QUE NO 1.

def fact(n):

res=1

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

res=res\*i

return res

print(fact(3))

def approx\_e(iter):

lst=[]

for i in range(0, iter):

if i==0:

lst.append(1)

continue

lst.append(1/fact(i))

print(lst)

result=sum(lst)

print(sum(lst))

approx\_e(100)

QUE NO. 2..

import math

def squares(seq):

res=[]

for i in seq:

root=math.sqrt(i)

if int(root+0.5)\*\*2==i:

res.append(i)

return res

squares([500,30])

QUE NO. 3

def add\_this\_many(x, el, lst):

repeat=0

for i in lst:

if x==i:

repeat +=1

print(repeat)

for i in range(repeat):

lst.append(el)

return lst

lst = [1, 2, 4, 3, 1]

add\_this\_many(1, 5, lst)