Essential Git Commands

1.Setup and Configuration

- git - -version : checks if git is installed and shows the version.
- git config - -global user.name : sets your user name.
- git config - -list : displays all current git configurations.

2. Starting a Repository

- git init : initializes a new git repository in the current directory.
- git clone <repo url> : creates a local copy of an existed remote repository

3. working with files

- git add<filename> : adds a specific files to the staging area
- git add. : adds all files in the current directory to the staging area
- git rm <filename> : removes a file from the repository & directory
- git status : shows the status of the file

4. Committing Changes

- git commit -m “commit change” : saves the staged changes with a message
- git commit -am “commit message” : adds all the commits all tracked files at one step.

5. Viewing History

- git log : displays commit history in detail
- git log - -oneline : gives a consice, one line view of commits
- git diff : shows the difference between working directory and staging raea

6. Branching

- git branch : list all branches in the repo
- git branch <branch name> : creates a new branch
- git checkout <branch name> : switches to another branch

- git checkout -b <branch name> : creates and swithes to a new branch at a time
- git merge <branch name> : merges a branch into the current branch
- git branch -d <branch name> : deletes a branch

7. Working with Remote Repositories

- git remote -v : lists remote repositories linked to your project
- git remote add origin <repo url> : adds a new remote repository
- git push -u origin<branch name> : pushes your branch to the remote repository and sets tracking
- git push : pushes commited changes to the remote repo
- git pull : fetches and merges changes from the remote repo
- git fetch : fetches latest changes from the repo but doesn’t merge