

ENSF 692: Lab 3

Programming Fundamentals for Data Engineers

May 14, 2024

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Exercises Today

- ▶ Introduce Assignment 2 specifications and demo
- ▶ Exercise: User input with functions and commenting your code
- ▶ Exercise: Understanding for-else loops
- ▶ Open time to ask questions

Assignment Reminders

- ▶ Assignment 2 is due **Tuesday, May 21st at 11:59 pm (released tomorrow after class)**
 - ▶ Develop a terminal application for processing changes in car vision detection sensors
 - ▶ Requires all lesson material to date
 - ▶ Don't forget to submit your HTTPS link via D2L!
 - ▶ Make sure all changes have been committed via git
 - ▶ Last push prior to the deadline will be the version that is graded
- ▶ Grading rubric will be posted to D2L

Exercises

- ▶ Download the Lab 3 code from D2L
- ▶ As a group, follow and add comments to explain the functionality of the programs
- ▶ Aspects to consider:
 - ▶ How is Method 3 different from the first two input methods?
 - ▶ How are the control flow statements used?
 - ▶ What are the arguments/return values for each function?

Best Practices for Data Input and Commenting

- ▶ Will the intended users understand how to properly provide the input?
- ▶ Better to evaluate the validity of each input right away instead of at the end
- ▶ Input defaults to a string, consider where casting may need to be used
- ▶ Comments help other programmers understand your code
- ▶ Document your user-defined functions
 - ▶ The purpose of the function
 - ▶ The intended input arguments
 - ▶ The return value (if any)
 - ▶ Also include comments throughout!

Open Tutorial Time

- ▶ Any other course content
- ▶ Troubleshooting