

Devops Practical File

**Submitted in partial fulfilment of the requirements for the award of
the degree of**

BACHELOR OF TECHNOLOGY (Information Technology)

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**GURU NANAK DEV ENGINEERING COLLEGE
LUDHIANA-141006, INDIA**

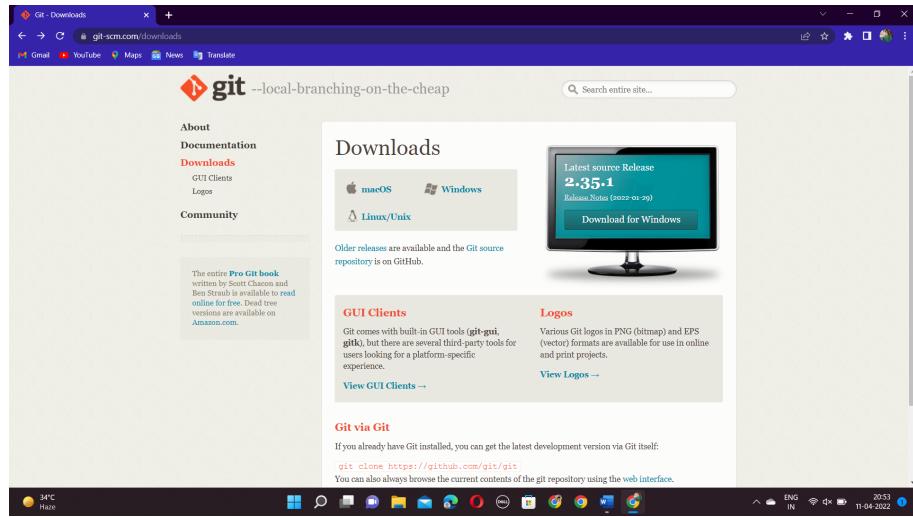
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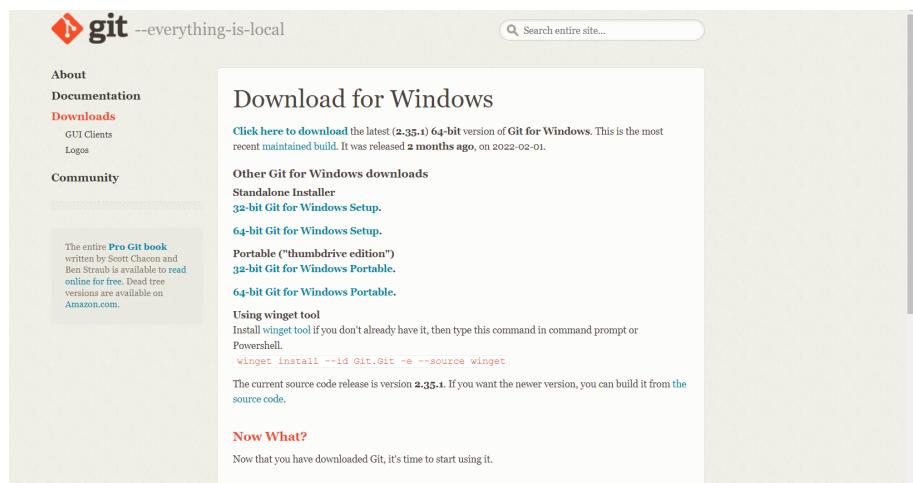
1 Installation of GIT

Steps to install GIT in Windows System:-

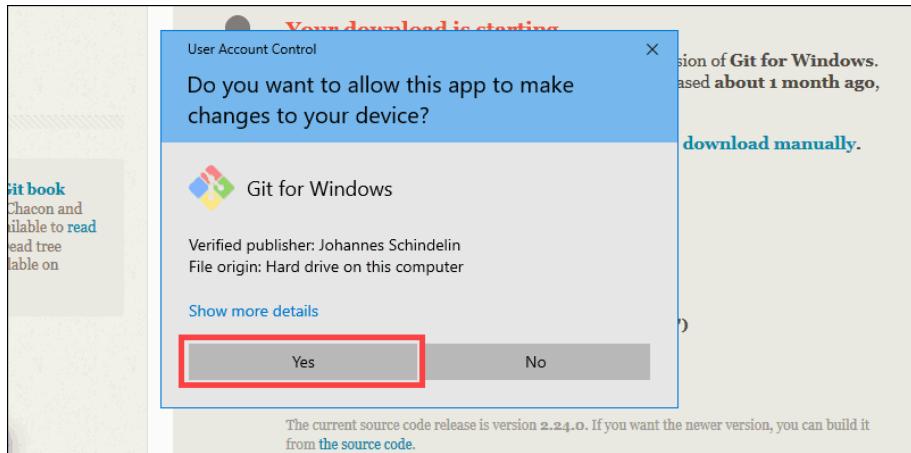
1. Visit <https://git-scm.com/downloads>. Click the download link for Windows and allow the download to complete and download the version according to your system by clicking on the link.



