60. Permutation Sequence

The set [1, 2, 3, ..., n] contains a total of n! unique permutations.

By listing and labeling all of the permutations in order, we get the following sequence for n = 3:

1. "123"
2. "132"
3. "213"
4. "231"
5. "312"
6. "321"

Given n and k, return the kth permutation sequence.

Example 1:

- **Input:** n = 3, k = 3
- **Output:** "213"

Example 2:

- **Input:** n = 4, k = 9
- **Output:** "2314"

Example 3:

- **Input:** n = 3, k = 1
- **Output:** "123"

Constraints:

$1 <= n <= 9$

$1 <= k <= n!$