Understanding

GIT & BASIC COMMANDS

01
Git Configuration

Set the username	:	git config - - global user.name
Set the user email	:	git config - - global user.email
Create a Git command shortcut	:	git config - - global alias.
Set the preferred text editor	:	git config - - system core.editor
Open and edit the global configuration file	:	git config - - global - - edit
Enable command line highlighting	:	git config - - global color.ui auto

02
Setting up Git repositories

- Create an empty repository in the project folder : **git init**
- Clone a repository from GitHub and add it to the project folder : **git clone (repo URL)**
- Clone a repository to a specific folder : **git clone (repo URL) (folder)**
- Display a list of remote repositories with URLs : **git remote -v**
- Remove a remote repository : **git remote rm (remote repo name)**
- Retrieve the most recent changes from origin but don't merge : **git fetch**
- Retrieve the most recent changes from origin and merge : **git pull**

03
Commands for managing file changes

Add file changes to staging	:	git add (file name)
Add all directory changes to staging	:	git add .
Add new and modified files to staging	:	git add –A
Remove a file and stop tracking it	:	git rm (file_name)
Untrack the current file	:	git rm –cached (file_name)
Recover a deleted file and prepare it for commit	:	git checkout <deleted file name>

03
Commands for managing file changes

Display the status of modified files	:	git status
Display a list of ignored files	:	git ls-files –other –ignored –exclude-standard
Display all unstaged changes in the index and the current directory	:	git diff
Display differences between files in staging and the most recent versions	:	git diff –staged
Display changes in a file compared to the most recent commit	:	git diff (file_name)
Recover a deleted file and prepare it for commit	:	git checkout <deleted file name>

Commands for declaring Git commits

- Commit changes along with a custom message : git commit -m "(message)”
- Commit and add all changes to staging : git commit -am "(message)”
- Switch to a commit in the current branch : git checkout <commit>
- Show metadata and content changes of a commit : git show <commit>
- Discard all changes to a commit : git reset –hard <commit>
- Discard all local changes in the directory : git reset –hard Head
- Show the history of changes : git log
- Stash all modified files : git stash
- Retrieve stashed files : git stash pop
- Empty stash : git stash drop
- Define a tag : git tag (tag name)
- Push changes to origin : git push

05
Commands for Git Branching

• Display a list of all branches	:	git branch
• Make a new branch and switch to it	:	git checkout -b <branch name>
• Switch to a branch:	:	git checkout <branch name>
• Delete a branch:	:	git branch -d <branch name>
• Merge a different branch with your active branch	:	git merge <branch name>
• Fetch a branch from the repository	:	git fetch remote <branch name>
• View merge conflicts between branches	:	git diff <source branch> <target branch>
• Preview changes before merging branches:	:	git diff <source branch> <target branch>
• Push all local branches to a remote repository:	:	git push –all