

ADVANCED PYTHON HOMEWORK 11

Polishing up our past homework

This task is worth 5 points. This is the last sheet.

Exercise one. Choose two exercises from the previous sheets and complete the following four sub-tasks on them. (Note that all four sub-tasks need to be completed.)

- A. Prepare a set of unit tests for each chosen exercise, you can use `pyunit`, `pydoc` or `nose`. Every set must contain at least three unit tests. If you are using `pyunit`, combine these tasks into one test suite.
- B. Select one of the exercises and use a profiler tool to generate a profile. Then, document and describe which part is the most time-consuming. Attach a separate text file with the results.
- C. Find more information about PEP 8 (Python Enhancement Proposals). Use a package `pep8 checker`¹ to check compliance of the source code of the two exercises (and the source code of the unit tests) with the PEP 8 guidelines. Include a fully compliant PEP 8 version of the exercise along with your SKOS submission.
- D. Find more information about auto-generated documentation from the source code and its comments. Generate such documentation for both tasks in some popular format (html, pdf, etc.). Instead of sending the generated documentation (which might be i.e. many html files), describe in the comments how the teacher can generate the documentation (for example, the exact command or script to use). It is also possible to send the corresponding `Makefile`.

¹PEP 8 compliance can be checked by PyCharm plugins as well as other tools and online services.