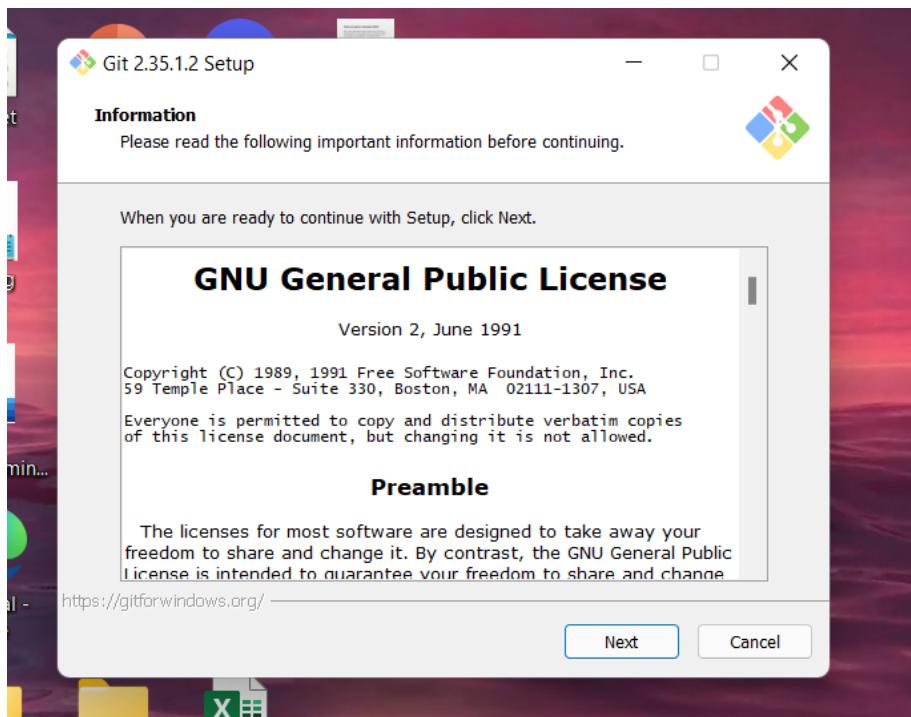
2. Browse to the download location (or use the download shortcut in your browser). Double-click the file to extract and launch the installer.



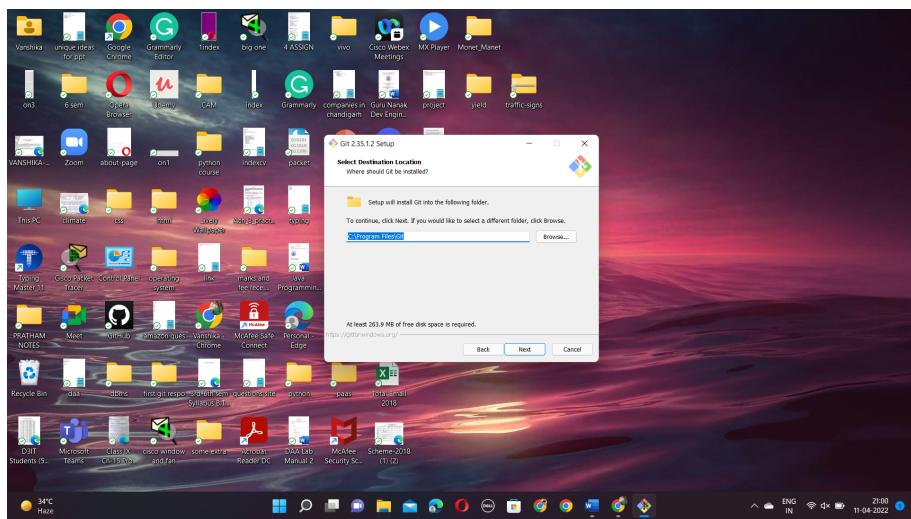
3. Allow the app to make changes to your device by clicking Yes on the User Account Control dialog that opens.



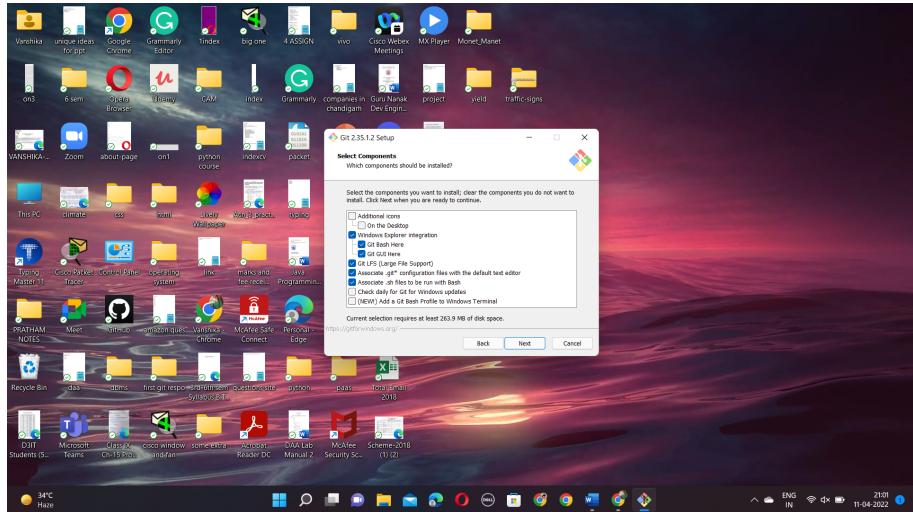
4. Review the GNU General Public License, and when you're ready to install, click Next.



