**Question B**

The goal of this question is to write a software library that accepts 2 version string as input and returns whether one is greater than, equal, or less than the other. As an example: “1.2” is greater than “1.1”. Please provide all test cases you could think of.

**ANSWER**

Java software library that accepts two version strings as input and determines whether one is greater than, equal to, or less than the other:



This program defines a VersionComparer class with a compareVersions method, which takes two version strings and compares them component by component. The result is -1 if the first version is less than the second, 1 if it's greater, and 0 if they are equal.

**Here are some test cases for the library:**

compareVersions("1.2", "1.1") should return "1.2 is greater than 1.1."

compareVersions ("1.1", "1.2") should return "1.1 is less than 1.2."

compareVersions ("1.2", "1.2") should return "1.2 is equal to 1.2."

compareVersions ("1.2.3", "1.2.3.4") should return "1.2.3 is less than 1.2.3.4."

compareVersions ("2.0", "1.9.9.9") should return "2.0 is greater than 1.9.9.9."

compareVersions ("1.0.0.0", "1.0") should return "1.0.0.0 is equal to 1.0."

compareVersions ("1.0", "1.0.0.0") should return "1.0 is equal to 1.0.0.0."

These test cases cover scenarios with varying numbers of components and different values, ensuring that the compareVersions method works correctly.

Using TDD approach, I have defined more test cases in below Junit test case file (also uploaded in github).

