

1492. The kth Factor of n

Description

You are given two positive integers `n` and `k`. A factor of an integer `n` is defined as an integer `i` where `n % i == 0`.

Consider a list of all factors of `n` sorted in **ascending order**, return *the* `kth` *factor* in this list or return `-1` if `n` has less than `k` factors.

Example 1:

Input: `n = 12, k = 3`

Output: `3`

Explanation: Factors list is `[1, 2, 3, 4, 6, 12]`, the 3rd factor is 3.

Example 2:

Input: `n = 7, k = 2`

Output: `7`

Explanation: Factors list is `[1, 7]`, the 2nd factor is 7.

Example 3:

Input: `n = 4, k = 4`

Output: `-1`

Explanation: Factors list is `[1, 2, 4]`, there is only 3 factors. We should return `-1`.

Constraints:

- `1 <= k <= n <= 1000`

Follow up:

Could you solve this problem in less than $O(n)$ complexity?