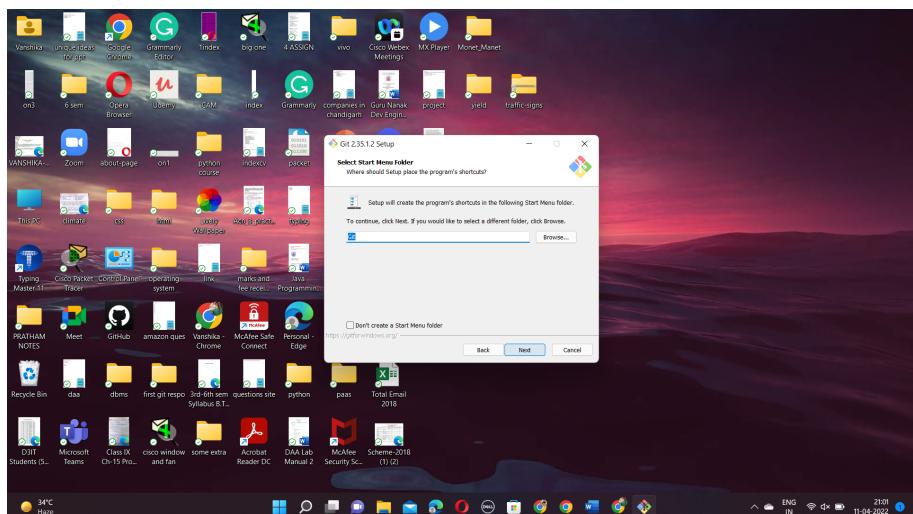
5. The installer will ask you for an installation location. Leave the default, unless you have reason to change it, and click Next.



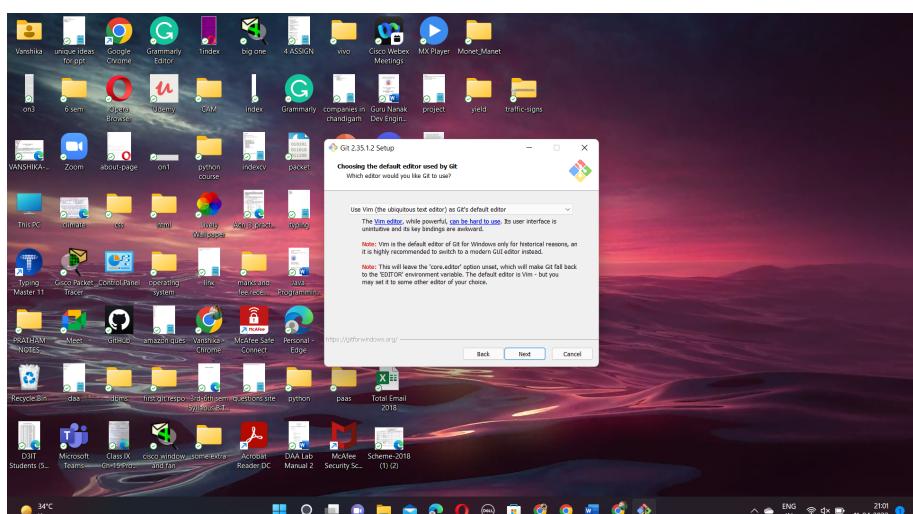
6. A component selection screen will appear. Leave the defaults unless you have a specific need to change them and click Next.



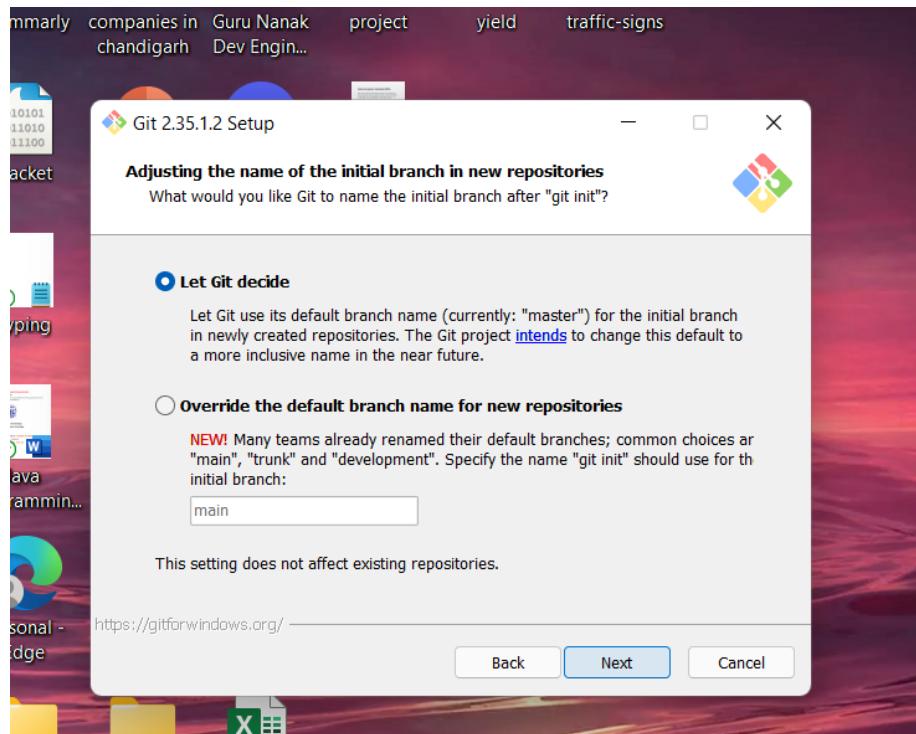
7. The installer will offer to create a start menu folder. Simply click Next.



