

Assignment 1

Java FSD - Angular

Initialize a New Git Repository

1. Question: How do you initialize a new Git repository in the current directory?

Ans. To initialize a new Git repository in the current directory, you can use the following command:

git init

Run the git init command to initialize a new Git repository

Clone a Repository

2. Question: How do you clone a repository from GitHub using the URL <https://github.com/user/repo.git>?

Ans. To clone a repository from GitHub using the provided URL, you can use the git clone command in your terminal or command prompt.

git clone <https://github.com/user/repo.git>

After running these commands, you will have a local copy of the repository on your machine.

Check the Status of the Repository

3.Question: What command do you use to check the current status of the working directory and staging area?

Ans. To check the current status of the working directory and the staging area in Git, you use the git status command. This command provides information about the current branch

git status

Add a File to the Staging Area

4.: How do you add a file named index.html to the staging area?

Ans.To add a file named index.html to the staging area in Git, you use the git add command.

git add index.html

Commit Changes

5.Write the command to commit changes with the message "Initial commit"?

Ans. To commit changes with the message "Initial commit" in Git, you use the git commit command followed by the -m option to include your commit message.

Here is the command:

git commit -m "Initial commit"

Create a New Branch

6.How do you create a new branch named feature-branch?

Ans.To create a new branch named feature-branch in Git, you use the git branch command or the git checkout -b command.

git checkout feature-branch

or

git checkout -b feature-branch

Switch to Another Branch

7.Write the command to switch to the branch feature-branch?

Ans.To switch to the branch named feature-branch in Git, you use the git checkout command or the git switch command.

git switch feature-branch

Merge Branches

8.Question: How do you merge the branch feature-branch into the current branch?

Ans.To merge the branch feature-branch into the current branch in Git, you use the git merge command.

git merge feature-branch

View Commit History

9.Question: What command do you use to view the commit history?

Ans.To view the commit history in Git, you use the git log command.

git log

Fetch Updates from Remote Repository

10.Question: How do you fetch updates from the remote repository without merging them?

Ans.To fetch updates from the remote repository without merging them into your current branch, you use the git fetch command.

git fetch

Push Changes to Remote Repository

11.Question: Write the command to push changes to the remote repository named origin on the branch main.

Ans.To push changes to the remote repository named origin on the branch main, you use the git push command.

git push origin main

Revert a Commit

12.Question: How do you revert a commit with the hash a1b2c3d?

Ans.To revert a commit with the hash a1b2c3d, you use the git revert command.
git revert a1b2c3d

Create and Apply a Stash

13.Question: How do you create a stash and then apply it later?

Ans. To create a stash and then apply it later in Git, you use the git stash command to save your current changes, and git stash apply to apply the stashed changes.

Create a stash
git stash

Optionally, create a stash with a message
git stash save "work in progress"

List all stashes (optional)
git stash list

Apply the most recent stash
git stash apply

Optionally, apply a specific stash
git stash apply stash@{0}

List All Branches

14.Question: What command lists all branches in the repository?

Ans.To list all branches in a Git repository, you use the git branch command
git branch

Delete a Branch

15.Question: How do you delete the branch old-feature?

Ans.To delete a branch named old-feature in Git, you can use the git branch -d command.

git branch -d old-feature

Check the Differences Between Two Commits

16.Question: How do you check the differences between two commits with hashes a1b2c3d and d4e5f6g?

Ans.To check the differences between two commits with hashes a1b2c3d and d4e5f6g in Git, you use the git diff command.

git diff a1b2c3d d4e5f6g

Create an Annotated Tag

17.Question: How do you create an annotated tag named v1.0 with the message "First release"?

Ans.To create an annotated tag named v1.0 with the message "First release" in Git, you use the git tag command with the -a option and the -m option to provide a message.

```
git tag -a v1.0 -m "First release"
```

List Tags

18.Question: What command lists all tags in the repository?

Ans.To list all tags in a Git repository, you use the git tag command.

```
git tag
```

Configure Git Username and Email

19.Question: How do you set the global username to "JohnDoe" and email to "johndoe@example.com"?

Ans.To set the global username and email in Git to "JohnDoe" and "johndoe@example.com" respectively, you use the git config command with the --global flag.

```
git config --global user.name "JohnDoe"
```

```
git config --global user.email "johndoe@example.com"
```

Remove a File from the Staging Area

20.Question: How do you remove a file named test.txt from the staging area without deleting it from the working directory?

Ans.To remove a file named test.txt from the staging area (index) in Git without deleting it from the working directory, you use the git reset command.

```
git reset test.txt
```

View Changes in the Working Directory

21.Question: What command shows changes in the working directory since the last commit?

Ans.To see the changes in the working directory since the last commit in Git, you use the git diff command.

```
git diff HEAD
```

Create a New Remote Repository

22.Question: How do you add a new remote repository named upstream with the URL https://github.com/user/repo.git?

Ans.To add a new remote repository named upstream with the URL https://github.com/user/repo.git in Git, you use the git remote add command.

```
git remote add upstream https://github.com/user/repo.git
```

Rename a Branch

23.Question: How do you rename the current branch to new-branch-name?

Ans.To rename the current branch to new-branch-name in Git.

git branch -m new-branch-name

Show the Commit History in a Compact Format

24.Question: Write the command to show the commit history in a compact format with one line per commit.

Ans.To show the commit history in a compact format with one line per commit in Git, you can use the git log command with the --oneline option.

git log --oneline

Amend the Last Commit

25.Question: How do you amend the last commit with a new message "Updated commit"?

Ans.To amend the last commit with a new commit message ("Updated commit") in Git, you can use the git commit --amend command.

git commit --amend -m "Updated commit"