

1.To initialize a new Git repository in the current directory, use the command **git init**.

2.To clone a repository from GitHub with the URL <https://github.com/user/repo.git>, use **git clone https://github.com/user/repo.git**.

3.To check the current status of the working directory and staging area in Git, use **git status**.

4.To add a file named index.html to the staging area, use the following command:

**git add index.html**

5.To commit changes with the message "Initial commit," use the following command:

**git commit -m "Initial commit"**

6.To create a new branch named feature-branch, use the following command:

**git branch feature-branch**

7.To switch to the branch feature-branch, use the following command:

**git checkout feature-branch**

8.To merge the branch feature-branch into the current branch, use the following command:

**git merge feature-branch**

9.To view the commit history, use the following command:

**git log**

10.To fetch updates from the remote repository without merging them, use the following command:

**git fetch**

11.To push changes to the remote repository named origin on the branch main, use the following command:

**git push origin main**

12.To revert a commit with the hash a1b2c3d, use the following command:

**git revert a1b2c3d**

13.To create a stash, use the following command:

**git stash**

To apply the stash later, use the following command:

**git stash apply**

14.To list all branches in the repository, use the following command:

**git branch**

15.To delete the branch old-feature, use the following command:

**git branch -d old-feature**

If old-feature has not been merged yet and you want to force delete it, use:

**git branch -D old-feature**

16. To check the differences between two commits with hashes a1b2c3d and d4e5f6g, use the following command:

**git diff a1b2c3d d4e5f6g**

17. To create an annotated tag named v1.0 with the message "First release", use the following command:

**git tag -a v1.0 -m "First release"**

18. To list all tags in the repository, use the following command:

**git tag**

19. To set the global username to "John Doe" and email to "Johndoe@example.com" in Git, use the following commands:

**git config --global user.name "John Doe"**

**git config --global user.email "Johndoe@example.com"**

20. To remove a file named test.txt from the staging area without deleting it from the working directory, you can use the following command:

**git reset HEAD test.txt**

21. To view changes in the working directory since the last commit, you can use the following command:

**git status**

22. To add a new remote repository named upstream with the URL <https://github.com/user/repo.git>, use the following command:

**git remote add upstream https://github.com/user/repo.git**

23. To rename the current branch to new-branch-name, you can use the following Git command:

**git branch -m new-branch-name**

Make sure you are not currently on the branch you want to rename. If you are on the branch you want to rename (current-branch-name), switch to a different branch first:

**git checkout any-other-branch**

Then, rename the branch:

**git branch -m new-branch-name**

This will rename the current branch (current-branch-name) to new-branch-name.

24. To show the commit history in a compact format with one line per commit, you can use the git log command with the --oneline option:

**git log --oneline**

25. To amend the last commit with a new message "Updated commit", use the following command sequence:

**git commit --amend -m "Updated commit"**