#Tạo một mảng ngẫu nhiên (tự sinh ra)

import random

array= []

array1= []

n = random.randint(1,101)

for x in range(n):

array.append(random.randint(1,101))

print("Da tao mang co so phan tu la: ")

print(n)

print("Mang da tao: ")

print(array)

#Sap xep tang dan bang ham sort()

array1=array

array1.sort()

print("Mang sau khi sap xep tang, dung ham sort:")

print(array1)

array1=sorted(array,reverse= True)

print("Mang sau khi sap xep giam, khong dung ham sort:")

print(array1)

#Ham check so nguyen to

def isNguyenTo(x):

for i in range(x):

if i>1 and i<x and x%i==0:

return("false")

array2.append(x)

return("true")

#Dem so nguyen to

dem=0

array2=[]

for y in array:

if(isNguyenTo(y)=="true"): dem+=1

print("So luong so nguyen to: ")

print(dem)

print("Danh sach so nguyen to la: ")

print(array2)

#Sap xep khong dung ham sort()

array3=array1

n = len(array3)

for x in range(0,n-1):

for y in range(x+1,n):

if array3[x]>array3[y]:

tg=array3[x]

array3[x]=array3[y]

array3[y]=tg

print("Ket qua sap xep tang dan khong dung ham sort: ")

print(array3)

#Nhap so

print("Moi ban nhap mot so:")

s=input()

print("So ban da nhap:")

print(s)

#Ham check so nguyen to

def isNguyenTo(x):

for i in range(2,x):

if x%i==0: return('false')

return("true")

if(isNguyenTo(int(s))=="true"):

print("La so nguyen to")

else:

print("Khong la so nguyen to")

# Ham in ra day so fibonaxy nho hon N

def fibonaxi(n):

x1 = 1

x2 = 1

x3 = 2

arrayA=[]

if n>1:

arrayA.append(x1)

arrayA.append(x2)

while(x3<n):

if x3<n: arrayA.append(x3)

x1=x2

x2=x3

x3=x1+x2

return arrayA

n= random.randint(1,101)

arrayB = fibonaxi(n)

print("Day so fibonaxi: ")

print(arrayB)

#Ham kiem tra so chinh phuong

def isChinhPhuong(n):

i=0

while(i\*i<=n):

if(i\*i==n): return("true")

i+=1

return("false")

if(isChinhPhuong(1)=="true"):

print("La so chinh phuong")

else:

print("Khong phai so chinh phuong")

#Ham kiem tra mot so doi xung

def isSoDoiXung(n):

M = 0

tmp = n

while(tmp>0):

k = tmp%10

M = M\*10 + k

tmp = tmp/10

print(M)

print(n)

if M==n:

print

print("CO")

else:

print("KHONG")

isSoDoiXung(141)

# if(isSoDoiXung(141) =='true'):

# print("La so doi xung")

# else:

# print("Khong phai la so doi xung nha")

def isDoiXung(m):

tong = 0

tg = m

while(tg>0):

sodu=tg%10

tong = tong \*10 +sodu

tg=tg//10

if tong==m:

print("OK")

else:

print("nOK")

isDoiXung(71)