**Day6 – Assignment2:** Explain all the git commands.

Common Git commands along with examples:

1. **git init**:
   * Initializes a new Git repository in the current directory.

Bash

$ git init

Initialized empty Git repository in /path/to/your/directory/.git/

1. **git clone [url]**:
   * Clones a remote repository to your local machine.

Bash

$ git clone https://github.com/username/repository.git

Cloning into 'repository'...

1. **git status**:
   * Shows the current state of the repository (tracked files, modified files, untracked files).

Bash

$ git status

On branch master

Your branch is up to date with 'origin/master'.

nothing to commit, working tree clean

1. **git add [file(s)]**:
   * Adds file(s) to the staging area for the next commit.

Bash

$ git add file.txt

1. **git commit -m "[commit message]"**:
   * Records changes to the repository with a commit message.

Bash

$ git commit -m "Added file.txt"

[master a1b2c3d] Added file.txt

1 file changed, 1 insertion (+)

create mode 100644 file.txt

1. **git push**:
   * Uploads local repository changes to a remote repository.

Bash

$ git push origin master

1. **git pull**:
   * Fetches and integrates changes from a remote repository into the current branch.

Bash

$ git pull origin master

1. **git fetch**:
   * Downloads objects and refs from another repository without integrating them into your working files.

Bash

$ git fetch origin

1. **git merge [branch]**:
   * Integrates changes from another branch into the current branch.

Bash

$ git merge feature-branch

1. **git branch**:
   * Lists all local branches in the repository.

Bash

$ git branch

\* master

feature-branch

1. **git checkout [branch/commit]**:
   * Switches branches or restores working tree files from a specific branch or commit.

Bash

$ git checkout feature-branch

1. **git log**:
   * Displays commit history.

Bash

$ git log

commit a1b2c3d4e5f6g7h8i9j0 (HEAD -> master)

Author: Your Name <you@example.com>

Date: Mon Jan 1 12:00:00 2023 +0100

Added file.txt

1. **git reset [file]**:
   * Resets the staged file(s) or commits.

Bash

$ git reset file.txt