class Solution:

def nextPermutation(self, arr):

n = len(arr)

i = n - 2

# Step 1: Find the first decreasing element from the right

while i >= 0 and arr[i] >= arr[i + 1]:

i -= 1

if i >= 0:

# Step 2: Find the element just larger than arr[i]

j = n - 1

while arr[j] <= arr[i]:

j -= 1

# Step 3: Swap arr[i] and arr[j]

arr[i], arr[j] = arr[j], arr[i]

# Step 4: Reverse the elements after index i

arr[i + 1:] = arr[i + 1:][::-1] # Correct reversal logic