Experiment No 2

Title: Implementation of Staging, Commit, and Push on GitHub

Objective:

To understand and perform version control using Git by staging, committing, and pushing code to a remote repository on GitHub.

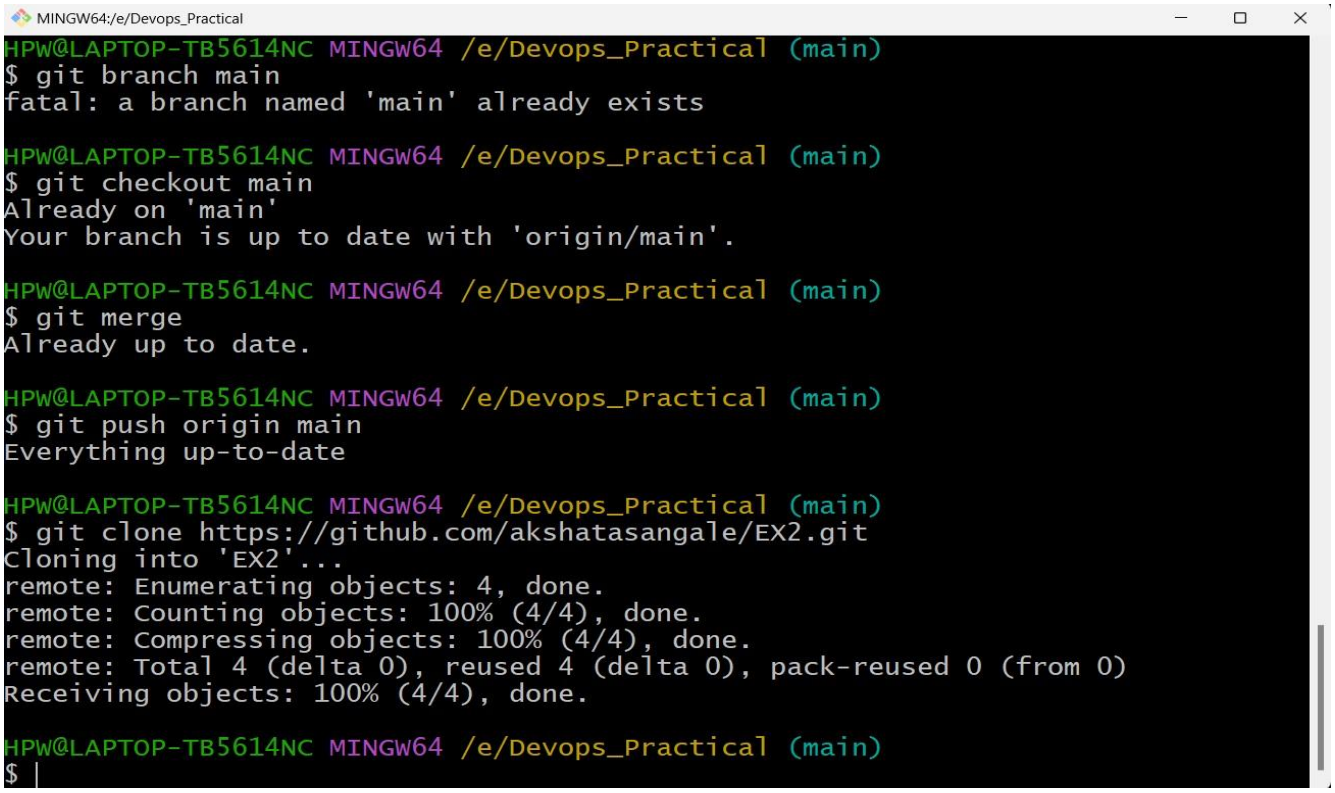
Important Steps

1.Git Installation:

- Installed Git using sudo apt install git (Ubuntu) or downloaded from Git website (Windows).
- Verified installation using git --version.

2.**Initializing and Cloning a Repository:**

- Created a new repository on GitHub.
- Cloned the repository using git clone <repository-url>.
- Navigated to the repository using cd <repository-name>.

