

# Problem 1018: Binary Prefix Divisible By 5

## Problem Information

**Difficulty:** Easy

**Acceptance Rate:** 47.39%

**Paid Only:** No

**Tags:** Array, Bit Manipulation

## Problem Description

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

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

\* For example, if `nums = [1,0,1]`, then `x0 = 1`, `x1 = 2`, and `x2 = 5`.

Return `an array of booleans answer` where `answer[i]` is `true` if `xi` 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 <= 105` \* `nums[i]` is either `0` or `1`.

## Code Snippets

### C++:

```
class Solution {  
public:  
    vector<bool> prefixesDivBy5(vector<int>& nums) {  
  
    }  
};
```

### Java:

```
class Solution {  
    public List<Boolean> prefixesDivBy5(int[] nums) {  
  
    }  
}
```

### Python3:

```
class Solution:  
    def prefixesDivBy5(self, nums: List[int]) -> List[bool]:
```