Snake in Matrix - LeetCode

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3248. Snake in Matrix

There is a snake in an `n x n` matrix `grid` and can move in **four possible directions**. Each cell in the `grid` is identified by the position: `grid[i][j] = (i * n) + j`.

The snake starts at cell 0 and follows a sequence of commands.

You are given an integer `n` representing the size of the `grid` and an array of strings `commands` where each `command[i]` is either `"UP"`, `"RIGHT"`, `"DOWN"`, and `"LEFT"`. It's guaranteed that the snake will remain within the `grid` boundaries throughout its movement.

Return the position of the final cell where the snake ends up after executing `commands`.

Example 1:

> **Input:** n = 2, commands = ["RIGHT","DOWN"]
>
> **Output:** 3
>
> **Explanation:**

0	1	0	1	0	1
2	3	2	3	2	3

Example 2:

> **Input:** n = 3, commands = ["DOWN","RIGHT","UP"]
>
> **Output:** 1
>
> **Explanation:**

0	1	2	0	1	2	0	1	2	0	1	2
3	4	5	3	4	5	3	4	5	3	4	5
6	7	8	6	7	8	6	7	8	6	7	8

Constraints:

- `2 <= n <= 10`
- `1 <= commands.length <= 100`
- `commands` consists only of `"UP"`, `"RIGHT"`, `"DOWN"`, and `"LEFT"`.
- The input is generated such the snake will not move outside of the boundaries.