Computer Programming for Lawyers

Prof. Rachel Orey

Spring 2026

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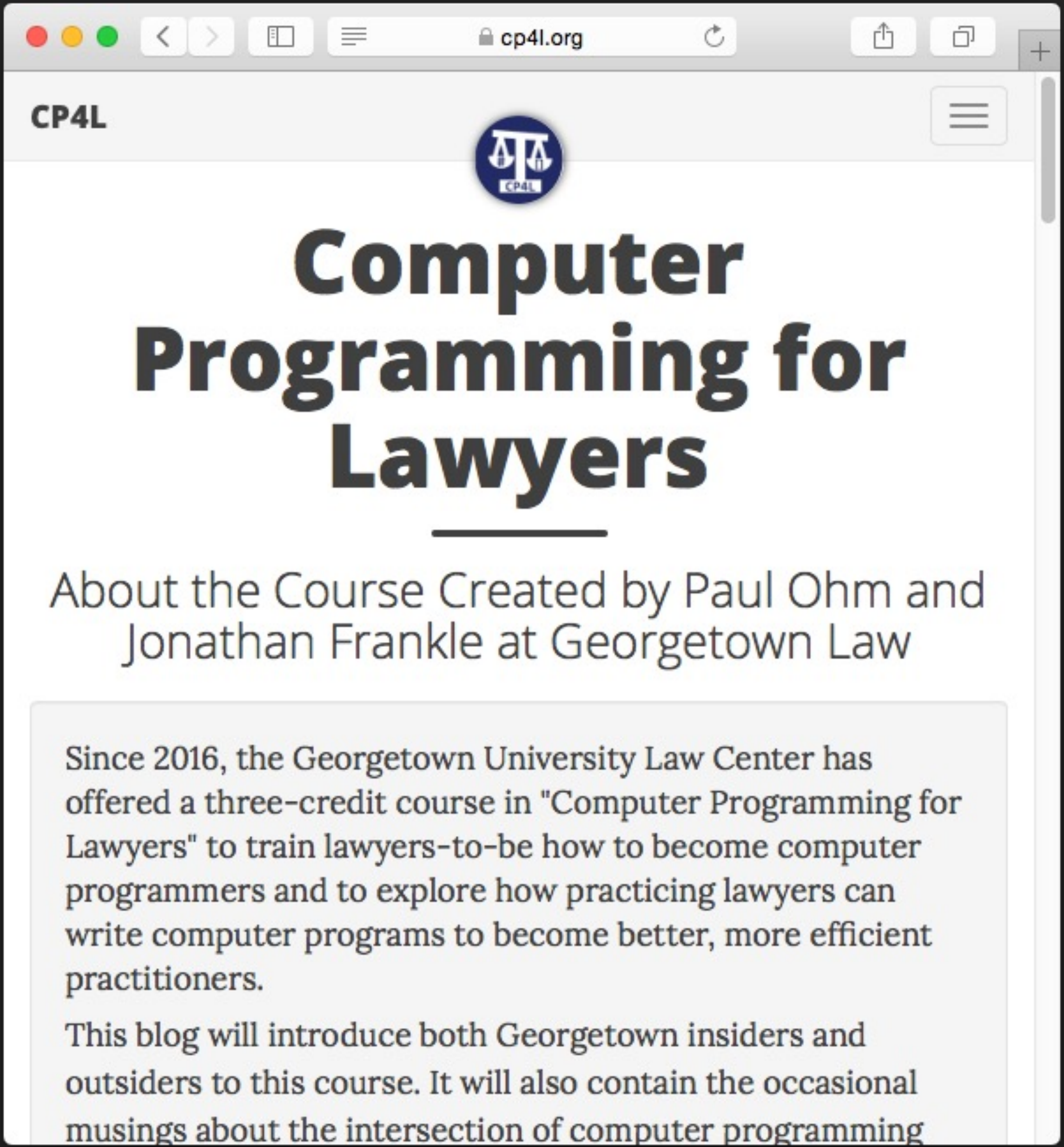


Computer Programming for Lawyers

About the Course Created by Paul Ohm and Jonathan Frankle at Georgetown Law

Since 2016, the Georgetown University Law Center has offered a three-credit course in "Computer Programming for Lawyers" to train lawyers-to-be how to become computer programmers and to explore how practicing lawyers can write computer programs to become better, more efficient practitioners.

This blog will introduce both Georgetown insiders and outsiders to this course. It will also contain the occasional musings about the intersection of computer programming

Course philosophy

- Lawyers process information, but use inefficient tools for the job
- Coding is an emerging legal skill, like writing and research
  - Automate the ‘Boring Stuff’
  - Work at Scale
  - Have Fun!

Goals and side-effects

- Make you more efficient in ordinary legal practice
  - Text manipulation, search, summary
  - Document manipulation (pdf, docx, xlsx)
  - File manipulation
  - Application Programming Interfaces (APIs)
  - Scraping
  - Knowing how to work with AI to do… anything?!

What this class is not

- A law class.
- A class on cybersecurity, the internet, or any other specific technology.
- A math-heavy class.

This is a skills class, plain and simple.

