

440. K-th Smallest in Lexicographical Order

Given two integers n and k , return the k th 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:

- $1 \leq k \leq n \leq 10^9$