Cut N meters of roles to m parts

Compute this, in which condition, cut to I and cut to q-I makes the tol multiply maximum

class Solution(object):

def maxProductAfterCutting(self,length):

"""

:type length: int

:rtype: int

"""

if length==2:

return 2

if length==3:

return 3

dp = [0,1,2,3]

for i in range(4,length+1):

maximum = float("-inf")

for j in range(1,i//2+1):

maximum = max(maximum,dp[j]\*dp[i-j])

dp.append(maximum)

return dp[-1]