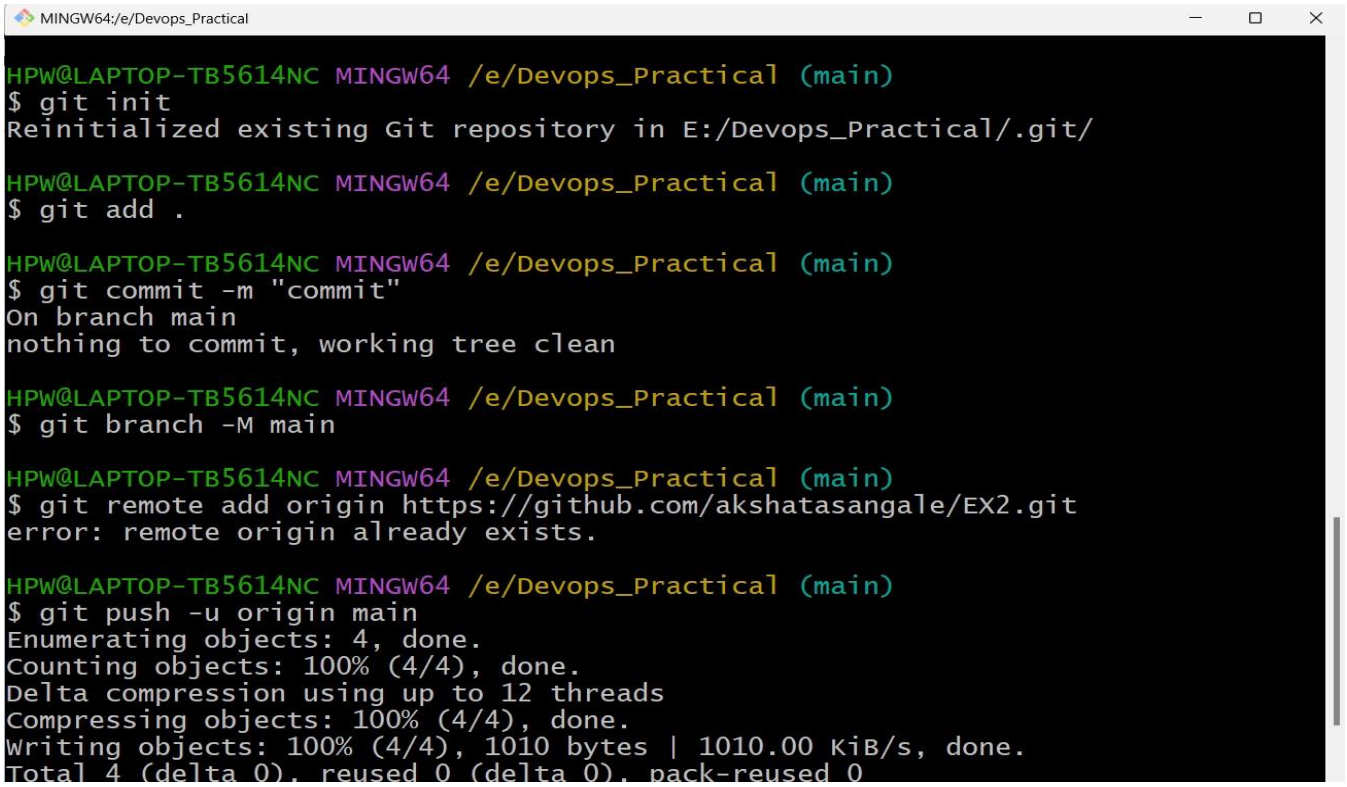


3.Staging and Committing Changes:

- Created a new file and added source code.
- Staged the changes using git add <file-name>.
- Committed the changes using git commit -m "Commit message".

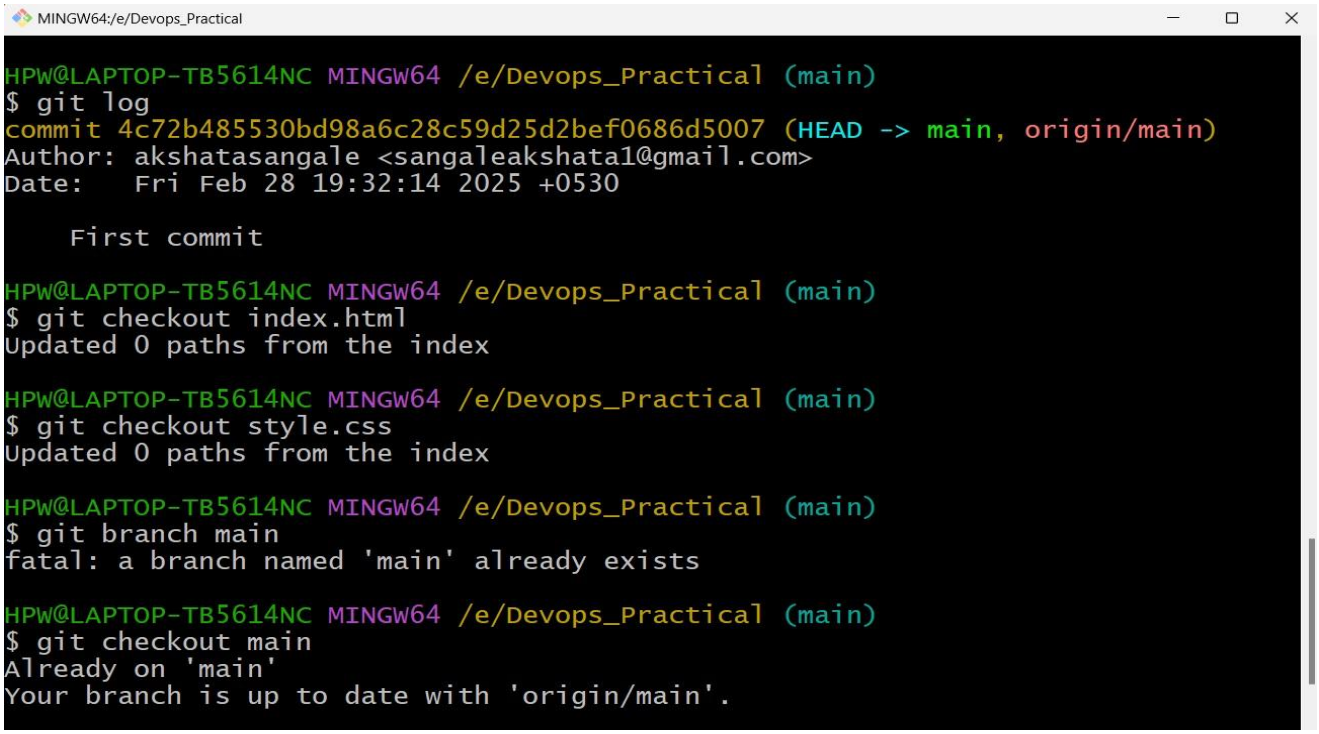
4 **Pushing Changes to GitHub:**

- Used git push origin master to upload changes to the remote repository.
- Verified changes on GitHub.



5.Branching and Merging:

- Created a new branch using git branch <branch-name>.
- Switched branches using git checkout <branch-name>.
- Merged changes using git merge <branch-name>.



Conclusion:

This experiment provided hands-on experience in version control using Git. It covered essential operations such as staging, committing, pushing, branching, and merging, which are crucial for managing source code in collaborative software development projects.