

Report of the Waiter exercise.

The exercise I have chosen in Hackerrank is "Waiter", a Stack (Data Structures) challenge. I have written the code in Python 3 and I have passed the 13 tests with a score of 75 points.

I have also written some test cases to ensure that the code is robust. In these tests I have checked the range (minimum and maximum valid values) and format (all inputs must be integers separated by a blank space) of inputs. I have also tested a function to determine if a number is prime.

Concerning the continuous integration I would use Jenkins to carry out this task. The steps would be the following:

- 1- Set the URL of the repository to download the code.
- 2- Configure the trigger. I would use a webhook to notify Jenkins every time that there is a change in the remote repository.
- 3- Configure the Shell Command to execute the tests (it is supposed that I am using Linux). I would configure the execution reporting the results in XML for publishing these results.
- 4- As an optional step, I would use a tool for static analysis. This is useful, because you can have some metrics (cyclomatic complexity, duplicated lines, etc.) that say how good your code is. If you have good results, probably your code is quite maintainable.
- 5- Publish the test results.
- 6- Configure the email notification if the build fails.

With the continuous integration you ensure that when there is a change in the repository, a set of tests are executed, ensuring that the changes do not break the developed functionalities.