

842. Split Array into Fibonacci Sequence

Description

You are given a string of digits `num`, such as `"123456579"`. We can split it into a Fibonacci-like sequence `[123, 456, 579]`.

Formally, a **Fibonacci-like** sequence is a list `f` of non-negative integers such that:

- $0 \leq f[i] < 2^{31}$, (that is, each integer fits in a **32-bit** signed integer type),
- `f.length >= 3`, and
- `f[i] + f[i + 1] == f[i + 2]` for all $0 \leq i < f.length - 2$.

Note that when splitting the string into pieces, each piece must not have extra leading zeroes, except if the piece is the number `0` itself.

Return any Fibonacci-like sequence split from `num`, or return `[]` if it cannot be done.

Example 1:

Input: `num = "1101111"`
Output: `[11,0,11,11]`
Explanation: The output `[110, 1, 111]` would also be accepted.

Example 2:

Input: `num = "112358130"`
Output: `[]`
Explanation: The task is impossible.

Example 3:

Input: `num = "0123"`
Output: `[]`
Explanation: Leading zeroes are not allowed, so `"01"`, `"2"`, `"3"` is not valid.

Constraints:

- $1 \leq num.length \leq 200$
- `num` contains only digits.

