class Solution:

def generateParenthesis(self, n: int) -> List[str]:

res = []

def dfs(openP, closeP, s):

if openP == closeP and openP + closeP == n \* 2:

res.append(s)

return

if openP < n:

dfs(openP + 1, closeP, s + "(")

if closeP < openP:

dfs(openP, closeP + 1, s + ")")

dfs(0, 0, "")

return res