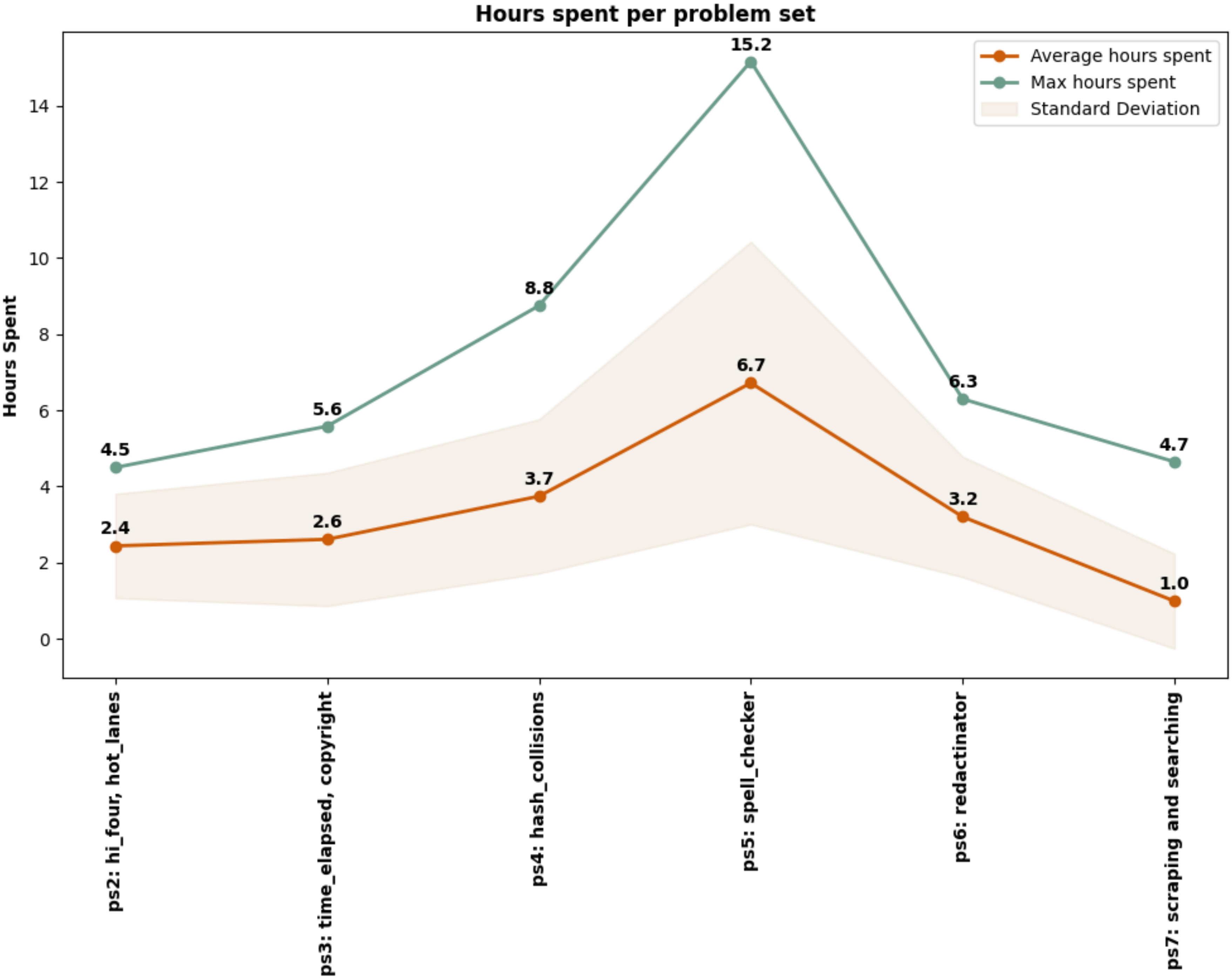
Beginners Only!

- Ineligible if you have:
  - Taken a programming class in college or graduate school.
  - Mastered any programming language.
- Must consult with instructors if you are unsure if you are eligible.

Course Logistics

Course Structure

- Semi-weekly lecture.
  - Check the syllabus and put class dates in your calendar (every other week, then every week).
- 8 problem sets. You’ve already done one: PS1
  - Next four: “core” Python.
  - Last three: co-programming with AI.


Hours spent per problem set
Average hours spent
Max hours spent
Standard Deviation
Hours Spent
0
2
4
6
8
10
12
14
4.5
5.6
8.8
15.2
6.3
4.7
2.4
2.6
3.7
6.7
3.2
1.0
ps2: hi_four, hot_lanes
ps3: time_elapsed, copyright
ps4: hash_collisions
ps5: spell_checker
ps6: redactinator
ps7: scraping and searching

Why are problem sets difficult?

- The coding-debugging cycle is very different from writing. It’s more like puzzle-solving.
- You can’t predict which problem sets will be most challenging for you.
- **But we have lots of support!**
    - TAs
    - Office Hours
    - Ed
    - Google/AI/Stack Overflow/Python docs

Problem Set Scoring

TAs in the intermediate class help with grading.

- **2/2**: Code logic is sound and executes assignment instructions properly, even if it fails autograding tests due to negligible typos.
- **1/2**: There are some syntax or logic errors but code runs without error, or code functions as intended but there are significant deviations from the course style.
- **0/2**: Code fails to execute, or a majority of tests fail due to multiple logic errors.

