# 408. Valid Word Abbreviation

## Description

A string can be **abbreviated** by replacing any number of **non-adjacent**, **non-empty** substrings with their lengths. The lengths **should not** have leading zeros.

For example, a string such as ["substitution"] could be abbreviated as (but not limited to):

```
"s10n" ( "s ubstitutio n" )
"sub4u4" ( "sub stit u tion" )
"12" ( "substitution " )
"su3i1u2on" ( "su bst i t u ti on" )
"substitution" (no substrings replaced)
```

The following are **not valid** abbreviations:

```
    "s55n" ( "s <u>ubsti</u> <u>tutio</u> n" , the replaced substrings are adjacent)
    "s010n" (has leading zeros)
    "s0ubstitution" (replaces an empty substring)
```

Given a string word and an abbreviation abbr , return whether the string matches the given abbreviation .

A **substring** is a contiguous **non-empty** sequence of characters within a string.

### Example 1:

```
Input: word = "internationalization", abbr = "i12iz4n"
Output: true
Explanation: The word "internationalization" can be abbreviated as "i12iz4n" ("i nternational iz atio n").
```

#### Example 2:

```
Input: word = "apple", abbr = "a2e"
Output: false
Explanation: The word "apple" cannot be abbreviated as "a2e".
```

### **Constraints:**

- 1 <= word.length <= 20
- word consists of only lowercase English letters.
- 1 <= abbr.length <= 10
- abbr consists of lowercase English letters and digits.
- All the integers in abbr will fit in a 32-bit integer.