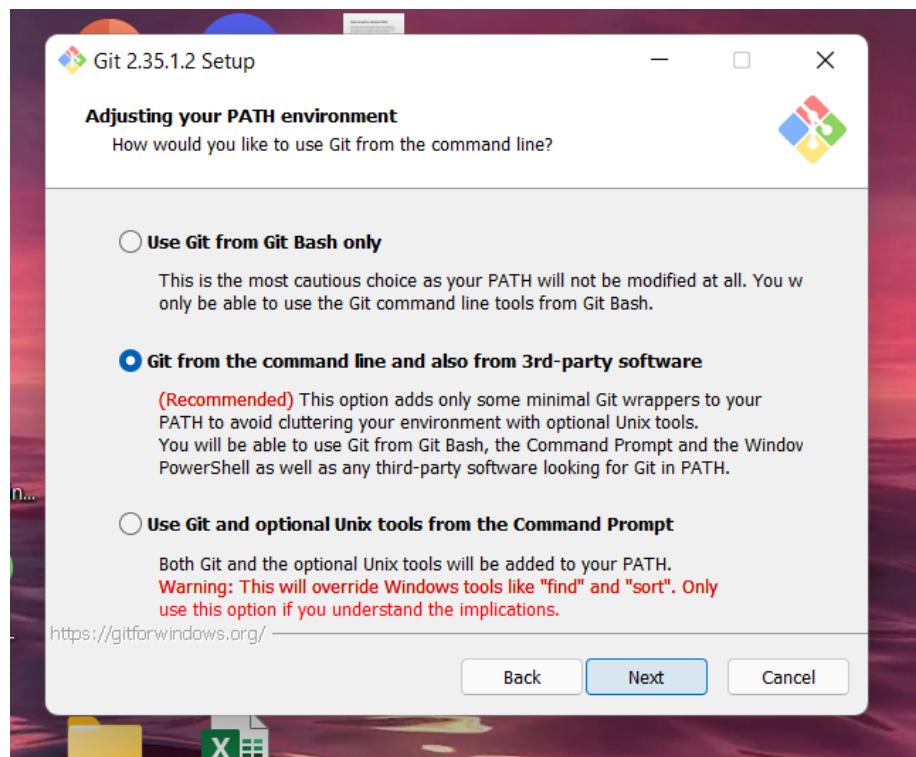
8. Select a text editor you'd like to use with Git. Use the drop-down menu to select Notepad++ (or whichever text editor you prefer) and click Next.



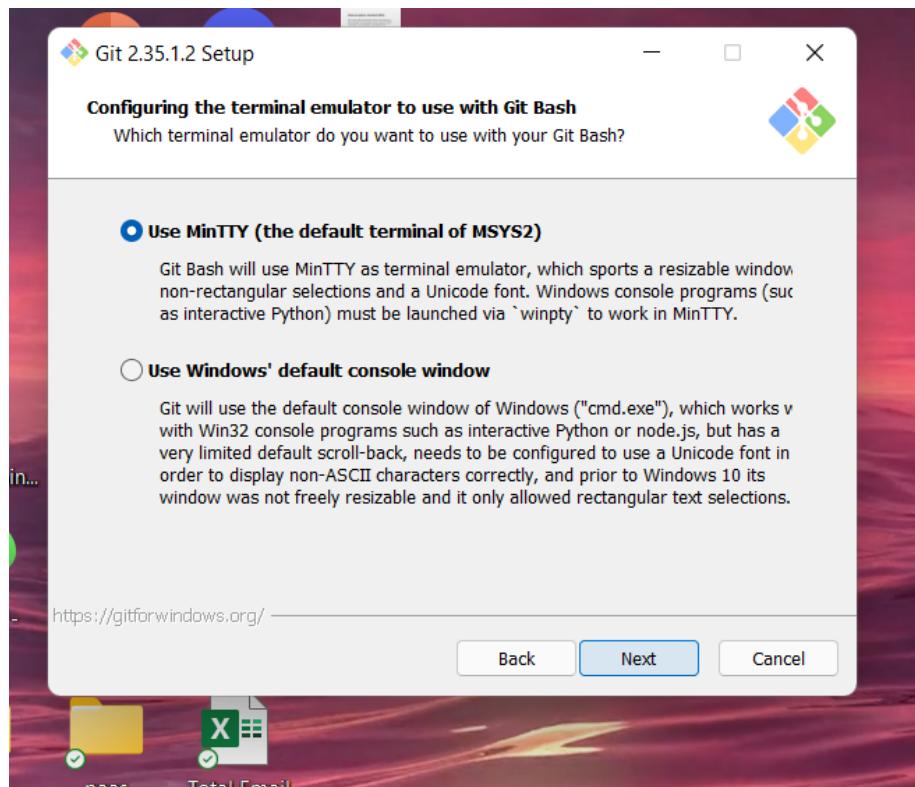
9. The next step allows you to choose a different name for your initial branch. The default is 'master.' Unless you're working in a team that requires a different name, leave the default option and click Next.