Requirements to pass

1. **Attendance at and participation in all classes**.
2. **Strong attempt at (and non-zero score on) all problem sets**. Any problem sets that receive a grade of 0 must be revised so that they run without error and demonstrate understanding of the skills covered by the problem set, even if they do not perfectly achieve the assignment objectives.
3. **Attendance at five office hours**. This is necessary for the course to meet the minimum required number of instructional hours for a law school course, and will be taken seriously upon grading. *Students should ensure that the TA has noted their attendance for each office hour attended.*

Requirements to pass

- TAs and I will score each problem set as 0, 1, or 2, but only I can officially grade you.
- Do not obsess over your percentage.
- No one has failed the class. But dozens of students have had to work **very, very hard** not to fail.

Course Readings

- Recommended, generally not required
- Skim to get comfortable with ideas that will be presented during lecture and use as a resource during problem sets
- Lean on cheat sheets

Collaboration Policy

- Unless told otherwise, you must work on your own for the problem sets.
- Except in office hours, you may ask each other only general questions.
- During office hours only, you may ask each other more specific questions if you’re stuck on the same problem.
- See syllabus for more.

Ed

- Along with office hours, Ed is the best resource for getting help.
- Discouraged:
    - Emailed questions
    - Ed posts that say, “Why is this code not working?”

Laptop Policy

- I encourage you not to have your laptop open while we’re coding together during lecture, but keep it handy for self-guided exercises.
- No need to copy down all the code. It will be available on the course GitHub page (link is on syllabus).
- Trust yourself if you think you need your laptop open.

Policy on the use of AI

Problem Sets 1–5: AI use is prohibited

- You may not use generative AI tools in any capacity.
- Do not copy, paste, re-type, or paraphrase any part of the problem set into an LLM.
- Do not copy, paste, re-type, or adapt any AI-generated code into your solutions.

Attempts to circumvent the spirit of this policy will undermine your ability to learn core programming concepts and will leave you unprepared for later assignments.

Policy on the use of AI

Problem Sets 6–8: AI use is required

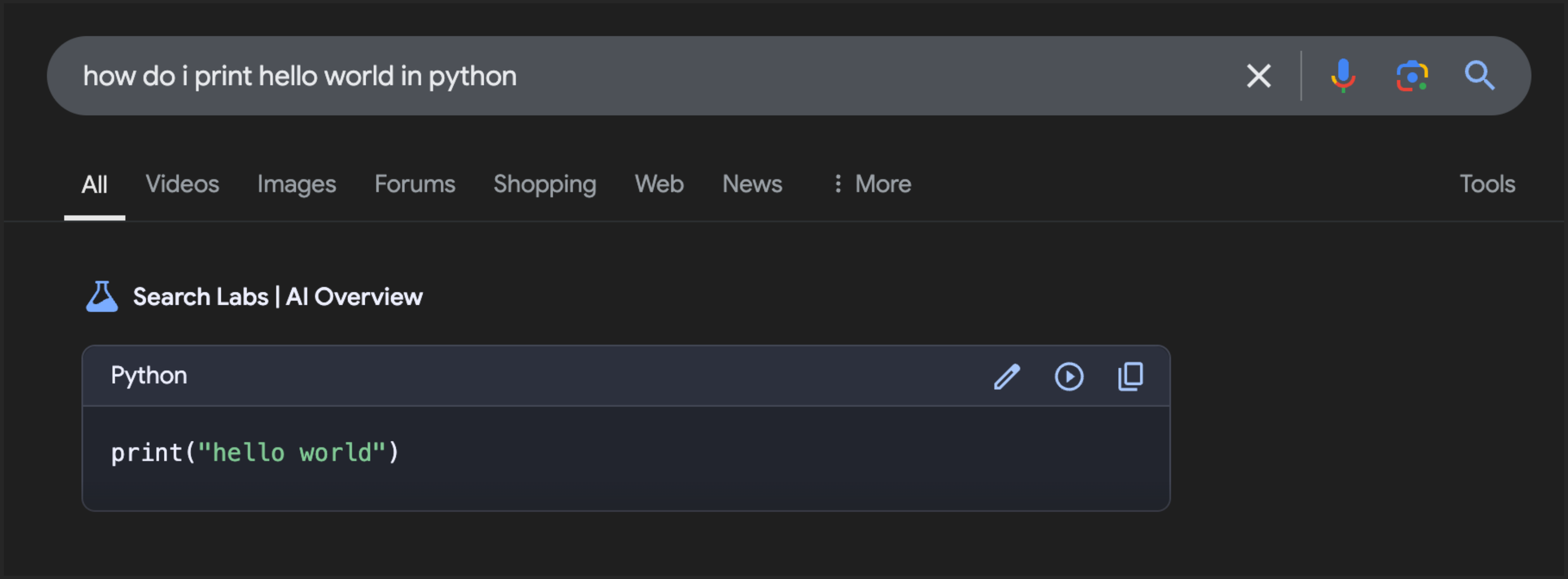
- You are **expected** to use generative AI tools.
- You may paste prompts into an LLM, copy AI-generated code into your solution, and iteratively refine that code.

