

Git Commands

1. Configuration

Git config --global user.name "Your Name"

Git config - - global user.email "your@example.com"

Git config - -global core.editor "code - - wait "

2. Basic Operations

- **Clone a repository**

Git clone <repository_url>

- **Initialize a new repository**

Git init

- **Add files to the staging area :**

Git add <file_name>

Or add all changes

Git add .

- **Commit changes :**

Git commit -m "Commit message"

- **View the commit history**

Git log

3. Branching and Merging

- **Create a new branch :**

Git branch <branch_name>

- **Switch to a branch :**

Git checkout <branch_name>

- **Create and switch to a new branch :**

Git checkout -b <branch_name>

- **Merge a branch into the current branch :**

Git merge <branch_name>

- **Delete a branch**

Git branch -d <branch_name>

4. Remote Repositories

- **Add a remote repository**

Git remote add origin <repository_url>

- **View remote repository**

Git remote -v

- **Push changes to a remote repository :**

Git push origin <branch_name>

- **Pull changes from a remote repository :**

Git pull origin <branch_name>

- **Fetch changes from a remote repository**

Git fetch origin

5. Stashing Changes

- **Stash changes:**

Git stash

- **Apply stashed changed**

Git stash apply

- **List stashes**

Git stash list

- **Drop a stash**

Git stash drop

GitHub Commands

1. Creating a repository

creating a new repository on Git Hub and link it with your local repository

Echo “# MyProject” >> README.md

Git init

Git add README .md

Git commit -m “frist commit”

Git remote add origin <repository_url>

Git push -u origin master

2. Forking a Repository

- **Fork a repository using GitHub web interface , then clone it :**

Git clone <forked_repository_url>

3. Creating Pull Requests

- **After making changes and committing them, push to your branch :**

Git push origin <branch_name>

- **Create a pull request using the GitHub web interface**

4. GitHub Actions (CI/CD)

- **Create a '.github/workflows' directory in your repository and add a workflow file (e.g., 'ci.yml') :**

Name : CI

On : [push, pull_request]

Jobs:

Build:

Runs-on :ubuntu-latest

steps :

-uses : actions/checkout@v2

-name: Set Up Node.js

Uses : actions/setup-node@v2

With :

Node-version : '14'

-run : npm install

-run : npm test

5. Managing Issues and Projects

- **Create , assign and manage issues and projects using the GitHub web interface .**

Integration with Other Tools

- **Jenkins : Use git plugin to pull code from GitHub repositories.**
- **Ansible : Use git module to deploy configurations stored in git repositories.**
- **Terraform : Store and manage terraform configurations in github for version control and collaboration.**