## **Python: Next Permutation**

```
from typing import List
class Solution:
  def nextPermutation(self, nums: List[int]):
    n = len(nums)
    # Step 1: Find the first decreasing element from the end
    i = n - 2
    while i \ge 0 and nums[i] \ge nums[i + 1]:
      i -= 1
    if i \ge 0:
      # Step 2: Find the next larger element from the end and swap
      j = n - 1
      while nums[j] <= nums[i]:
        j -= 1
       nums[i], nums[j] = nums[j], nums[i]
    # Step 3: Reverse the sequence after i
    nums[i + 1:] = reversed(nums[i + 1:])
# Example usage
nums = [1, 2, 3]
Solution().nextPermutation(nums)
print(nums) # Output: [1, 3, 2]
```

## **SQL: Consecutive Numbers**

```
# Write your MySQL query statement below
```

WITH LogsNeighbors AS (SELECT \*,

LAG(num) OVER(ORDER BY id) AS previous\_num,

LEAD(num) OVER(ORDER BY id) AS next\_num

FROM LOGS)

SELECT DISTINCT num AS ConsecutiveNums

FROM LogsNeighbors

WHERE num = previous\_num AND num = next\_num;