

NR 426 – Programming for GIS I

Lab 5 – Error Handling

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Learning objectives:

1. Identify and handle errors using various methods: Proof reading, print and try statements
2. Create a user-friendly script with good error handling and messaging

What to submit:

Submit the code (as a .py file) from the self-directed activity.

Identifying errors and creating an improved script

In-class hands-on activity:

1. Use the Lesson 5 Find the Errors.py script and the US_states.shp shapefile
2. As a class, find the errors in the script, we'll correct it on screen and in our own script files
3. As a class, examine some code and identify places to add error handling techniques.

For example:

- Check if input data exists
- Check if input is the right type of data (the code needs a vector input)
- Make sure that the output data doesn't exist (or turn on overwrite)
- Make use of Try-except blocks, raise specific exceptions, generate well-formatted error messaging such as the examples from the book
- Add print statements
- Improve readability (comments, blank lines, etc...)

Self-directed activity to submit:

Using the ideas from the in-class activity above, modify the code provided (...\\Lesson 5\\Lesson5 FindtheErrors.py) to add those error handling methods.

Submit the completed code.