How to check if git is available on your system?

- Open your terminal or command prompt.
- Type the command
- git –version
- If Git is installed, this command will display the version of Git installed on your system. If it's not installed, you'll get an error message.

How to initialize a new Git repository?

- Navigate to the directory where you want to create a new Git repository using the terminal or command prompt.
- Run the command

    git init

    This command will create a new subdirectory named `.git` that contains all of your necessary repository files.

How to tell git about your name and email?

- You need to configure your Git settings to set your name and email. Use the following commands:

git config --global user.name "Your Name"

git config --global user.email "your.email@example.com"

This sets your global Git username and email address. You can also set these configurations per repository by omitting the `--global` flag and running the commands inside a specific repository.

How to add a file to the staging area?

- Use the `git add` command followed by the file name. For example:

    ```
    git add filename
    ```

- To add all files in the current directory to the staging area, use:

    ```
    git add .
    ```

How to remove a file from the staging area?

- Use the `git reset` command followed by the file name. For example:

    ```
    git reset filename
    ```

- This will unstage the file but leave its working directory changes intact.

How to make a commit?

- o Use the `git commit` command with a message describing your changes. For example:

  ```
  git commit -m "Your commit message"
  ```

How to send your changes to a remote repository?

- o First, ensure you have a remote repository configured. You can add a remote repository using:

  ```
  git remote add origin
  https://github.com/username/repository.git
  ```

- o Then, to push your changes to the remote repository, use:

  ```
  git push origin branch_name
  ```

- o Replace `branch_name` with the name of the branch you want to push to, typically `main` or `master`.

What is the difference between clone and pull?

- o **`git clone`**:
  - This command is used to create a copy of an existing repository from a remote source to your local machine.
  - It downloads the entire repository, including all files, commit history, branches, and tags.
  - Syntax:

    ```
    git clone https://github.com/username/repository.git
    ```

- o **`git pull`**:
  - This command is used to fetch changes from a remote repository and merge them into your current branch.
  - It updates your local repository with the latest changes from the remote repository.
  - Syntax:

    ```
    git pull origin branch_name
    ```