**PYTHON TEST 3 - 13/09/2022**

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1Q MERGE A TWO SORTED LIST . LET IT BE LIST 1 AND LIST 2

INPUT

LIST 1 = [8,9,10,20] ; LIST 2 = [12,15,25,30]

GET OUTPUT 0

OUTPUT EMPTY []

LIST 1=[10,20], LIST 2=[]

LIST 1=[9] LIST 2 =[15,25]

list1=[]

list2=[]

num1=int(input("Enter number of elements for first list:"))

for i in range(1,num1+1):

b=int(input("Enter element: "))

list1.append(b)

num2=int(input("Enter number of elements for second list:"))

for i in range(1,num2+1):

d=int(input("Enter element:"))

list2.append(d)

list3=list1+list2

print("Merged List :",list3)

list3.sort()

print("Sorted list is:",list3)

2Q GENERATE THE PARANTHESIS PROGRAM TO DISPLAY

TEST CASE

N=3

N=1

N=5

def printParenthesis(str, n):

if(n > 0):

\_printParenthesis(str, 0,

n, 0, 0)

return

def \_printParenthesis(str, pos, n,

open, close):

if(close == n):

for i in str:

print(i, end="")

print()

return

else:

if(open > close):

str[pos] = ')'

\_printParenthesis(str, pos + 1, n,

open, close + 1)

if(open < n):

str[pos] = '('

\_printParenthesis(str, pos + 1, n,

open + 1, close)

n = int(input("n="))

str = [" "] \* 2 \* n

printParenthesis(str , n)

3Q PROGRAM TO FIND THE GIVEN YEAR IS LEAP YEAR OR NOT GET THE INPUT FORM THE USER.

n=int(input("Enter Your Year : "))

if(n>0):

if(n%400==0):

print("Your Year is a Leap Year")

elif((n%4==0)and (n%100!=0)):

print("Your Year is a Leap Year")

else:

print("Your Year is not a Leap Year")

else:

print("Invalid Year")