## Advanced Python: Homework set 13

2023/2024

The commands below concern the tasks carried out under lists 11–12.

- A Using dedicated pyunit or nose environments, prepare sets unit tests checking the correctness of previously programmed tasks. Requirements:
  - tests are located in a separate directory, outside the directories of the server source code or user interface;
  - tests are combined into a test set so that all tests can be run with one command;
  - prepare at least two classes with test cases, at least three tests in each class.
- B Look for information on PEP 8 (python enhancement proposals). By pep8 checker or package pycodestyle check the compliance of the source code of the tasks (and the implementation of tests) with the PEP 8 recommendations. By sending files, place files with corrected source code formatting on SKOS. In README.md file, include information about the tool you used. You can alternatively place a Makefile with the command to check the code.
- C Find information about automatically generating documentation based on the source code and its comments. Generate one documentation for both tasks in some popular format (html, pdf, etc.). Instead of posting documentation on SKOS, just post it a file with appropriate commands, e.g. Makefile or README.md. To complete this point, it is necessary to comment on all classes and functions (including the parameters). Local functions or irrelevant methods do not need to be commented on.
- D Complete the source code with common annotations and check its accuracy. Similarly to the previous points, include information about the analyzer used in the Makefile or README.md file.
- E Prepare previously programmed applications (server and user application) so that they can be distributed as individual files. The simplest method is to use zipapp; more ambitious people can use the methods described in the document *Package and distribution projects*. There is no need to send the entire file to SKOS; just provide the necessary Makefile or README.md information.

The exercise is worth 5 points.