1. Create a new folder named `data\_project` on your local machine. Initialise it as a git repository and verify its status.

mkdir data\_project

cd data\_project

git init

git statusA screenshot of a computer

AI-generated content may be incorrect.

2. Inside the `data\_project` directory, create three Python files: `data\_cleaning.py`, `data\_analysis.py`, and `visualisation.py`. Add all these files to the staging area.

touch data\_cleaning.py data\_analysis.py visualisation.py

git add data\_cleaning.py data\_analysis.py visualisation.py

git statusA screen shot of a computer

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3. Commit the added Python files with the message "Initial commit with data processing scripts".

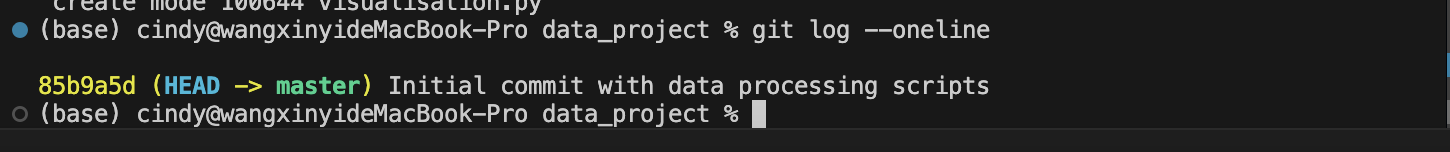
git commit -m "Initial commit with data processing scripts"

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4. Display the commit history of your repository.

git log -- oneline



5. Add a new function `clean\_data()` in `data\_cleaning.py`. After modifying the file, stage and commit the changes with the message "Add clean\_data function to data\_cleaning.py".

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6. Create a new branch named `feature-exploration` and switch to it.

git branch feature-exploration

git checkout feature-exploration

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7. On the `feature-exploration` branch, add a new file `exploratory\_analysis.py` and commit it with the message "Add exploratory\_analysis.py for initial data exploration"

touch exploratory\_analysis.py

git add exploratory\_analysis.py

git commit -m "Add exploratory\_analysis.py for initial data exploration"

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8. Switch back to the `main` (or `master`) branch from `feature-exploration`.

git checkout main

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9. Merge the `feature-exploration` branch into the `main` (or `master`) branch.

git merge feature-exploration

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10. Commit the merge and list all the branches in your repository.

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