Problem #118 — Pascal’s Triangle

<https://leetcode.com/problems/pascals-triangle/>

Use the identity in combinations:

n C (r -1) + n C r = (n+1) C r

class Solution:

def generate(self, numRows: int) -> List[List[int]]:

if numRows == 0:

return([])

elif numRows == 1:

return([[1]])

elif numRows == 2:

return([[1], [1, 1]])

pascal\_list = [[1], [1, 1]]

for i in range (3, numRows + 1):

alist = [1]

for j in range(1, len(pascal\_list[-1])):

alist.append(pascal\_list[-1][j-1] + pascal\_list[-1][j])

alist.append(1)

pascal\_list.append(alist)

return(pascal\_list)