lists not of equal size !!

INPUT

# list in ascending order using bubble sort (Ripunjay ,Manasvi)

a = eval(input('enter a list :'))

l = len(a)

for i in range(0,l-1) :

for j in range(0,l-i-1) :

if a[j] > a[j+1] :

a[j],a[j+1] = a[j+1],a[j]

print('list in ascending order using bubble sort is :',a)

OUTPUT

enter a list : [99,37,1156,23,88,87,55,100]

list in ascending order after bubble sort is : [23, 37, 55, 87, 88, 99, 100, 1156]

enter a list :[1,2,0,55,77,83,11114,34]

list in ascending order after bubble sort is : [0, 1, 2, 34, 55, 77, 83, 11114]

INPUT

# list after removing all odd numbers(Ripunjay ,Manasvi)

l = eval(input("enter a list :"))

size = len(l)

i = 0

print("original list is :",l)

while i < size :

if l[i]%2!= 0:

while True :

if l[i]%2 != 0:

del(l[i])

size = size -1

if i >= size:

break

else :

break

i = i+1

else :

i = i+1

print("new list is :",l)

OUTPUT

enter a list : [2,3,5,7,9,10,11]

original list is : [2, 3, 5, 7, 9, 10, 11]

new list is : [2, 10]

enter a list : [20,10,50,76,88,90,100]

original list is : [20, 10, 50, 76, 88, 90, 100]

new list is : [20, 10, 50, 76, 88, 90, 100]

enter a list : [1,5,7,9,99,1111,33]

original list is : [1, 5, 7, 9, 99, 1111, 33]

new list is : []

INPUT

# insertion sort in ascending order(Ripunjay ,Manasvi)

a = eval(input("enter a list of numbers :"))

l = len(a)

for i in range(1,l) :

temp = a[i]

j = i - 1

while a[j] > temp and j >= 0 :

a[j+1] = a[j]

j -= 1

a[j+1] = temp

print("list in ascending order is :",a)

OUTPUT

enter a list of numbers : [2,99,1,0,1118,77,66,12,45]

list in ascending order is : [0, 1, 2, 12, 45, 66, 77, 99, 1118]

enter a list of numbers :[0]

list in ascending order is : [0]

enter a list of numbers :[100,100,100,1000]

list in ascending order is : [100, 100, 100, 1000]