Git and Github workshop

1. Setup and Initialize: -

What command do you use to create a new directory named `git-workshop` and navigate into it?

Answer:

mkdir (make directory) command is used to create a new folder. This will the working folder for project files.

the cd (change directory) command to move inside it. This way, we can work within the folder.

1. Initialize a Git Repository: - What command initializes a Git repository in your directory?

Answer:

git init sets up a new, empty Git repository in the current directory.

1. Create and Modify Files: - How do you create a new file named `hello.txt` and add the content 'Hello, Git Workshop!' to it using a single command?

Answer:

echo "Hello, Git Workshop!" > hello.txt

1. Check the Status of Your Repository: - What command

displays the status of your repository?

Answer:

git status shows the current state of the repository.

1. Stage and Commit Changes: - What command stages the file `hello.txt`? - What command commits the staged file with the message 'Add hello.txt with welcome message'?

Answer:

git add hello.txt

git commit -m "Add hello.txt with welcome message"

1. Branching: - What command creates a new branch named update-content? - How do you switch to the update-content branch?

Answer:

git branch update-content

* This command creates a new branch called update-content

git checkout update-content

* This command switches your working directory to the update-content branch.

1. 7. Make Changes on the Branch: - What command would you use to append the text 'This is a simple Git assignment.' to `hello.txt`? - What command stages and commits the changes with the message 'Update hello.txt with additional message'?

Answer:

echo "This is a simple Git assignment." >> hello.txt

* The >> symbol appends the specified text to the end of hello.txt without overwriting the existing content.

git add hello.txt

* This stages the updated hello.txt file, preparing it for the commit.

git commit -m "Update hello.txt with additional message"

* This command commits the staged changes with the message "Update hello.txt with additional message," documenting the new content added to hello.txt.

1. Merge Changes: - What command switches you back to the `main` branch? - How do you merge the `update-content` branch into `main`?

Answer:

git checkout main

git merge update-content

* This command merges the changes from the update-content branch into the main branch.

1. View Commit History: -

What command shows the commit history?

Answer:

git log displays a list of commits in the repository’s history, starting with the most recent.

10 Undo and Reset (Practice Safely): - If you make a change to `hello.txt` that you want to revert before committing, what command would you use? - How can you reset your branch to a previous commit (optional, for advanced practice)?

Answer:

git checkout -- hello.txt

git reset --hard <commit-hash>

11 Push to a Remote Repository (Optional): - What command adds a remote repository named origin? - What command pushes your local main branch to the remote repository?

Answer:

git remote add origin <repository-url>

git push -u origin main