Policy on the use of AI

General principles (apply to the entire course)

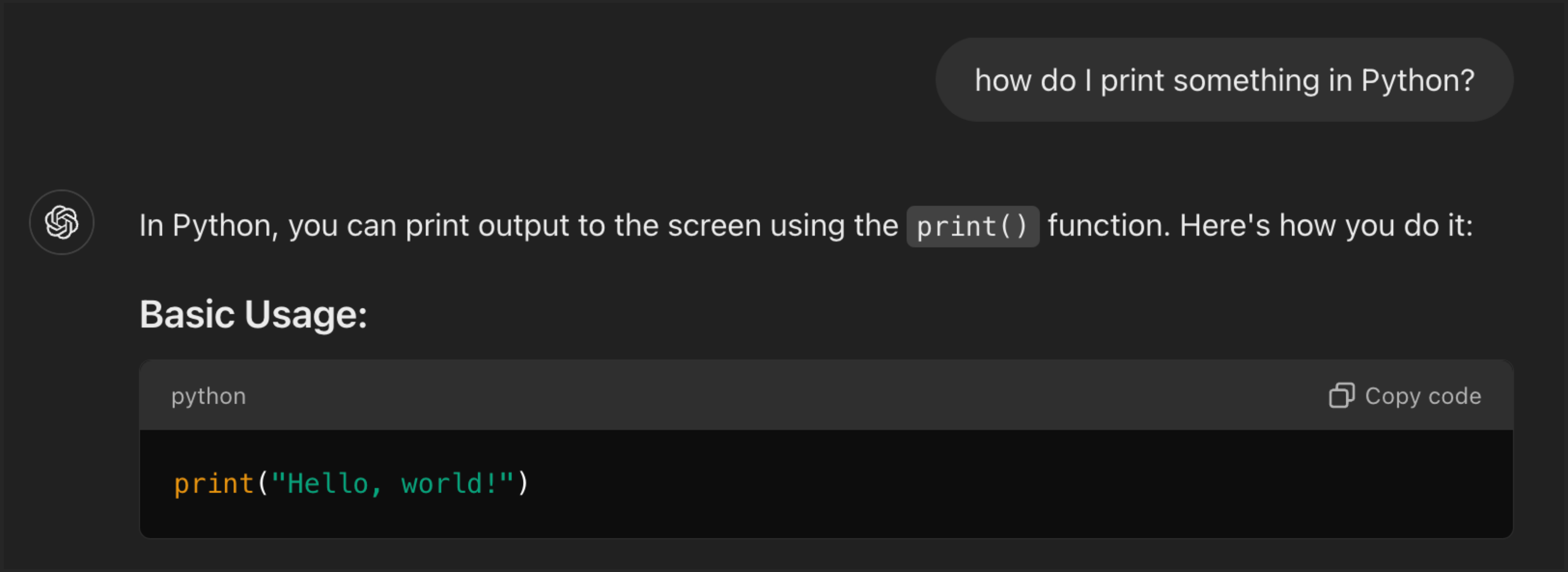
- You are always responsible for the code you submit, regardless of whether AI was used.
- You must be able to explain, test, and debug your code.

AI-augmented search okay to use


how do i print hello world in python
All
Videos
Images
Forums
Shopping
Web
News
⋮ More
Tools
Search Labs | AI Overview
Python

```python
print("hello world")
```

Asking AI general questions okay, too



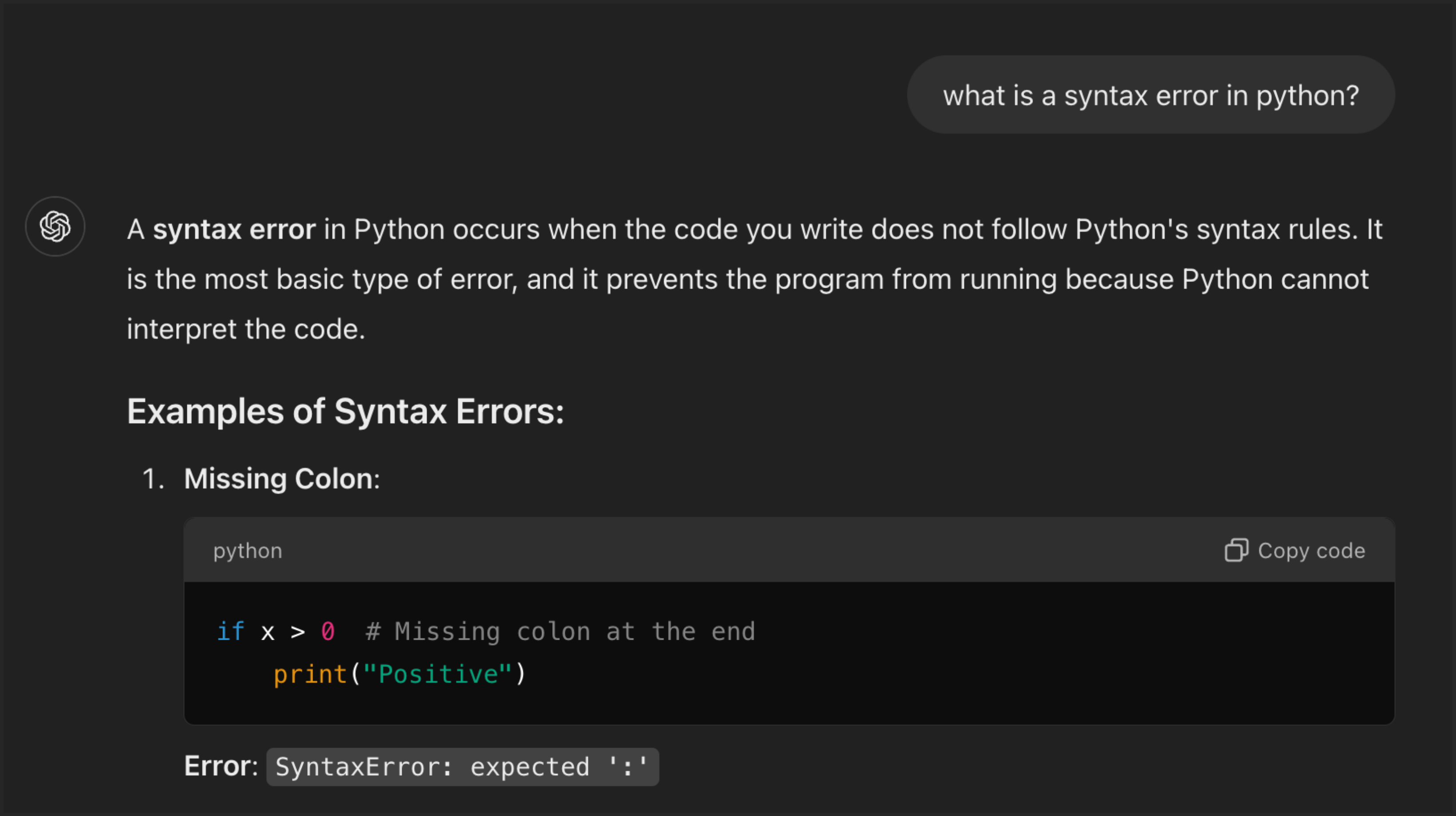
how do I print something in Python?