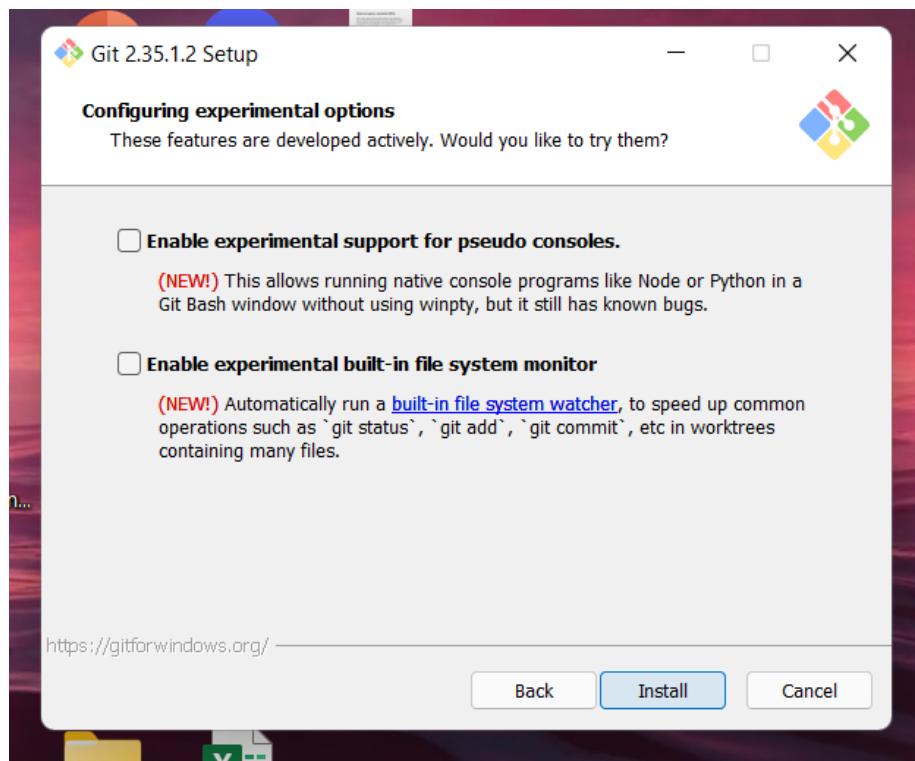
10. This installation step allows you to change the PATH environment. The PATH is the default set of directories included when you run a command from the command line. Leave this on the middle (recommended) selection and click Next.



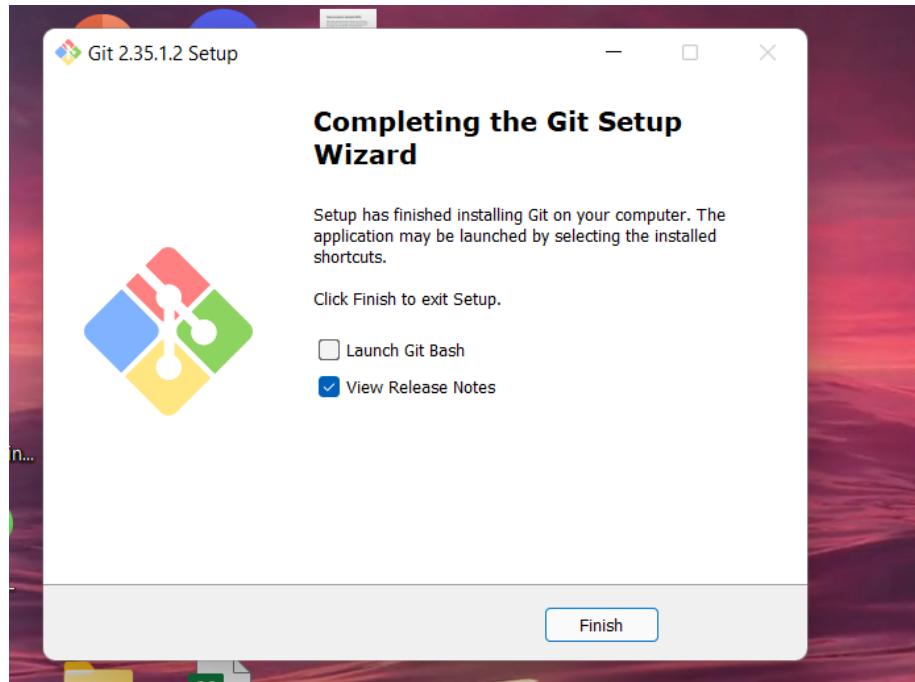
11. Choose the terminal emulator you want to use. The default MinTTY is recommended, for its features. Click Next



12. Depending on the version of Git you're installing, it may offer to install experimental features. At the time this article was written, the options to include support for pseudo controls and a built-in file system monitor were offered. Unless you are feeling adventurous, leave them unchecked and click Install.

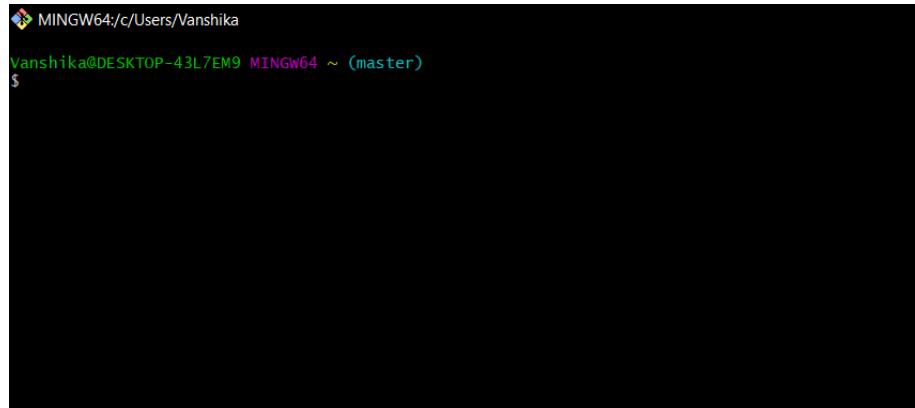


13. Once the installation is complete, tick the boxes to view the Release Notes or Launch Git Bash, then click Finish.



14. Now we have got all we need. Select Launch Git Bash and click on Finish.

This will launch Git Bash on your screen which looks like the snapshot below:



15. Let us proceed with configuring Git with your username and email. In order to do that, type the following commands in your Git Bash:

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

It is important to configure your Git because any commits that you make are associated with your configuration details.

