Test for applicants for the role of Software Developer

Dear applicant,
we appreciate your interest in the vacant position of Software Developer in our company. This test helps to assess your Know How and the way you approach problems.
Please return your solution for the problem stated below, to us via mail so we can continue the hiring process.

Environment settings

The solution must be developed using Python (2.x). Ideally this is done as a single module. There is no need to create packages or specialized distribution formats. Your program should rely on modules from the standard python library. Packages available via PyPI may be used but require a written statement as to why it was necessary to use them.

Dependencies must be documented at the appropriate location.

Note that your program will be tested in a Linux environment, but should be platform independent. If possible, your program should be executable with different Python versions (2.4 – 2.7).

Enclosed with this problem description you will find 2 ASCII files `bug.txt` and `landscape.txt`.

Calling your program, it should be possible to specify both files, to read them, and process them.

Also note that your program will be tested with another more complex landscape as well.

The problem – Find the bug

You program shall search a text file for bugs and print the number of their occurrence. The bug is drawn ASCII – style and can be found within `bug.txt`.
For testing purposes, we provide a text file called `landscape.txt`. The contents of this file is a lot simpler than the file that we will be testing the completed program. Each occurrence of the character pattern as specified in `bug.txt` is counted, except for the whitespaces contained therein.

Results

Aside from solving the problem as described above we expect that your code is meaningfully documented, easy to maintain, expand, and reusable. Your solution path shall demonstrate your skills and how you tackle complex problems.
Using solely a *Brute Force* - or *Fire and Forget* – solution of the problem will not be considered enough. We would like to see you solve the problem with a well-balanced mix of technical skill, aesthetics and pragmatism.

Notice

Please consider when implementing your solution, that during the course of the hiring process you will be expected to expand your program with additional functionalities.