In Python, you can print output to the screen using the `print()` function. Here's how you do it:

Basic Usage:

```python
print("Hello, world!")
```

Asking AI general questions okay, too



what is a syntax error in python?

A **syntax error** in Python occurs when the code you write does not follow Python's syntax rules. It is the most basic type of error, and it prevents the program from running because Python cannot interpret the code.

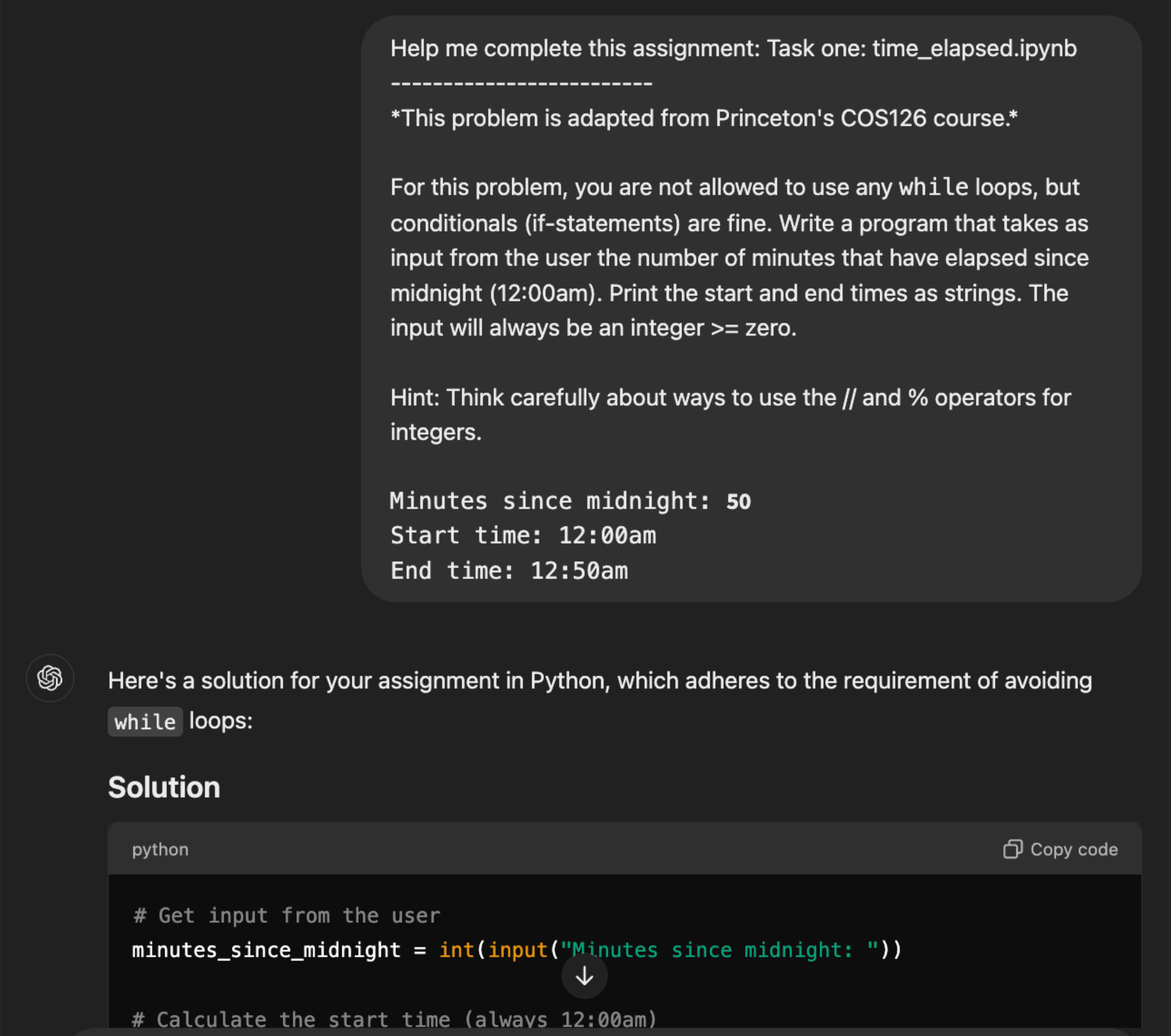
Examples of Syntax Errors:

