165. Compare Version Numbers

Description

Given two version numbers, `version1` and `version2`, compare them.

Version numbers consist of **one or more revisions** joined by a dot `'.'`. Each revision consists of **digits** and may contain leading **zeros**. Every revision contains **at least one character**. Revisions are **0-indexed from left to right**, with the leftmost revision being revision 0, the next revision being revision 1, and so on. For example `2.5.33` and `0.1` are valid version numbers.

To compare version numbers, compare their revisions in **left-to-right order**. Revisions are compared using their **integer value ignoring any leading zeros**. This means that revisions `1` and `001` are considered **equal**. If a version number does not specify a revision at an index, then **treat the revision as** `0`. For example, version `1.0` is less than version `1.1` because their revision 0s are the same, but their revision 1s are `0` and `1` respectively, and `0 < 1`.

Return the following:

- If `version1 < version2`, return `-1`.
- If `version1 > version2`, return `1`.
- Otherwise, return `0`.

Example 1:

```
Input: version1 = "1.01", version2 = "1.001"
Output: 0
Explanation: Ignoring leading zeroes, both "01" and "001" represent the same integer "1".
```

Example 2:

```
Input: version1 = "1.0", version2 = "1.0.0"
Output: 0
Explanation: version1 does not specify revision 2, which means it is treated as "0".
```

Example 3:

```
Input: version1 = "0.1", version2 = "1.1"
Output: −1
Explanation: version1's revision 0 is "0", while version2's revision 0 is "1". 0 < 1, so version1 < version2.
```

Constraints:

- `1 <= version1.length, version2.length <= 500`
- `version1` and `version2` only contain digits and `'.'`.
- `version1` and `version2` **are valid version numbers**.
- All the given revisions in `version1` and `version2` can be stored in a **32-bit integer**.