Problem 1977: Number of Ways to Separate Numbers

Problem Information

Difficulty: Hard
Acceptance Rate: 21.25%
Paid Only: No
Tags: String, Dynamic Programming, Suffix Array

Problem Description

You wrote down many **positive** integers in a string called `num`. However, you realized that you forgot to add commas to seperate the different numbers. You remember that the list of integers was **non-decreasing** and that **no** integer had leading zeros.

Return _the**number of possible lists of integers** that you could have written down to get the string _`num`. Since the answer may be large, return it **modulo** `109 + 7`.

Example 1:

Input: num = "327" **Output:** 2 **Explanation:** You could have written down the numbers: 3, 27 327

Example 2:

Input: num = "094" **Output:** 0 **Explanation:** No numbers can have leading zeros and all numbers must be positive.

Example 3:

Input: num = "0" **Output:** 0 **Explanation:** No numbers can have leading zeros and all numbers must be positive.

Constraints:

* `1 <= num.length <= 3500` * `num` consists of digits `'0'` through `'9'`.

Code Snippets

C++:

```
class Solution {
public:
int numberOfCombinations(string num) {

}
};
```

Java:

```
class Solution {
public int numberOfCombinations(String num) {

}
}
```

Python3:

```
class Solution:
def numberOfCombinations(self, num: str) -> int:
```