Assignment

Q1 How to check if git is available on your system?

→ 1. Open a Terminal or Command Prompt:

- On Windows :- Press 'win+R', Type Cmd & press Enter

2. Check Git Version

In the terminal or Command Prompt type the following Command.

```
git --version
```

If Git is installed, you will see output similar too.

```
giv version 2.33.0.
```

If Git is not installed you might see an error message.

Q2 How to initialize new git Repository?

→ 1. Nevigate to your Project Directory.
Open a terminal or Command prompt & Nevigate to directory where you want to Create.

2. Initialize the Repository.

once you are in the desired directory. Run the following Command to initialize new Git repository.

```
git init
```

- This Comman initialize an empty repository in your Current directory.

Q.3 How to tell git about your name & email?

→ You need to to Configure ~~your~~ user info. Git uses this information to identify the author of Commit you make ~~its~~ in a repository.

1. Global Configuration
open a terminal & run following Commands, replacing your name & Email.

```
git Config --global user.name "your name"
git Config --global user.email "your email"
```

- These Commands set your name & email globally

Q.4) How to add a file to the staging area?
→ You use the 'git add' Command. The staging area is where you prepare your change before Committing them to repository.

1. Navigate to your Repository.
Open a terminal or Command prompt & navigate to the director of your Git Repository 'cd' Command.

2. Ad a file to Staging
use 'git add' Command followed by filename to add specific file to stagging.
ex:-

```
git add myfile.txt
```

you can use a 'wildcard '.', to add all changes in current direatory to staging area.

```
git add
```

Q.5 How to remove a file from staging Area?
→

You can use 'git reset' Command.
1. Navigate to your Repository.

2. Remove file from Staging
use 'git reset' Command followed by filename to remove specific file from staging Area.
ex.

```
git reset myfile.txt
```

Q.6) How to make Commit?
→ Create a Commit

You can create a commit usit 'git Commit' Command Replace "your commit massage" with meaningful git description

git Commit -m "your Commit message here"

For example
git Commit -m "Add new feature"

7. How to send your changes to remote repository
→ You typically use the 'git push' Command.

1. Push your changes:
use 'git push' Commad followed by remote name. (usually 'origin' the default remote name) and the branch name
git push origin main

2. Enter Credentials (if required)

5. Verify changes on Remote

If you're pushing to remote repository for first time. You might need to set up remote URL 'git remote add'.

git remote add origin <remote-repository-url>

Q.8) What is the difference between clone & pull.
→ Both 'git clone' & 'git pull' are Git Commands used for interacting with remote repository

1. git clone:
- The 'git clone' Command is used to create a copy of remote repository on your local

machine. its typically use when you want to Starkin on a project from Scratch or when you want to make local Copy of a repository that you Wahht to Contribute to or Collarate

git clone <resitory-url>

2. git pull
The 'git pull' Command is used to update your local repository with latest changes from remote repository. it fetches changes made by others & integrates them into your current branch.

git pull <remote-name> <branch-name>