276. Paint Fence Premium

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You are painting a fence of `n` posts with `k` different colors. You must paint the posts following these rules:

- Every post must be painted **exactly one** color.
- There **cannot** be three or more **consecutive** posts with the same color.

Given the two integers `n` and `k`, return *the **number of ways** you can paint the fence.*

Example 1:

> **Input:** `n = 3, k = 2`
> **Output:** `6`
> **Explanation:** All the possibilities are shown.
> Note that painting all the posts red or all the posts green is invalid because there cannot be three posts in a row with the same color.

Example 2:

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

Example 3:

> **Input:** `n = 7, k = 2`
> **Output:** `42`

Constraints:

- `1 <= n <= 50`
- `1 <= k <= 10^5`
- The testcases are generated such that the answer is in the range `[0, 2^31 - 1]` for the given `n` and `k`.

Seen this question in a real interview before? 1/5

Yes No

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