5906. Number of Valid Words in a Sentence

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A sentence consists of lowercase letters (`'a'` to `'z'`), digits (`'0'` to `'9'`), hyphens (`'-'`), punctuation marks (`'!'` , `'.'` , and `','`), and spaces (`' '`) only. Each sentence can be broken down into **one or more tokens** separated by one or more spaces `' '` .

A token is a valid word if:

- It only contains lowercase letters, hyphens, and/or punctuation (**no** digits).
- There is **at most one** hyphen `'-'` . If present, it should be surrounded by lowercase characters (`"a-b"` is valid, but `"-ab"` and `"ab-"` are not valid).
- There is **at most one** punctuation mark. If present, it should be at the **end** of the token.

Examples of valid words include `"a-b."` , `"afad"` , `"ba-c"` , `"a!"` , and `"!"` .

Given a string `sentence` , return *the **number** of valid words in* `sentence` .

User Accepted:	0
User Tried:	0
Total Accepted:	0
Total Submissions:	0
Difficulty:	Easy

Example 1:

```
Input: sentence = "cat and  dog"
Output: 3
Explanation: The valid words in the sentence are "cat", "and", and "dog".
```

Example 2:

```
Input: sentence = "!this  1-s b8d!"
Output: 0
Explanation: There are no valid words in the sentence.
"!this" is invalid because it starts with a punctuation mark.
"1-s" and "b8d" are invalid because they contain digits.
```

Example 3:

```
Input: sentence = "alice and  bob are playing stone-game10"
Output: 5
Explanation: The valid words in the sentence are "alice", "and", "bob", "are", and "playing".
"stone-game10" is invalid because it contains digits.
```

Example 4:

```
Input: sentence = "he bought 2 pencils, 3 erasers, and 1  pencil-sharpener."
Output: 6
Explanation: The valid words in the sentence are "he", "bought", "pencils,", "erasers,", "and", and "pencil-sharpener.'
```

Constraints:

- `1 <= sentence.length <= 1000`
- `sentence` only contains lowercase English letters, digits, `' '` , `'-'` , `'!'` , `'.'` , and `','` .
- There will be at least `1` token.

JavaScript

```
const countValidWords = (ss) => {
    let a = ss.split(" "), res = 0;
    // pr(a);
```

```
    for (const s of a) {
        if (s.length > 0) {
            // pr(s, ok(s))
            if (ok(s)) res++;
        }
    }
    return res;
};

const ok = (s) => {
    let punctuation = 0, hyphen = 0, digit = 0;
    let n = s.length;
    for (let i = 0; i < n; i++) {
        let c = s[i];
        if (c == '!' || c == '.' || c == ',') {
            if (i != n - 1) return false;
            punctuation++;
        } else if (c == '-') {
            if (i == 0 || i == n - 1) return false;
            if (!isLowerCaseLetter(s[i - 1]) || !(isLowerCaseLetter(s[i + 1]))) return false;
            hyphen++;
        } else if (isDigit(c)) {
            digit++;
        }
    }
    return digit == 0 && punctuation <= 1 && hyphen <= 1;
};

const isDigit = (c) => {
    let s = '0123456789';
    return s.indexOf(c) != -1;
};

const isLowerCaseLetter = (c) => {
    let ascii = c.charCodeAt();
    return ascii >= 97 && ascii <= 122;
};
```

☐ **Custom Testcase** Use Example Testcases

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