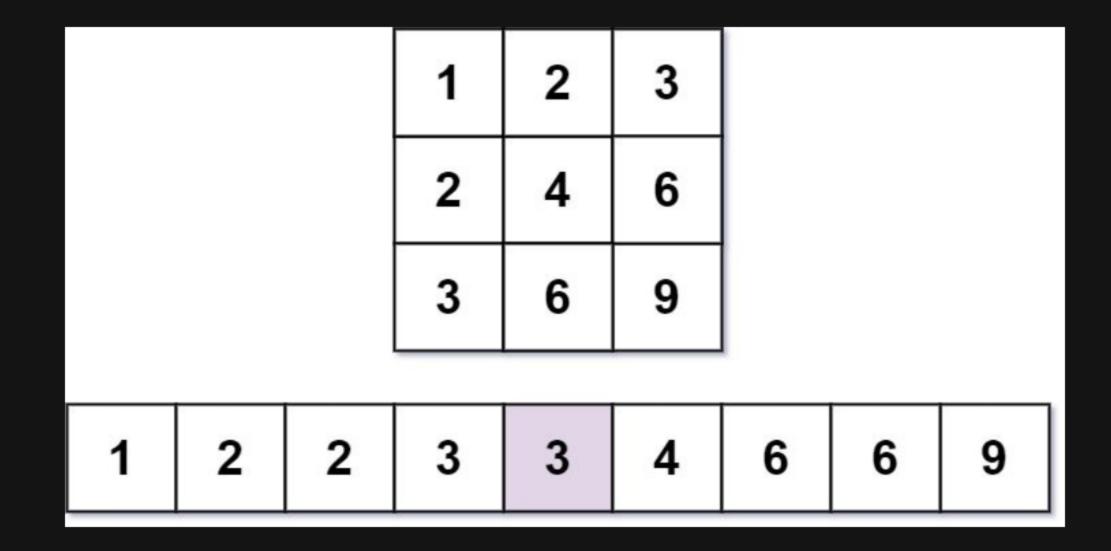
668. Kth Smallest Number in Multiplication Table

Description

Nearly everyone has used the Multiplication Table. The multiplication table of size $[m \times n]$ is an integer matrix [mat] where [mat[i][j] == i * j] (1-indexed).

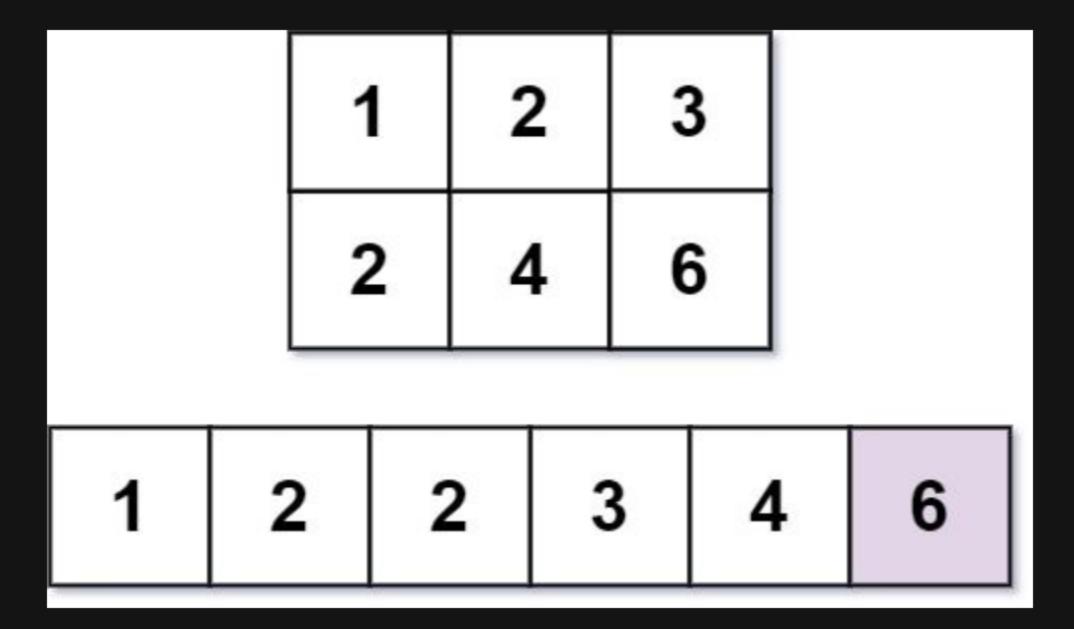
Given three integers [m], [n], and [k], return the [k th] smallest element in the [m x n] multiplication table.

Example 1:



Input: m = 3, n = 3, k = 5
Output: 3
Explanation: The 5 th smallest number is 3.

Example 2:



Input: m = 2, n = 3, k = 6
Output: 6
Explanation: The 6 th smallest number is 6.

Constraints:

- $1 \le m, n \le 3 * 10^4$
- 1 <= k <= m * n