To start using Git in **Ubuntu**, follow these steps:

Step 1: Install Git

Open a terminal (`Ctrl + Alt + T`) and run:

```sh
sudo apt update
sudo apt install git -y
```

To verify the installation:

```sh
git --version
```

This should output the installed Git version.

Step 2: Configure Git

Set up your username and email (used for commit history):

```sh
git config --global user.name "Your Name"
git config --global user.email "your.email@example.com"
```

To check your configurations:

```
git config --list
```

Step 3: Create a Git Repository

Navigate to the project directory:

```
cd /path/to/your/project
```

1.

Initialize a new Git repository:

```
git init
```

   2.

Add a file and commit it:

```sh
touch README.md
git add README.md
git commit -m "Initial commit"
```

   3.

Step 4: Connect to GitHub (Optional)

If you want to push your repository to GitHub:

Generate an SSH key (if not already set up):

```sh
ssh-keygen -t rsa -b 4096 -C "your.email@example.com"
```
Then, copy your public key:

```sh
cat ~/.ssh/id_rsa.pub
```

   1.   Add this key to your **GitHub Account → Settings → SSH and GPG keys**.

Link your local repository to GitHub:

```sh
git remote add origin git@github.com:your-username/your-repository.git
git branch -M main
git push -u origin main
```

   2.

Now Git is ready to use on Ubuntu! Let me know if you need help with anything specific. 🚀

Steps to Add SSH Key to GitHub

Get the Public Key
Run the following command in your terminal:

```sh
cat ~/.ssh/id_rsa.pub
```

It should output something like:

```css
ssh-rsa AAAAB3NzaC1yc2EAAAABIwAAAQEA7...your_key_here...
shreyanshjain955@gmail.com
```

1.
2. **Copy the Entire Output**

    ○ Select everything starting from `ssh-rsa` to your email.

    ○ **Right-click → Copy** or use `Ctrl + Shift + C`.

3. **Add the Key to GitHub**

    ○ **Go to GitHub → Settings → SSH and GPG keys**

    ○ Click **New SSH Key**

    ○ **Title**: Any name (e.g., "Ubuntu Laptop")

    ○ **Key Type**: **Authentication Key** (default)

    ○ **Key**: Paste your copied SSH key.

    ○ Click **Add SSH Key**

Test the Connection
Back in the terminal, run:

```sh
CopyEdit
ssh -T git@github.com
```

If successful, you will see:

Vbnet

```
Hi shreyansh-jain! You've successfully authenticated, but GitHub does
not provide shell access.
```

4.

Now you can securely push and pull repositories from GitHub using SSH! 🚀

1. Check Your Current Changes

Run:

sh

```
git status
```

This will show:

- Unstaged changes (modified but not added)

- Uncommitted changes (staged but not committed)

---

2. Choose One of the Following Options

✅ (A) Commit Your Changes (Recommended)

If your changes are important and should be saved:

sh

```
git add .
```

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

git pull --rebase origin main

git push -u origin main
```

📝 **(B) Stash Your Changes (Temporary Save)**

If you want to pull first but keep your local changes for later:

sh

```
git stash

git pull --rebase origin main

git stash pop  # Restore your changes
```