

# Assignments and Homework Workflow

# Written Assignments

# Step 1

Access .md file on Github page

- Slides (HTML): [L1\\_software\\_python.slides.html](#)
- Slides (PDF): [L1\\_software\\_python.pdf](#)
- Notebook: [L1\\_software\\_python.ipynb](#)

## VScode Setup

Introduction to Python, Conda environments, and the computational tools used in the course.

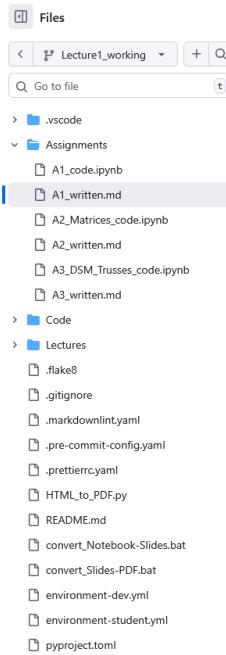
- Slides (HTML): [L1\\_software\\_VScode.slides.html](#)
- Slides (PDF): [L1\\_software\\_VScode.pdf](#)
- Notebook: [L1\\_software\\_VScode.ipynb](#)
- Extra Code: [L1\\_JupyterTest.ipynb](#)

Open in Colab

## Assignments

- Written Assignment: [A1\\_written.md](#)
- Coding Assignment: [A1\\_code.ipynb](#)

Open in Colab



**CEE6501 / Assignments / A1\_written.md**

Preview    Code    Blame    81 lines (55 loc) · 2.51 KB

All questions answered  
 File uploaded successfully to Canvas

**Collaboration / AI tools**

You may discuss concepts with classmates and you may use AI tools to help you learn, but **your submitted code must be written by you and you must understand it**. If you used outside help, add a short note in the final reflection cell.

---

### Assignment Questions

This is a **test assignment** designed to help you practice the **submission workflow** used throughout the course.

The goal of this assignment is **not technical difficulty**, but to ensure that you are comfortable with:

- completing a written assignment,
- scanning or exporting your work,
- and submitting it correctly on Canvas.

**Question 1 — Structural Inspiration**

Using the International Database and Gallery of Structures Website (or any other resource): <https://structurae.net/en/structures/>

Find and example of each of the following structure types that you personally find interesting or inspiring:

- Cable Nets
- Membranes
- Lattices and Gridshells
- Thin Shells
- Tensegrities

In your submission:

1. Include an image or sketch of each structure.
2. A link to a website page you found the image (if available).
3. Briefly describe the structure and its purpose
4. Explain **why you find this structure interesting**, focusing on aspects such as:
  - structural form
  - load paths
  - material use
  - scale
  - elegance or efficiency
5. Reflect on what questions this structure raises for you as a student of structural analysis

There are **no right or wrong answers**. The emphasis is on clarity, thoughtfulness, and clear communication.

## Step 2

Complete assignment in markdown or hand-write (for calculations) embed images as needed. Export as PDF. Upload PDF to canvas.

CEE-6501-A > Assignments > Week 1 Assignment

Spring 2026

Home Announcements Syllabus Modules **Assignments** Quizzes Grades People GT Student Resources CIOS

Week 1 Assignment 

Due Jan 26 by 11:59pm Points 10 Submitting a file upload Available after Jan 15 at 12am

No additional details were added for this assignment.

File Upload Box Dropbox Microsoft OneDrive

Upload a file, or choose a file you've already uploaded.

Drag a file here, or  
Choose a file to upload

 Use Webcam

# Coding Assignment

## What a Coding Assignment Looks Like

- Most homework is a **Jupyter notebook** template
- You will:
  - fill in code
  - answer short prompts
  - generate plots/figures to verify behavior
- Grading emphasizes:
  - correctness
  - clarity
  - interpretation ("does this result make sense?")

# Step 1

Access .ipynb file on Github page

The screenshot shows a GitHub page for a course. At the top, there's a navigation bar with icons for Home, GitHub, Issues, Pull requests, and a profile picture. Below the navigation, there's a search bar and a dropdown menu for repository selection.

The main content area has a light gray background with a dark header. It features two main sections:

- VScode Setup**:  
Introduction to Python, Conda environments, and the computational tools used in the course.
  - Slides (HTML): [L1\\_software\\_VScode.slides.html](#)
  - Slides (PDF): [L1\\_software\\_VScode.pdf](#)
  - Notebook: [L1\\_software\\_VScode.ipynb](#)
  - Extra Code: [L1\\_JupyterTest.ipynb](#)

Open in Colab
- Assignments**:  
  - Written Assignment: [A1\\_written.md](#)
  - Coding Assignment: [A1\\_code.ipynb](#)

Open in Colab

## Step 2

Open the notebook (locally or in Colab):

1. Run the setup cell(s) at the top of the notebook.
2. Complete the questions **in order**.
3. Enter your answers only in the **designated cells**.

```

# YOUR WORK

# TESTS (do not edit)

expected_Ek = 0.5 * 70 * 5**2 # 875.0

assert m == 70, "m should be 70"
assert v == 5, "v should be 5"
assert E_k == expected_Ek, "E_k is incorrect"

print("✅ Question 2 tests passed.")

