72. 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"

AIM: To find the permutation sequence

PROGRAM:

```python
import math

def getPermutation(n, k):
    nums = [str(i) for i in range(1, n + 1)]
    result = []
    k -= 1
    for i in range(n):
        index = k // math.factorial(n - 1 - i)
        result.append(nums.pop(index))
        k %= math.factorial(n - 1 - i)

    return ''.join(result)
n = 3
k = 3
print(getPermutation(n, k))
```

OUTPUT:
213

TIME COMPLEXITY: O(n^2)