def longestSubSet(L):

X = subsets(L)

y = 0

R = []

for H in X:

tempR, tempy = checkForLongest(H, length(H))

if (tempR):

R = tempR

y = tempy

return R

def subsets(L):

result = [ [] ] # list containing one empty list

for x in L:

# make a copy of each list in result with x inserted in

with\_x = []

for subset in result:

with\_x.append(subset + [x])

# the new result is the current result plus with\_x

result = result + with\_x

return result

def checkForLongest:(L,n):

y = 0

R = []

for x in range(L):

if(L[x] < L[x+1]):

y++

else:

return

R = L

return (R,y)