- 1. Install Git on your system. Run a command to check the version.
- 2. Configure your Git username and email globally.
  - ← Command: git config --global ...
- 3. Create a new local folder called python-practice, initialize it as a Git repository, and check its status.
- 4. Create a Python file hello.py with a simple print statement, add it to staging, and commit it with a message.
- 5. Create a GitHub account (if not already), then create a new repository called git-practice.
- 6. Connect your local repo to GitHub using git remote add origin .... Push your code.
- 7. Modify hello.py (e.g., add another print), commit, and push again.
- 8. Create a .gitignore file and add rules to ignore .log files and \_\_pycache\_\_/ folder.
- 9. Clone an existing repository from GitHub (e.g., your classmates or a demo repo).
- 10. Make a change to the cloned repo, commit, and push it.

## Group Work

- 1. In groups:
  - One student creates a shared repository on GitHub.
  - o Others clone it and add their own Python scripts.

- Everyone pushes their changes.
- 2. Create a situation where two students edit the same line of a file → simulate a **merge conflict**. Try to resolve it.
- 3. Practice using git pull regularly to stay updated with teammates' changes.
- 4. Write at least **three meaningful commit messages** that describe the changes you made (not "update" or "fix").

## Extra Challenge

- Fork an open-source repository on GitHub and clone it.
- Make a small change (like fixing a typo in README) and push it to your fork.
- Create a pull request to the original repository.