

## Lab 10 Feedback

- Close files you open (reading/writing)
- Use methods you've already written
  - `addPerson`
- What to return when errors

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## Lab 11: Three Parts

- Linux practice:
  - Using the `wc` command
- Social Network extensions
  - Binary search – find people in same network
    - Requires adding `__cmp__` method to Person class
  - Exception handling – handling bad files
  - UI: add search functionality
- Two-dimensional lists
  - Including Connect Four

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## wc Command

- **wc:** Word Count
  - Count up the lines of Social Network code from Lab 10
  - Compare with code for this assignment
- Specific directions are in the lab

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## Social Network, Extended

- Searching
  - Allows you to search for people by their network
  - Update `SocialNetwork` and `Person` classes and UI appropriately

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## Summary of Modifications to Binary Search

- Check the *network* of the Person that is at the midpoint
- After found, add to the list of Persons who match
  - Get the Persons before and after that person in the list that have the same network and add to list
- Represent (in method) and handle (in UI) when no people belong to network
- For "most intuitive" results:
  - Lowercase the key
    - Changes algorithm again slightly

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[search2.py](#)

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## Social Network, Extended

- Exception handling
  - Every time open a file in one of *your* methods, add exception handling
    - Print out error message and return from method
  - Better: return `True` or `False` from method
    - True if works
    - Then UI can check what returned and print appropriate message

```
try
    <code that could throw an exception>
except [error-type]:
    <handle exception appropriately>
```

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## SocialNetwork Code

- Fix the major problems in your code first
- Or, use the code in the handouts/lab11 directory
  - person.py, social.py, facespace.py
- GUI

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## Review

- How do you create a 2D list?
- How do you get the 2<sup>nd</sup> element in the 3<sup>rd</sup> “row” of a list?
- How do you find the number of lists in a 2D list?
- How do you find the number of elements in one of those lists?

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## 2D List Practice

- Creating, printing, processing 2D list
- ConnectFour
  - Opportunities for extra credit

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## ConnectFour Class

- Data
  - Board
- Methods
  - Constructor
  - Display the board
  - Play the game
    - Repeat:
      - Get input/move from user
      - Check if valid move
      - Make move
      - Display board
      - Check if win
      - Change player

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## Exam 2 Feedback

	A	B	C	Overall
Average	78.67	72.57	91.76	83.82
Median	82.05	68.97	93.75	86.50

Good!

Problems reading functions, writing comments

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## Lab 9 Feedback

- Recall: `__str__` always returns a String
- Always close files that you read from or write to
- Write output to files
  - Eases automation
- Comments describing your methods, their parameters, what they do, what they return
- Test functions
  - Should test *all* of a class's methods

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## Reminders

- Bring your final exam envelopes to me by Friday so that I can stuff them
- Bring your final exam questions tomorrow
- Course evaluations will be on Sakai under Tests & Quizzes starting at 9 p.m. tonight
  - 70% complete evaluations → 1% lab points added to lab grade
  - For every 10%, additional 1%

Thanks to Amy for her help  
this semester!