2115. Number of Unique Good Subsequences

Difficulty : Hard

https://leetcode.com/problems/number-of-unique-good-subsequences

You are given a binary string `binary`. A **subsequence** of `binary` is considered **good** if it is **not empty** and has **no leading zeros** (with the exception of `"0"`).

Find the number of **unique good subsequences** of `binary`.

- For example, if `binary = "001"`, then all the **good** subsequences are `["0", "0", "1"]`, so the **unique** good subsequences are `"0"` and `"1"`. Note that subsequences `"00"`, `"01"`, and `"001"` are not good because they have leading zeros.

Return *the number of **unique good subsequences** of* `binary`. Since the answer may be very large, return it **modulo** $10^9 + 7$.

A **subsequence** is a sequence that can be derived from another sequence by deleting some or no elements without changing the order of the remaining elements.

Example 1:

```
Input: binary = "001"
Output: 2
Explanation: The good subsequences of binary are ["0", "0", "1"].
The unique good subsequences are "0" and "1".
```

Example 2:

```
Input: binary = "11"
Output: 2
Explanation: The good subsequences of binary are ["1", "1", "11"].
The unique good subsequences are "1" and "11".
```

Example 3:

```
Input: binary = "101"
Output: 5
Explanation: The good subsequences of binary are ["1", "0", "1", "10", "11", "101"].
The unique good subsequences are "0", "1", "10", "11", and "101".
```

Constraints:

- `1 <= binary.length <=` 10^5
- `binary` consists of only `'0'`s and `'1'`s.