

# Git and GitHub Workshop Assignment

## 1. Setup and Initialize:

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

```
mkdir git-workshop
```

```
cd git-workshop
```

## 2. Initialize a Git Repository:

What command initializes a Git repository in your directory?

```
git init
```

## 3. 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?

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

## 4. Check the Status of Your Repository:

What command displays the status of your repository?

```
git status
```

## 5. Stage and Commit Changes:

What command stages the file `hello.txt`?

```
git add hello.txt
```

What command commits the staged file with the message 'Add hello.txt with welcome message'?

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

## 6. Branching:

What command creates a new branch named `update-content`?

```
git branch update-content
```

How do you switch to the `update-content` branch?

```
git switch update-content
```

## 7. Make Changes on the Branch:

What command would you use to append the text 'This is a simple Git assignment.' to `hello.txt`?

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

**What command stages and commits the changes with the message 'Update hello.txt with additional message'?**

*git add hello.txt*

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

## **8. Merge Changes:**

**What command switches you back to the `main` branch?**

*git switch main*

**How do you merge the `update-content` branch into `main`?**

*git merge update-content*

## **9. View Commit History:**

**What command shows the commit history?**

*git log*

## **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?**

*git checkout -- hello.txt*

**How can you reset your branch to a previous commit (optional, for advanced practice)?**

*git reset --hard <commit\_hash>*

## **11. Push to a Remote Repository (Optional):**

**What command adds a remote repository named `origin`?**

*git remote add origin <remote\_repository\_url>*

**What command pushes your local `main` branch to the remote repository?**

*git push origin main*