Problem 440: K-th Smallest in Lexicographical Order

Problem Information

Difficulty: Hard
Acceptance Rate: 46.06%
Paid Only: No
Tags: Trie

Problem Description

Given two integers `n` and `k`, return _the_ `kth` _lexicographically smallest integer in the range_ `[1, n]`.

Example 1:

Input: n = 13, k = 2 **Output:** 10 **Explanation:** The lexicographical order is [1, 10, 11, 12, 13, 2, 3, 4, 5, 6, 7, 8, 9], so the second smallest number is 10.

Example 2:

Input: n = 1, k = 1 **Output:** 1

Constraints:

* `1 <= k <= n <= 109`

Code Snippets

C++:

```
class Solution {
public:
    int findKthNumber(int n, int k) {
```

```
    }
};
```

Java:

```java
class Solution {
public int findKthNumber(int n, int k) {


}
}
```

Python3:

```python
class Solution:
def findKthNumber(self, n: int, k: int) -> int:
```