class Solution:

def combine(self, n: int, k: int) -> List[List[int]]:

res = []

comb = []

def backtrack(start):

if len(comb) == k:

res.append(comb[:])

return

for num in range(start, n + 1):

comb.append(num)

backtrack(num + 1)

comb.pop()

backtrack(1)

return res