1. **Missing Colon**:

```python
if x > 0  # Missing colon at the end
    print("Positive")
```

Error: `SyntaxError: expected ':'`

Sharing direct or paraphrased instructions from the problem set is NOT okay



Help me complete this assignment: Task one: time_elapsed.ipynb

------------------------

This problem is adapted from Princeton's COS126 course.

For this problem, you are not allowed to use any `while` loops, but conditionals (if-statements) are fine. Write a program that takes as input from the user the number of minutes that have elapsed since midnight (12:00am). Print the start and end times as strings. The input will always be an integer >= zero.

Hint: Think carefully about ways to use the // and % operators for integers.

```
Minutes since midnight: 50
Start time: 12:00am
End time: 12:50am
```

Here's a solution for your assignment in Python, which adheres to the requirement of avoiding `while` loops:

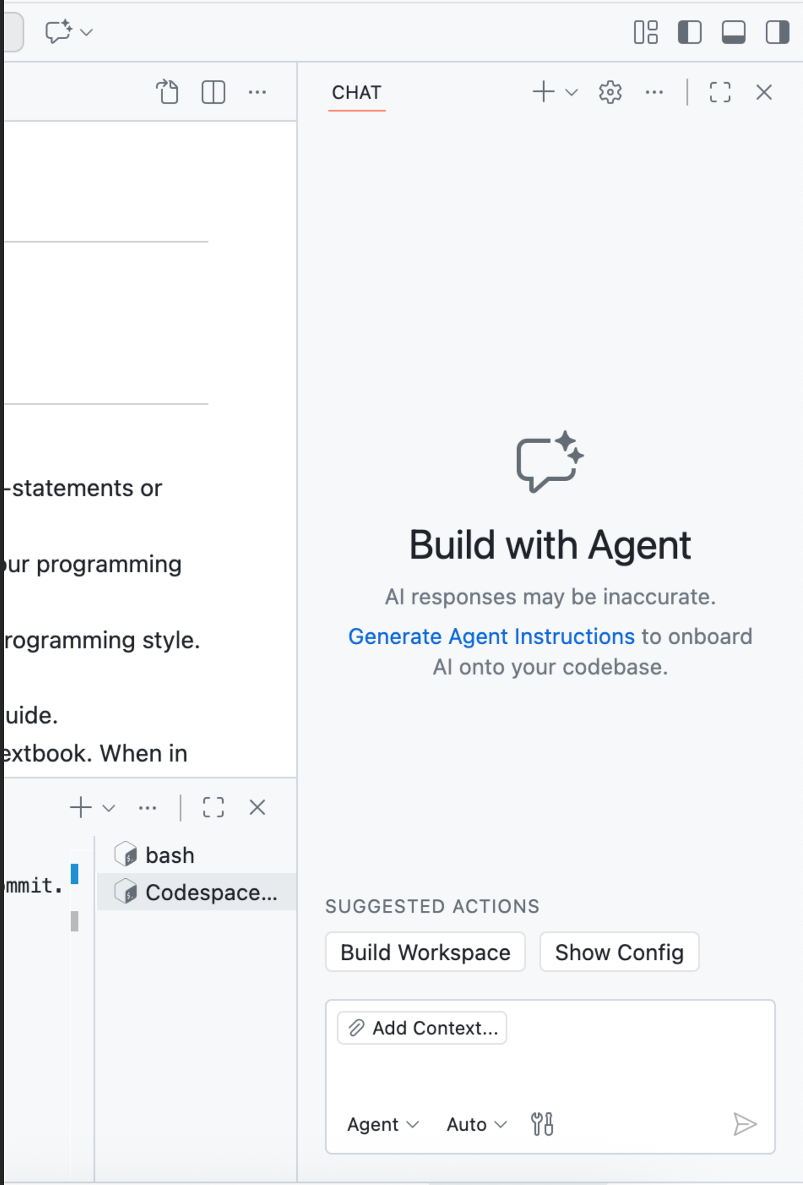
Solution

```python
# Get input from the user
minutes_since_midnight = int(input("Minutes since midnight: "))

# Calculate the start time (always 12:00am)
```

Codespaces

- Constantly embedding new AI features, like this chatbot on the righthand side of your screen
- No way for us to disable, but we **CAN** tell if you use it
- Use of this embedded chat feature to help with problem sets 1-5 is not allowed



Build with Agent

AI responses may be inaccurate.

Generate Agent Instructions to onboard AI onto your codebase.