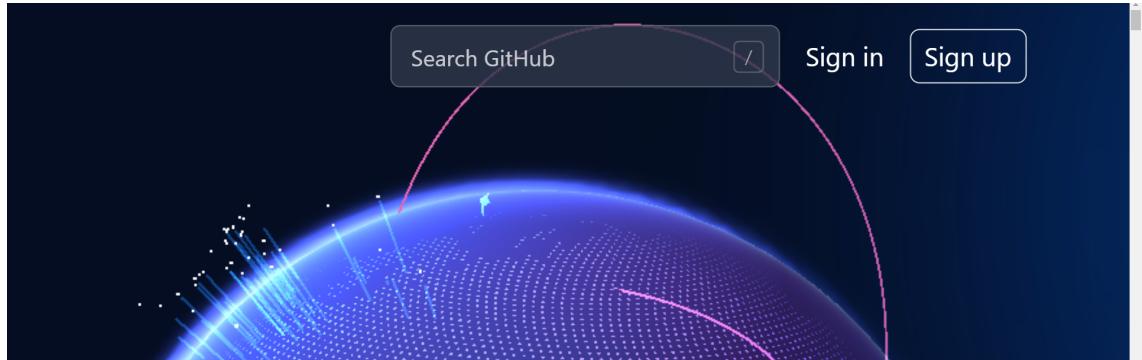
```
MINGW64:/c/Users/Vanshika  
$ Vanshika@DESKTOP-43L7EM9 MINGW64 ~ (master)  
$ git config --global user.name "vanshika"  
$ git config --global user.email "vanshikac360@gmail.com"  
$ |
```

2 Creating account on GITHUB

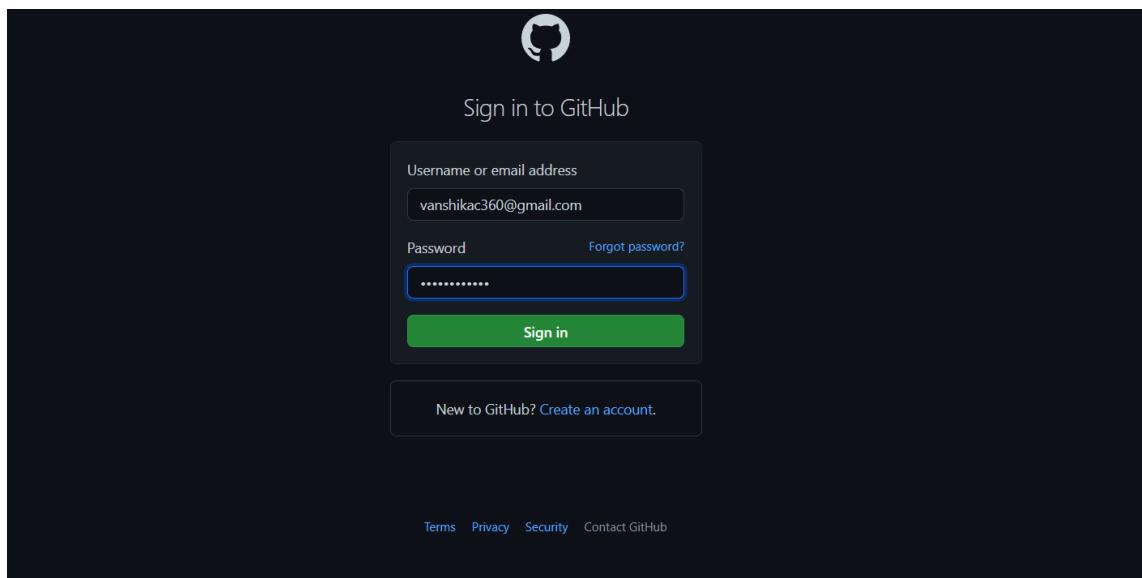
GitHub is a web-based centralized system for repositories. It used by millions of people to work on millions of projects.

Steps for creating account on GitHub:-

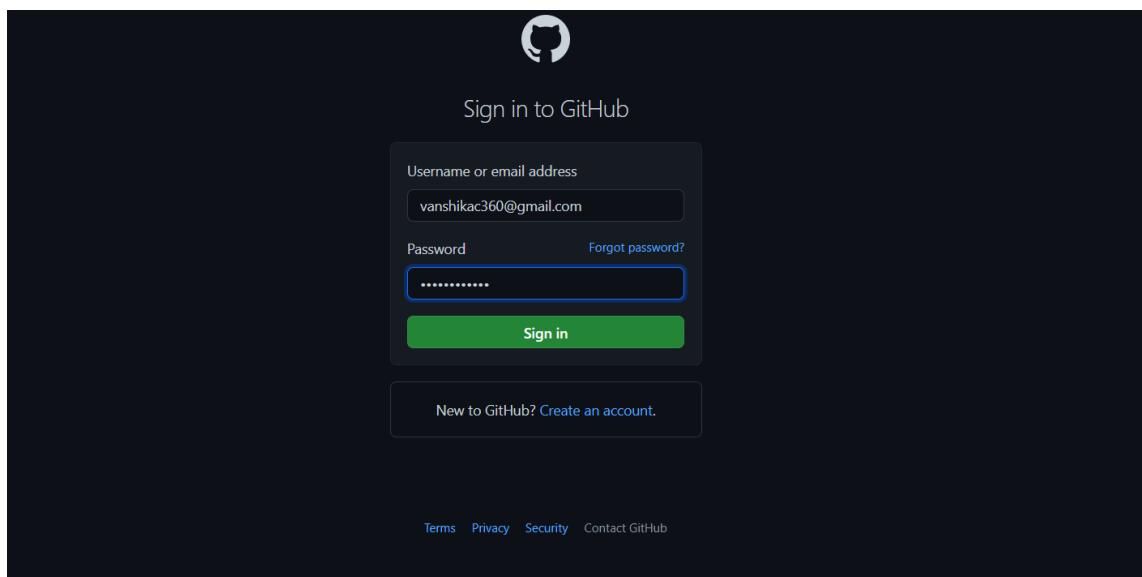
1. Visit official website of GitHub <https://github.com/> and click on Sign Up button.



