

# 1375. Number of Times Binary String Is Prefix-Aligned

## Description

You have a **1-indexed** binary string of length `n` where all the bits are `0` initially. We will flip all the bits of this binary string (i.e., change them from `0` to `1`) one by one. You are given a **1-indexed** integer array `flips` where `flips[i]` indicates that the bit at index `i` will be flipped in the `ith` step.

A binary string is **prefix-aligned** if, after the `ith` step, all the bits in the **inclusive** range `[1, i]` are ones and all the other bits are zeros.

Return *the number of times the binary string is prefix-aligned during the flipping process*.

### Example 1:

**Input:** `flips = [3,2,4,1,5]`

**Output:** `2`

**Explanation:** The binary string is initially `"00000"`.

After applying step 1: The string becomes `"00100"`, which is not prefix-aligned.

After applying step 2: The string becomes `"01100"`, which is not prefix-aligned.

After applying step 3: The string becomes `"01110"`, which is not prefix-aligned.

After applying step 4: The string becomes `"11110"`, which is prefix-aligned.

After applying step 5: The string becomes `"11111"`, which is prefix-aligned.

We can see that the string was prefix-aligned 2 times, so we return 2.

### Example 2:

**Input:** `flips = [4,1,2,3]`

**Output:** `1`

**Explanation:** The binary string is initially `"0000"`.

After applying step 1: The string becomes `"0001"`, which is not prefix-aligned.

After applying step 2: The string becomes `"1001"`, which is not prefix-aligned.

After applying step 3: The string becomes `"1101"`, which is not prefix-aligned.

After applying step 4: The string becomes `"1111"`, which is prefix-aligned.

We can see that the string was prefix-aligned 1 time, so we return 1.

### Constraints:

- `n == flips.length`
- `1 <= n <= 5 * 104`
- `flips` is a permutation of the integers in the range `[1, n]`.

