class Solution:

def convert(self, s: str, numRows: int) -> str:

if numRows == 1 or numRows >= len(s):

return s

idx, d = 0, 1

rows = [[] for \_ in range(numRows)]

for char in s:

rows[idx].append(char)

if idx == 0:

d = 1

elif idx == numRows - 1:

d = -1

idx += d

for i in range(numRows):

rows[i] = ''.join(rows[i])

return ''.join(rows)