

Assignment - 1

1. Initialize a New Git Repository

Question: How do you initialize a new Git repository in the current directory?

Ans: “git init “

After running these commands, a new Git repository will be created in the current directory. The ‘git init’ command sets up the necessary Git metadata and creates a ‘.git’ subdirectory.

2. Clone a Repository

Question: How do you clone a repository from GitHub using the URL

<https://github.com/user/repo.git>?

Ans: “git clone <https://github.com/user/repo.git>”

This command creates a local copy of the repository in a new directory named ‘repo’.

3. Check the Status of the Repository

Question: What command do you use to check the current status of the working directory and staging area?

Ans: “git status”

When you run ‘git status’, Git will output the current state of the working directory and staging area, helping you understand which files are tracked, which are modified, and which are ready to be committed.

4. Add a File to the Staging Area

Question: How do you add a file named index.html to the staging area?

Ans: “git add wipro.html”

This command stages the index.html file, preparing it to be included in the next commit.

5. Commit Changes

Question: Write the command to commit changes with the message "Initial commit".

Ans: git commit -m “Initial commit”

This command creates a new commit with the staged changes and includes the message "Initial commit" to describe the commit.

6. Create a New Branch

Question: How do you create a new branch named feature-branch?

Ans: “git branch feature-branch”

you can use the ‘git checkout’ command with the -b option to create and switch to the new branch in one step

“git checkout -b feature-branch”

7. Switch to Another Branch

Question: Write the command to switch to the branch feature-branch

Ans: “git switch feature-branch”

8. Merge Branches

Question: How do you merge the branch feature-branch into the current branch?

Ans: “git merge feature-branch”

9. View Commit History

Question: What command do you use to view the commit history?

Ans: “git log”

10. Fetch Updates from Remote Repository

Question: How do you fetch updates from the remote repository without merging them?

Ans: “git fetch”

11. Push Changes to Remote Repository

Question: Write the command to push changes to the remote repository named origin on the branch main?

Ans: “git push origin main”

12. Revert a Commit

Question: How do you revert a commit with the hash a1b2c3d?

Ans: “git revert a1b2c3d”

13. Create and Apply a Stash

Question: How do you create a stash and then apply it later?

Ans: 1. “git stash” – The “git stash” command saves your local modifications and reverts your working directory to match the HEAD commit

2. “git stash apply” – The “git stash apply” command reapplies the most recently created stash to your working directory

14. List All Branches

Question: What command lists all branches in the repository?

Ans: “git branch”

15. Delete a Branch

Question: How do you delete the branch old-feature?

Ans: “git branch -d old-feature”

16. Check the Differences Between Two Commits

Question: How do you check the differences between two commits with hashes a1b2c3d and d4e5f6g?

Ans: “git diff a1b2c3d d4e5f6g”

17. Create an Annotated Tag

Question: How do you create an annotated tag named v1.0 with the message "First release"?

Ans: “git tag -a v1.0 -m ‘First release’ ”

18. List Tags

Question: What command lists all tags in the repository?

Ans: “git tag”

19. Configure Git Username and Email

Question: How do you set the global username to "JohnDoe" and email to "johndoe@example.com"?

Ans: “git config --global user.name ‘JohnDoe’ ”

“git config --global user.email ‘johndoe@example.com’ ”

20. Remove a File from the Staging Area

Question: How do you remove a file named test.txt from the staging area without deleting it from the working directory?

Ans: “git reset HEAD test.txt”

21. View Changes in the Working Directory

Question: What command shows changes in the working directory since the last commit?

Ans: “git diff”

22. Create a New Remote Repository

Question: How do you add a new remote repository named upstream with the URL

<https://github.com/user/repo.git>?

Ans: “git remote add upstream <https://github.com/user/repo.git>”

23. Rename a Branch

Question: How do you rename the current branch to new-branch-name?

Ans: “git branch -m new-branch-name”

24. Show the Commit History in a Compact Format

Question: Write the command to show the commit history in a compact format with one line per Commit.

Ans: “git log --oneline”

25. Amend the Last Commit

Question: How do you amend the last commit with a new message "Updated commit"?

Ans: "git commit --amend -m 'Updated commit' "