1824. Minimum Sideway Jumps

Description

There is a **3 lane road** of length `n` that consists of `n + 1` **points** labeled from `0` to `n`. A frog **starts** at point `0` in the **second** lane and wants to jump to point `n`. However, there could be obstacles along the way.

You are given an array `obstacles` of length `n + 1` where each `obstacles[i]` (**ranging from 0 to 3**) describes an obstacle on the lane `obstacles[i]` at point `i`. If `obstacles[i] == 0`, there are no obstacles at point `i`. There will be **at most one** obstacle in the 3 lanes at each point.

- For example, if `obstacles[2] == 1`, then there is an obstacle on lane 1 at point 2.

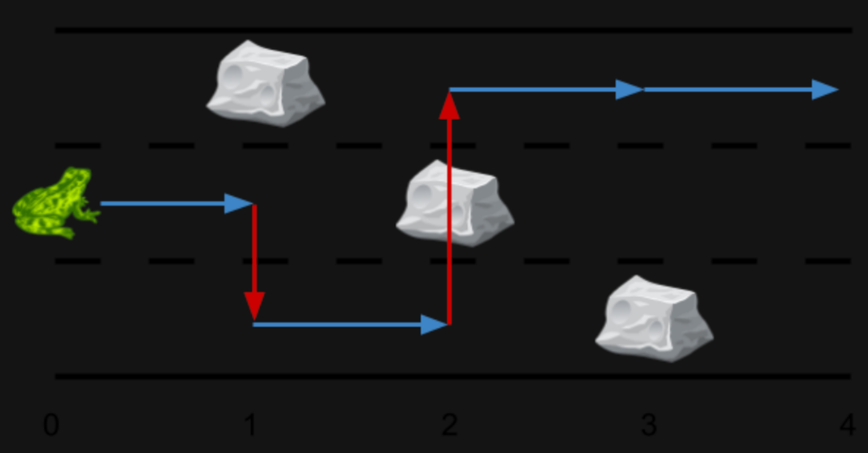
The frog can only travel from point `i` to point `i + 1` on the same lane if there is not an obstacle on the lane at point `i + 1`. To avoid obstacles, the frog can also perform a **side jump** to jump to **another** lane (even if they are not adjacent) at the **same** point if there is no obstacle on the new lane.

- For example, the frog can jump from lane 3 at point 3 to lane 1 at point 3.

Return *the **minimum number of side jumps** the frog needs to reach **any lane** at point n starting from lane `2` at point 0.*

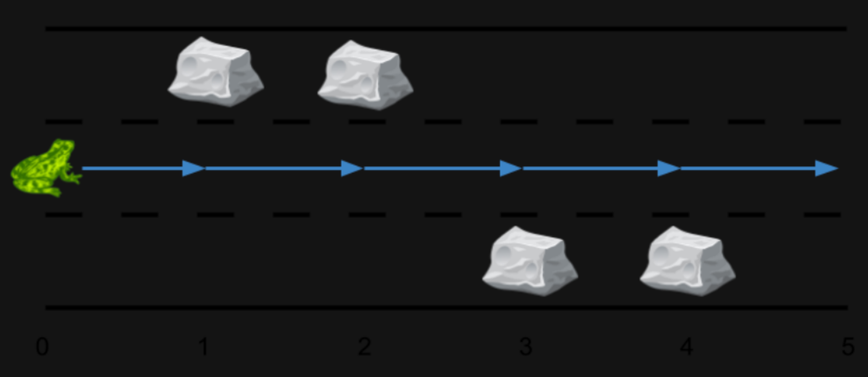
Note: There will be no obstacles on points `0` and `n`.

Example 1:



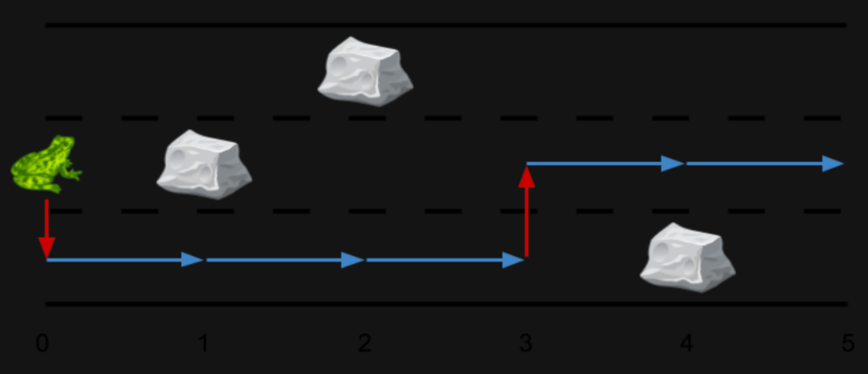

```
Input: obstacles = [0,1,2,3,0]
Output: 2
Explanation: The optimal solution is shown by the arrows above. There are 2 side jumps (red arrows).
Note that the frog can jump over obstacles only when making side jumps (as shown at point 2).
```

Example 2:




```
Input: obstacles = [0,1,1,3,3,0]
Output: 0
Explanation: There are no obstacles on lane 2. No side jumps are required.
```

Example 3:




```
Input: obstacles = [0,2,1,0,3,0]
Output: 2
Explanation: The optimal solution is shown by the arrows above. There are 2 side jumps.
```

Constraints:

- `obstacles.length == n + 1`
- `1 <= n <= 5 * 10^5`
- `0 <= obstacles[i] <= 3`
- `obstacles[0] == obstacles[n] == 0`