

306. Additive Number

Additive number is a string whose digits can form 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 '0' - '9' , write a function to determine if it's an additive number.

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.

$1 + 99 = 100$, $99 + 100 = 199$

Follow up:

How would you handle overflow for very large input integers?

;