#### **CLONE GIT USING GITHUB:**

To clone a Git repository using GitHub, follow these steps:

## **Prerequisites**

- **Git Installed**: Ensure Git is installed on your computer. Use git -- version in the terminal to verify.
- **GitHub Account**: You need access to the GitHub repository you want to clone.

### **Steps**

- 1. Get the Repository URL:
  - o Go to the repository page on GitHub.
  - Click the green Code button and copy the URL (HTTPS, SSH, or GitHub CLI).
- 2. Open Terminal/Command Prompt:
  - Navigate to the directory where you want the repository to be cloned. Use cd /path/to/your/directory.
- 3. Clone the Repository: Run the following command:

```
bash
Copy code
git clone <repository url>
```

Replace <repository\_url> with the URL you copied. For example:

```
bash
Copy code
git clone https://github.com/username/repository.git
```

4. **Navigate to the Cloned Repository**: Once cloning is complete, move into the repository directory:

```
bash
Copy code
cd repository
```

5. **Verify**: To ensure everything is set up correctly, check the repository status:

```
bash
Copy code
git status
```

You now have a local copy of the GitHub repository!

Here's how to create a new branch, implement changes, push to a forked repository, and submit a pull request on GitHub.

#### 1. Create a New Branch for the Feature

• Navigate to the repository:

```
bash
Copy code
cd repository
```

• Create and switch to a new branch:

```
bash
Copy code
git checkout -b new-feature-branch
```

Replace new-feature-branch with a descriptive name for the feature.

### 2. Implement Changes

- Edit files to implement the feature using your preferred editor.
- After making changes, stage the modified files:

```
bash
Copy code
git add .

(You can also add specific files, e.g., git add file_name.)
```

• Commit the changes:

```
bash
Copy code
git commit -m "Add feature description"
```

## 3. Push Changes to the Forked Repository

• Push the branch to your forked repository:

```
bash
Copy code
git push origin new-feature-branch
```

# 4. Submit a Pull Request (PR)

- Go to your GitHub repository in a browser.
- GitHub will detect the new branch and suggest creating a pull request. Alternatively:
  - 1. Navigate to the original repository where you forked from.
  - 2. Click Pull Requests  $\rightarrow$  New Pull Request.
  - 3. Select your fork and the new-feature-branch as the source, and the original repository's main branch (or the target branch) as the base.
- Add details about the feature in the pull request description.
- Submit the pull request.