

306. Additive Number

An additive number is a string whose digits can form an additive sequence.

A valid additive sequence should contain at least three numbers. Except for the first two numbers, each subsequent number in the sequence must be the sum of the preceding two.

Given a string containing only digits, return true if it is an additive number or false otherwise.

Note: Numbers in the additive sequence cannot have leading zeros, so sequence 1, 2, 03 or 1, 02, 3 is invalid.

Example 1:

- Input: "112358"
- **Output:** true
- **Explanation:**
 - The digits can form an additive sequence: 1, 1, 2, 3, 5, 8.
 - $1 + 1 = 2$, $1 + 2 = 3$, $2 + 3 = 5$, $3 + 5 = 8$

Example 2:

- **Input:** "199100199"
- **Output:** true
- **Explanation:**
 - *The additive sequence is: 1, 99, 100, 199.*
 - $1 + 99 = 100, 99 + 100 = 199$

Constraints:

- $1 \leq \text{num.length} \leq 35$
- num consists only of digits.

Follow up: How would you handle overflow for very large input integers?