

Unit testing - Instructions

Automated unit test is a way to test a program by checking that each of its unit, or function, behaves properly. If each piece works, then there are good chances the whole program works.

You were given programs which you already encountered in the past exercises. The developers working on those projects released new versions. Although, since there is no tests implemented for those programs, their teams keep getting bugs whenever they make change to the code.

Your role is to write automated unit tests for those programs and fix any bug you may find in the process.

Here are the steps you should follow for each program.

- a) The `tests.py` file have already been set up. For each unimplemented test, open the corresponding unit it has to test and **read it doc string** to understand its behaviour.
- b) Identify **three inputs** and the expected output for each of those. Write them down.
- c) Using `assert` statements, **implement a test**. Make sure your test works by introducing a bug in the code and see if your code catches it (make sure to remove the bug after).
- d) If your test fails, it means the unit you are testing contains a bug. Using any debugging technique, **fix the bug**.