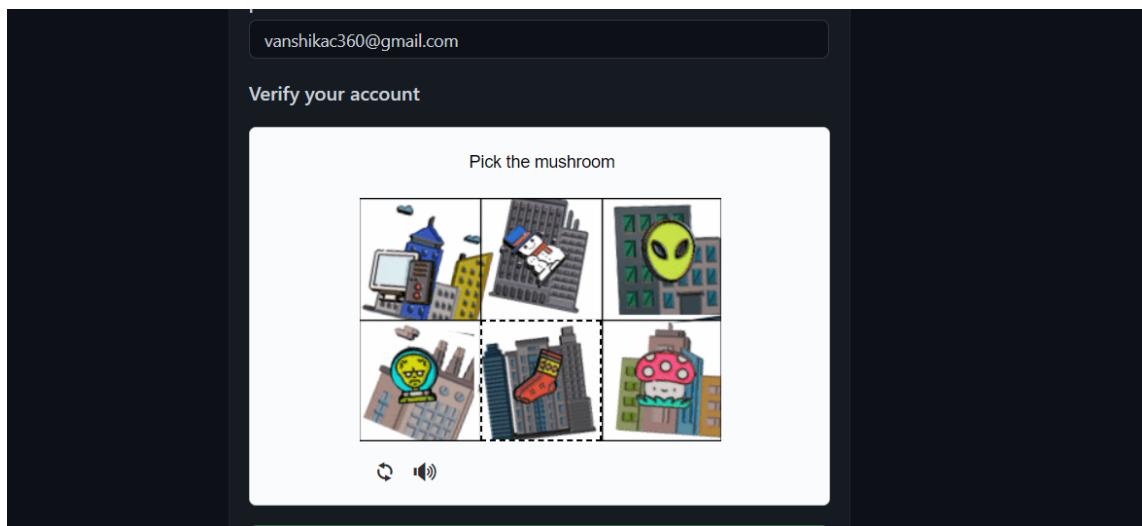
2. Enter your email and password.



3. Then Enter username.



4. Then verify your account . Solve the given puzzle.

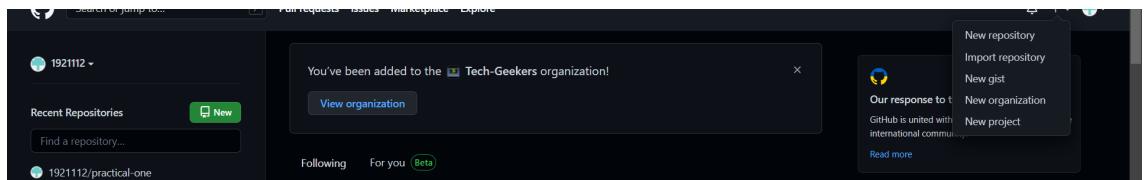


Then after verifying the account by entering code which we get at our email. We will move to GitHub dashboard.

