

ENSF 692: Lab 5

Programming Fundamentals for Data Engineers

May 21, 2024

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Exercises Today

- ▶ Assignment Reminder
- ▶ Upcoming Deliverables
- ▶ Exercise: list comprehensions and generator expressions
- ▶ Documentation vs. commenting
- ▶ Open time to ask questions

Assignment Reminders

- ▶ Assignment 2 deadline is extended to **Tuesday, May 22nd at 11:59 pm**
 - ▶ Don't forget to submit your HTTPS link via D2L!
 - ▶ Make sure all changes have been committed via git
 - ▶ Use the discussion board to post/view questions and answers
 - ▶ Alternatively, email the instructor directly

Upcoming Deliverables

- ▶ Assignment 3 link will be available next Monday
- ▶ Quiz #1 this Friday
 - ▶ Friday May 24th in class
 - ▶ All material up to Strings and Regular expressions (and corresponding labs) are included in the quiz
 - ▶ Varied question formats (multiple choice, matching, short answer, coding, etc.)
 - ▶ Practice questions during May 23rd lab

Exercise - List Comprehensions and Generator Expressions

- ▶ Download the Lab 5 code from D2L
- ▶ As a group, develop the comprehensions/generators expressions/logic needed to answer the presented problems
- ▶ Key will be added after the lab

Documentation vs. Comments

- ▶ Documentation: how to understand and use the functionality of your code
- ▶ Comments: useful to other developers continuing your logic
- ▶ docstrings: built-in strings to create program documentation
- ▶ Access the docstrings for objects using `help()` or find their direct location
 - ▶ e.g. `help(int)` or `print(int.__doc__)`
- ▶ Use triple-double quotes to create your own `__doc__` property
- ▶ Conventions: <https://www.python.org/dev/peps/pep-0257/>
- ▶ Varied formats (Numpy, Google Doc, etc.)
- ▶ More add-ons such as docutils (converts to HTML, XML, LaTeX, etc.)