1.How to check if Git is available on your system?

- To check if Git is available on our system, open a terminal or command prompt and type the following command:

```
git --version
```

- If Git is installed, this command will display the installed Git version. If Git is not installed, you might see an error message or a prompt to install Git.

2.How to initialize a new Git repository?

- To initialize a new Git repository:
  - Open a terminal or command prompt.
  - Navigate to your project directory using `cd`.
  - Type `git init` and press Enter.
  - Optionally, create a `.gitignore` file to specify files Git should ignore.
  - If we have files to commit initially, use `git add .` and `git commit -m "Initial commit."`
  - Now, our Git repository is initialized in the project directory.

3.How to tell Git your name and email?

- Open a terminal or command prompt.
- Set your name:

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

- Set your email:

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

4.How to add a file to the staging area?

- In a simple way, to add a file to the staging area in Git:
    - Open a terminal or command prompt.
    - Navigate to our project directory using `cd`.
    - Type:

      ```
      git add filename
      ```

    - Press Enter.
    - Now, the file is added to the staging area and ready to be included in the next commit.

5.How to remove a file from the staging area?

- Open a terminal or command prompt.
- Navigate to our project directory using `cd`.
- Type:

  ```
  git reset filename
  ```

- Replace "filename" with the actual name of the file we want to remove from the staging area.
- Press Enter.

6.How to make a commit?

- Open a terminal or command prompt.
- Navigate to our project directory using `cd`.
- Add the changes you want to commit to the staging area:

  git add.

  This stages all changes. If you only want to commit specific files, replace
. with the file names.

- Commit the changes:
- `git commit -m "Your commit message here"`

7 . How to send your changes to a remote repository ?

=>To send changes to a remote repository in Git:

Open a terminal or command prompt.

Ensure we have committed our changes using git commit.

Use the following command to push our changes:

git push

- If it's our first push to a branch, we might need to use:

git push -u origin <branch_name>

- Replace <branch_name> with the name of our branch.

8.What is the difference between clone and pull?

=>Clone: Used to copy an entire repository, including its entire version history, to your local machine. Typically done when you're setting up a new project or collaborating for the first time.

git clone <repository_url>

- Pull: Used to fetch and integrate changes from a remote repository into our local repository. Updates our local copy with the latest changes made by others.

git pull

clone is for getting an entire repository, while pull is for getting the latest changes from a remote repository into our existing local repository.