class Solution:

def permute(self, nums: List[int]) -> List[List[int]]:

if len(nums) == 1:

return [nums[:]]

res = []

for \_ in range(len(nums)):

n = nums.pop(0)

perms = self.permute(nums)

for p in perms:

p.append(n)

res.extend(perms)

nums.append(n)

return res