```

## Step 3

Run the provided tests (do not modify them) to verify that your output matches the expected results.

### ▼ Question 2 — Python Basics (10 pts)

Write code that:

1. Defines `m = 70` and `v = 5`
2. Computes kinetic energy `E_k`
3. Prints: `Kinetic energy: <value> J`

 **Deliverable:** running the cell prints the correct value.

```
[4] ✓ 0s
# YOUR WORK
m = 70
v = 5

E_k = 1/2 * m * v**2

print("Kinetic Energy: ", k)
Kinetic Energy:  875.0

[5] ✓ 0s
# TESTS (do not edit)

expected_Ek = 0.5 * 70 * 5**2 # 875.0

assert m == 70, "m should be 70"
assert v == 5, "v should be 5"
assert E_k == expected_Ek, "E_k is incorrect"

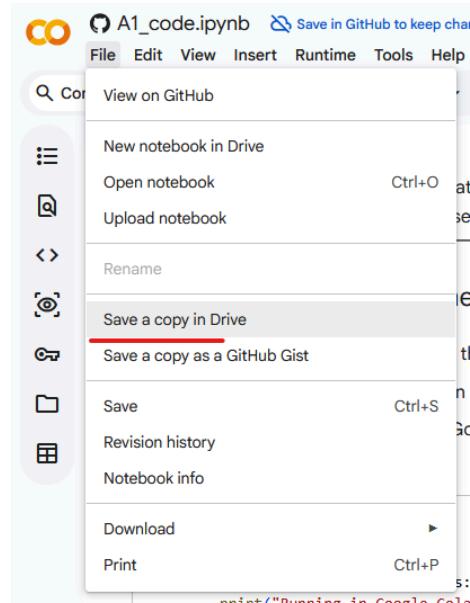
print("✓ Question 2 tests passed.")

... ✓ Question 2 tests passed.
```

## Step 4

Save your Colab notebook **locally**. If you do not do this, your work will be **overwritten** the next time you pull updates from GitHub.

I will periodically push updates to assignments (e.g., to fix issues or clarify problems). You should therefore expect to **pull updates while working on an assignment**. I will notify you when an update is required.



# Step 5

Upload Colab file link to canvas. Make sure permissions on the file are appropriately set so that I can access and run your code.

Spring 2026

Home

Announcements

Syllabus

Modules

Assignments

Quizzes

Grades

People

GT Student Resources

CIOS

## Week 1 Coding Assignment ↗

Due Jan 26 by 11:59pm Points 10 Submitting a website url Available after Jan 15 at 12am

No additional details were added for this assignment.

Website URL Box Dropbox Microsoft OneDrive

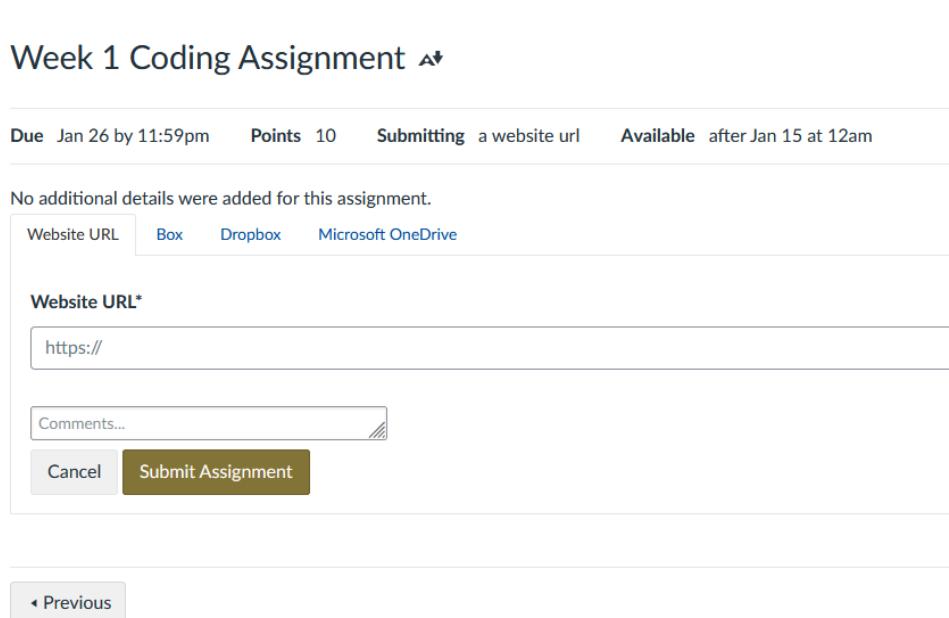
Website URL\*

https://

Comments...

Cancel Submit Assignment

◀ Previous



# Collaboration and Integrity

- You are encouraged to discuss **concepts, written solution, and code** with classmates.
- You may use GPT-based tools while working on the assignments; however, you must **attempt the problem yourself first** and not rely on copy-and-paste solutions.
- Any code you submit must be **your own work**:
  - Do not submit complete solutions generated by others or by AI.
  - You should be able to **explain every line of code** you submit.
- If you are unable to explain your code when asked, it will be treated as copied work and you will receive **zero credit** for that question.
- When in doubt about what is appropriate: attend office hours or email me.