

165. Compare Version Numbers

- Given two version strings, version1 and version2, compare them. A version string consists of revisions separated by dots '.'. The value of the revision is its integer conversion ignoring leading zeros.
- To compare version strings, compare their revision values in left-to-right order. If one of the version strings has fewer revisions, treat the missing revision values as 0.
- *Return the following:*
 - If version1 < version2, return -1.
 - If version1 > version2, return 1.
 - Otherwise, return 0.

Example 1:

- **Input:** version1 = "1.2", version2 = "1.10"
- **Output:** -1
- **Explanation:** version1's second revision is "2" and version2's second revision is "10": 2 < 10, so version1 < version2.

Example 2:

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

Example 3:

- **Input:** version1 = "1.0", version2 = "1.0.0.0"
- **Output:** 0
- **Explanation:** version1 has less revisions, which means every missing revision are treated as "0".

Constraints:

- $1 \leq \text{version1.length}, \text{version2.length} \leq 500$
- 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.