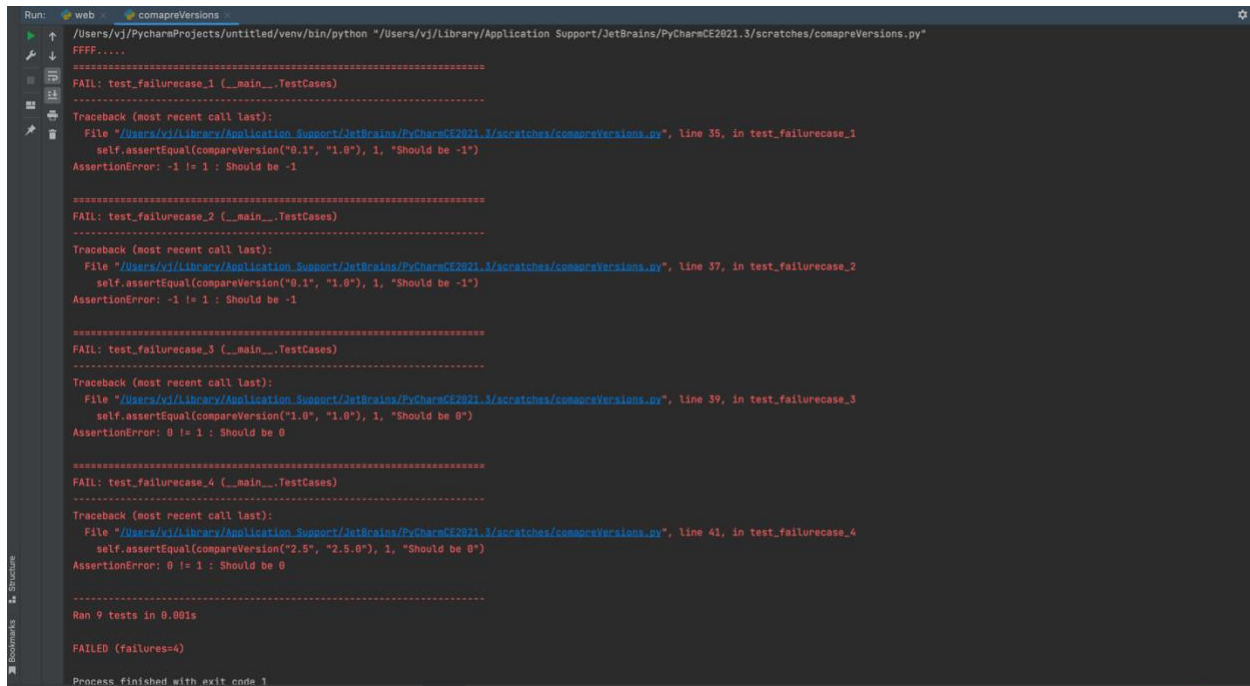


## Problem1 : Compare Versions

This utility is built using Python to compare Version1 with Version2. Test cases are incorporated with the program – there are 5 positive testcases and 4 negative testcases.

On running compareVersions.py – below are the logs obtained displaying negative testcases in Red.



```
Run: web comapreVersions
/Users/vj/PycharmProjects/untitled/venv/bin/python "/Users/vj/Library/Application Support/JetBrains/PyCharmCE2021.3/scratches/comapreVersions.py"
FFFF.....
=====
FAIL: test_failurecase_1 (__main__.TestCases)
=====
Traceback (most recent call last):
  File "/Users/vj/Library/Application Support/JetBrains/PyCharmCE2021.3/scratches/comapreVersions.py", line 35, in test_failurecase_1
    self.assertEqual(compareVersion("0.1", "1.0"), 1, "Should be -1")
AssertionError: -1 != 1 : Should be -1

=====
FAIL: test_failurecase_2 (__main__.TestCases)
=====
Traceback (most recent call last):
  File "/Users/vj/Library/Application Support/JetBrains/PyCharmCE2021.3/scratches/comapreVersions.py", line 37, in test_failurecase_2
    self.assertEqual(compareVersion("0.1", "1.0"), 1, "Should be -1")
AssertionError: -1 != 1 : Should be -1

=====
FAIL: test_failurecase_3 (__main__.TestCases)
=====
Traceback (most recent call last):
  File "/Users/vj/Library/Application Support/JetBrains/PyCharmCE2021.3/scratches/comapreVersions.py", line 39, in test_failurecase_3
    self.assertEqual(compareVersion("1.0", "1.0"), 1, "Should be 0")
AssertionError: 0 != 1 : Should be 0

=====
FAIL: test_failurecase_4 (__main__.TestCases)
=====
Traceback (most recent call last):
  File "/Users/vj/Library/Application Support/JetBrains/PyCharmCE2021.3/scratches/comapreVersions.py", line 41, in test_failurecase_4
    self.assertEqual(compareVersion("2.5", "2.5.0"), 1, "Should be 0")
AssertionError: 0 != 1 : Should be 0

=====
Ran 9 tests in 0.001s

FAILED (failures=4)

Process finished with exit code 1
```

Time complexity:  $O(N + M + \max(N, M))$  where N and M are lengths of input strings

Space Complexity:  $O(N+M)$  to store arrays version1 and version2