

Assignment Day-1
21.07.2025

Task 1: Initialize a Git Repository " Scenario: You just created a new project folder called PortfolioWebsite. You want to start tracking it with Git

Commands :

```
$ cd PortfolioWebsite
```

```
$ git init
```

Task 2: Create a New Branch for Feature Development " Scenario: You're adding a "Contact Us" form to your site. Instead of working on main, you want to isolate changes.

Commands :

```
$ git checkout -b contact-form
```

Task 3: Commit Code with Message " You created the HTML form and want to save it with a descriptive message

Commands :

```
$ git status
```

```
$ git add .
```

```
$ git add index.html
```

```
$ git commit -m "Add Contact Us form to index.html"
```

Task 4: Pull Before Push to Avoid Conflicts " You and your teammate are working on the same branch. Before pushing, you want to ensure you have the latest code.

Commands :

```
$ git checkout contact-form
```

```
$ git pull origin contact-form
```

```
$ git push origin contact-form
```

Task 5: Resolve Merge Conflicts and Push " Scenario: After pulling, you hit a conflict in style.css that you and your teammate edited. You fix it manually.

Commands :

```
$ git add Style.css
```

```
$ git commit -m "Resolve merge conflict in style.css"
```

```
$ git push origin contact-form
```

Everything up-to-date

Task 6: Initializing and Committing a Project Scenario-Based Question: You've just created a project directory and a couple of files. What Git commands would you use to start tracking the project and save your initial version?

Commands :

```
$ cd newproject
```

```
$ git init
```

```
$ git checkout -b main-form
```

Switched to a new branch 'main-form'

```
$ git add .
```

```
$ git commit -m "Initial commit"
```

Task 7: Connecting Local Repository to GitHub Scenario-Based Question: You've completed your local project setup and want to upload it to a new GitHub repository. Which Git commands will you use to connect the remote and push the changes?

Commands :

```
$ git remote add origin https://github.com/spoorthib008/HTML.git
```

```
$ git push -b origin main
```

Task 8: Creating and Switching to a New Feature Branch Scenario-Based Question: Your team lead has asked you to develop a new login feature without disturbing the main code. What Git commands should you use to create and switch to a new branch?

Commands :

\$ git status

\$ git checkout -b login-feature

Task 9: Temporarily Saving Work in Progress Scenario-Based Question: You were working on a new feature but suddenly need to switch branches to fix a bug. How do you temporarily save your work without committing?

Commands :

\$ git stash

\$ git checkout bugfix-branch

\$ git checkout your-feature-branch

\$ git stash pop

Task 10: Merging Feature Branch into Main Branch Scenario-Based Question: You completed a feature in a separate branch and now need to combine it with the main branch after verifying the changes. Which Git commands will help you inspect and perform this merge

Commands :

\$ git checkout main

\$ git pull origin main

\$ git merge login-feature

\$ git push origin main