1018. Binary Prefix Divisible By 5

Description

You are given a binary array nums (0-indexed).

We define x i as the number whose binary representation is the subarray nums[0..i] (from most-significant-bit to least-significant-bit).

• For example, if $\begin{bmatrix} nums = [1,0,1] \end{bmatrix}$, then $\begin{bmatrix} x_0 = 1 \end{bmatrix}$, $\begin{bmatrix} x_1 = 2 \end{bmatrix}$, and $\begin{bmatrix} x_2 = 5 \end{bmatrix}$.

Return an array of booleans answer where answer[i] is true if x_i is divisible by [5].

Example 1:

```
Input: nums = [0,1,1]
Output: [true,false,false]
Explanation: The input numbers in binary are 0, 01, 011; which are 0, 1, and 3 in base-10.
Only the first number is divisible by 5, so answer[0] is true.
```

Example 2:

```
Input: nums = [1,1,1]
Output: [false,false,false]
```

Constraints:

- 1 <= nums.length <= 10 ⁵
- nums[i] is either 0 or 1.