Programming Tools We’ll Use This Semester

Terms you'll hear a lot

Tool	Purpose	Key Features
Git	Version control system	Tracks code changes Branching and merging Commit history
GitHub	Online Git repository hosting	Repository hosting Pull requests Issue tracking Code review

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GitHub	Online Git repository hosting	Repository hosting Pull requests Issue tracking Code review
GitHub Classroom	Education-focused GitHub extension	Assignment distribution Automatic repository creation Integrated feedback
GitHub Codespaces	Cloud-based development environments	Pre-configured w customization options Auto-save for 30 days Accessible from anywhere

Terms you'll hear a lot

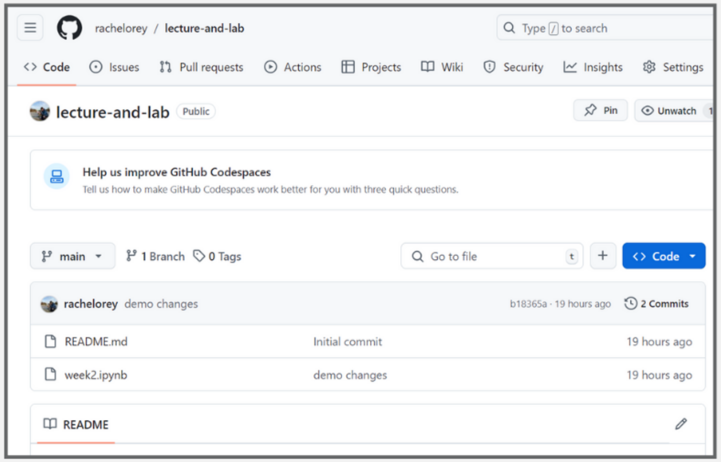
Tool	Purpose	Key Features
Python	General-purpose programming language	Simple syntax Extensive libraries Cross-platform compatibility
Jupyter	Interactive coding environment	Code and Markdown cells Inline visualizations Support multiple languages, incl Python

Style Guide

- Adhere to the style guide posted on the course GitHub page
- Some highlights:
    - Program headers
    - Heavily “comment” (explain) your code
    - Use descriptive variable names

Live GitHub Demo

Remote Repository on GitHub



Help us improve GitHub Codespaces
Tell us how to make GitHub Codespaces work better for you with three quick questions.

rachelorey demo changes b18365a · 19 hours ago 2 Commits

README.md	Initial commit	19 hours ago
week2.ipynb	demo changes	19 hours ago

- Consider your files on GitHub to be the official version. Those are the ones that your colleagues and collaborators we'll see, and the ones that we'll grade in assignments.
- These files are separate from the work you do on Codespaces unless you add, commit, and push your changes.
- These files are not deleted when you delete your Codespace.

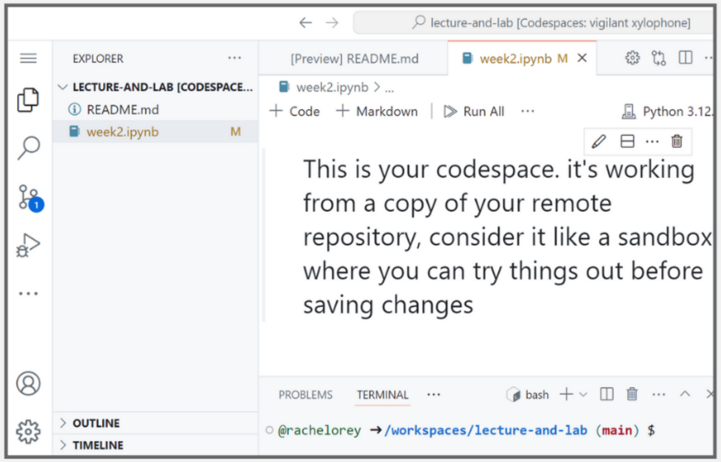
Push changes from local to remote

←

Pull changes from remote to local

→

Local Clone (Copy) on Codespaces

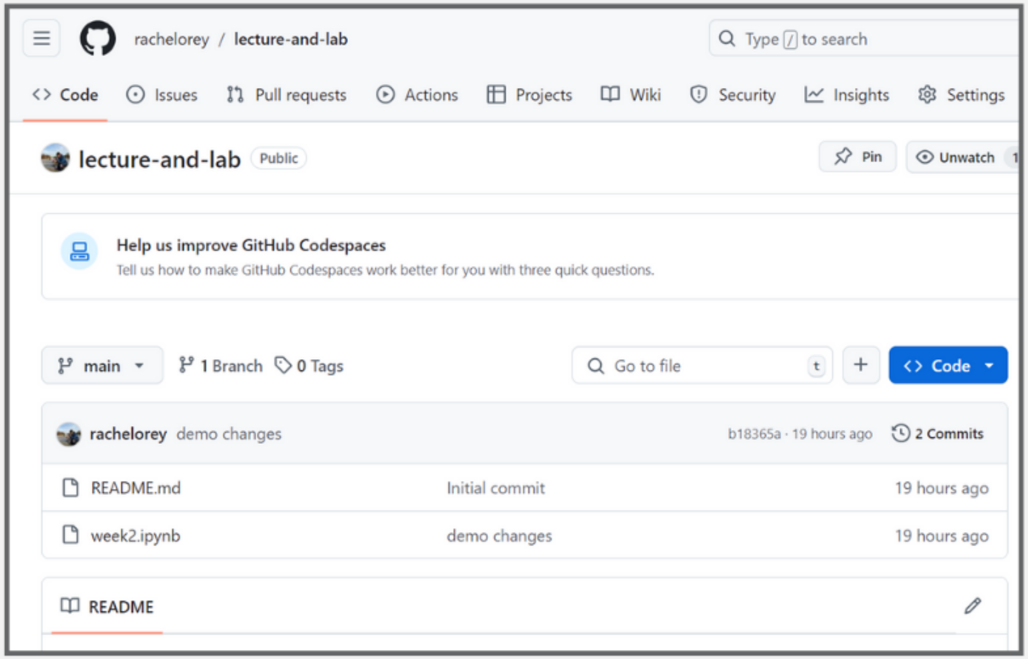


This is your codespace. it's working from a copy of your remote repository, consider it like a sandbox where you can try things out before saving changes

```
○ @rachelorey ➜ /workspaces/lecture-and-lab (main) $
```

- Codespaces effectively makes a copy of your remote repository that you can code from safely without worrying about messing up the original files.
- To make sure your changes are captured, you have to "add", "commit", and "push" your changes back to the remote repository when you're ready.

Remote Repository on GitHub



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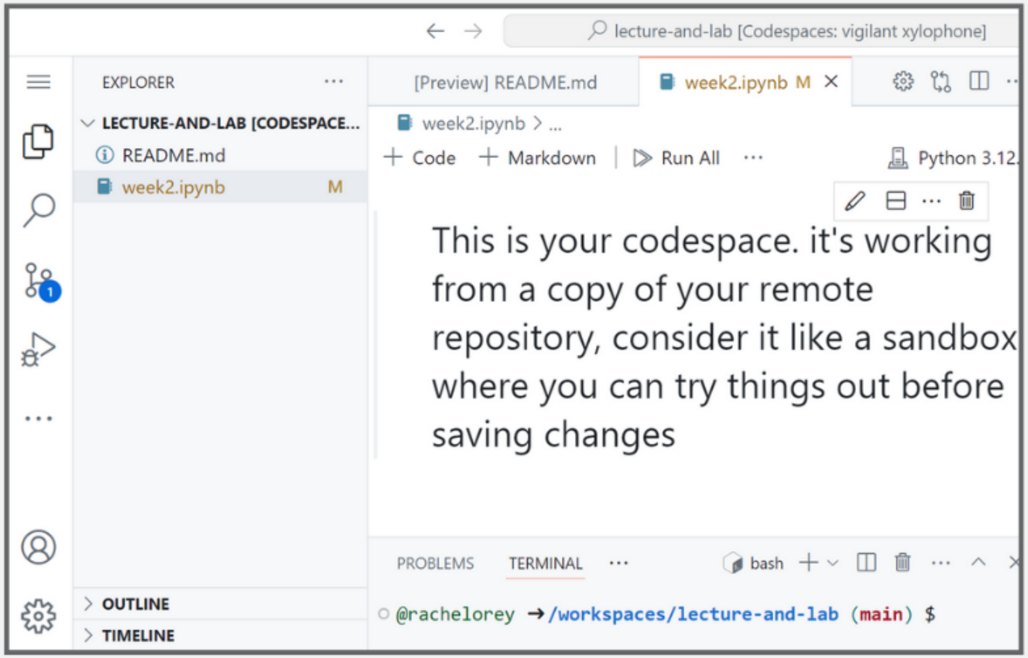

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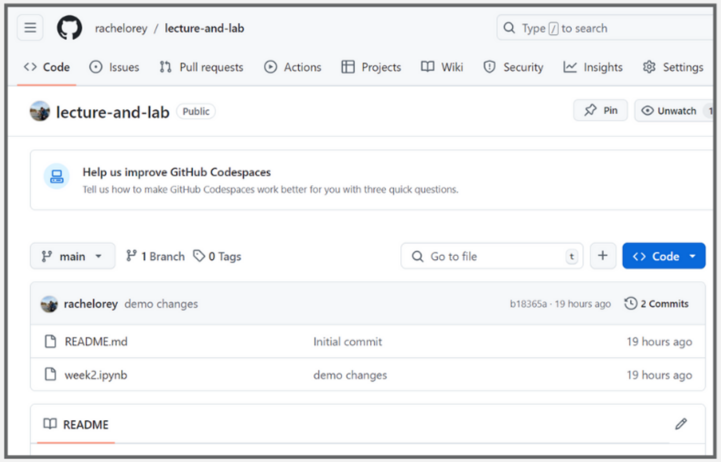

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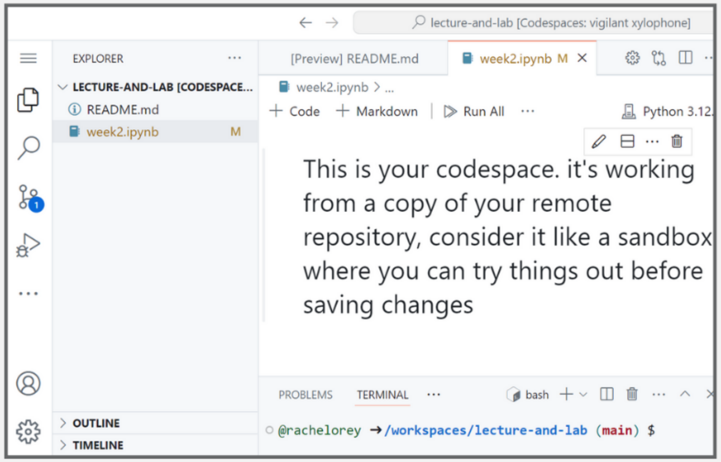

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