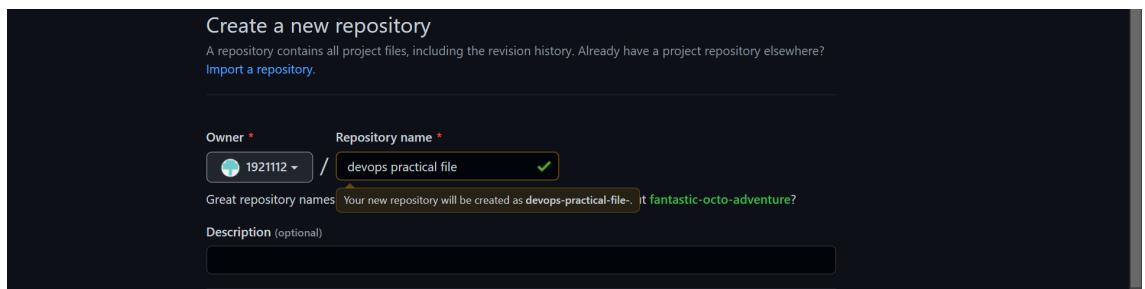
3 Create Repository using GIT/ GITHUB

Steps for creating repository in GitHub:-

1. On the main dashboard, click on Create Repository.

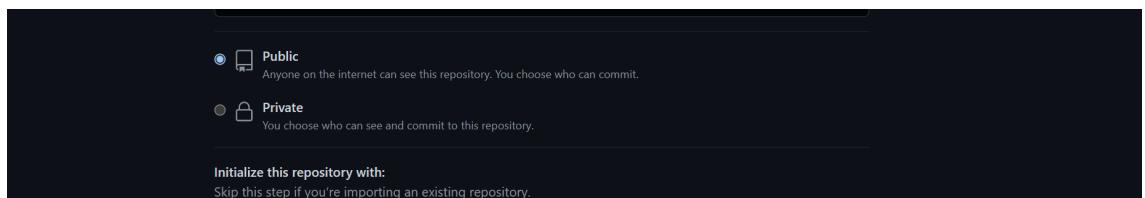


2. Enter repository name.

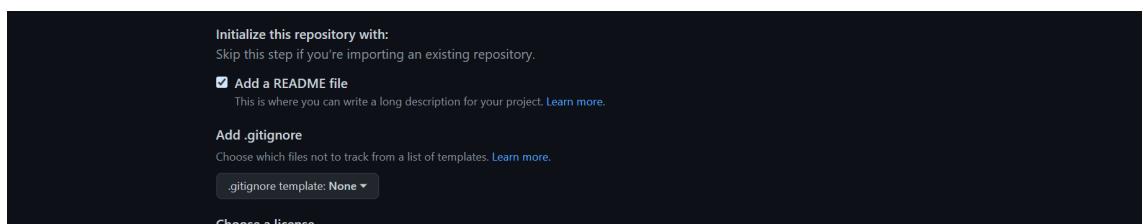


3. Enter the description , but it's optional.

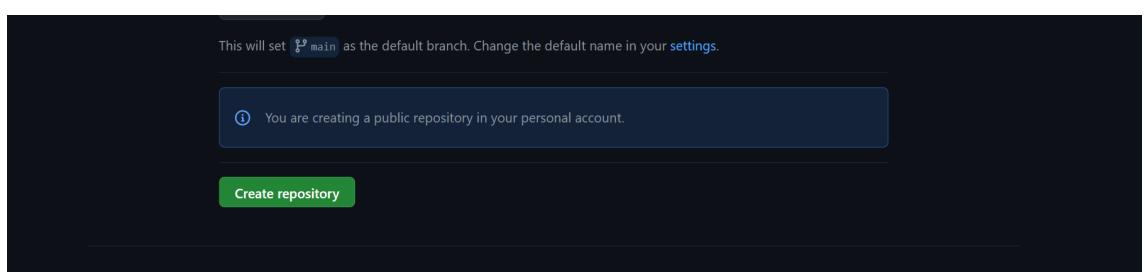
4. We can make our repository public or private.



5. We can add README , .gitignore and license for our repository as per our requirement.



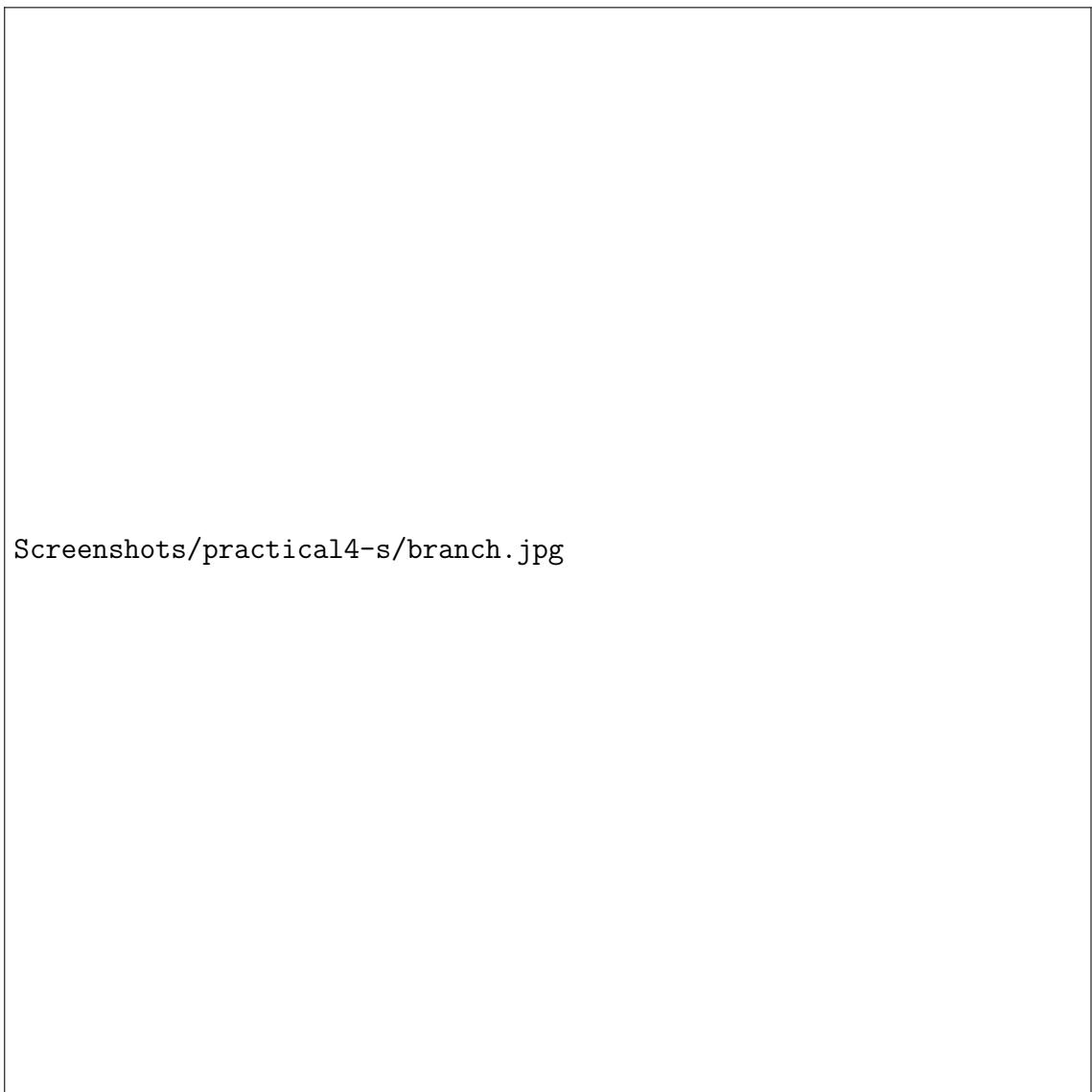
6. Then click on Create Repository button.



4 Create/Delete/Merge Branches

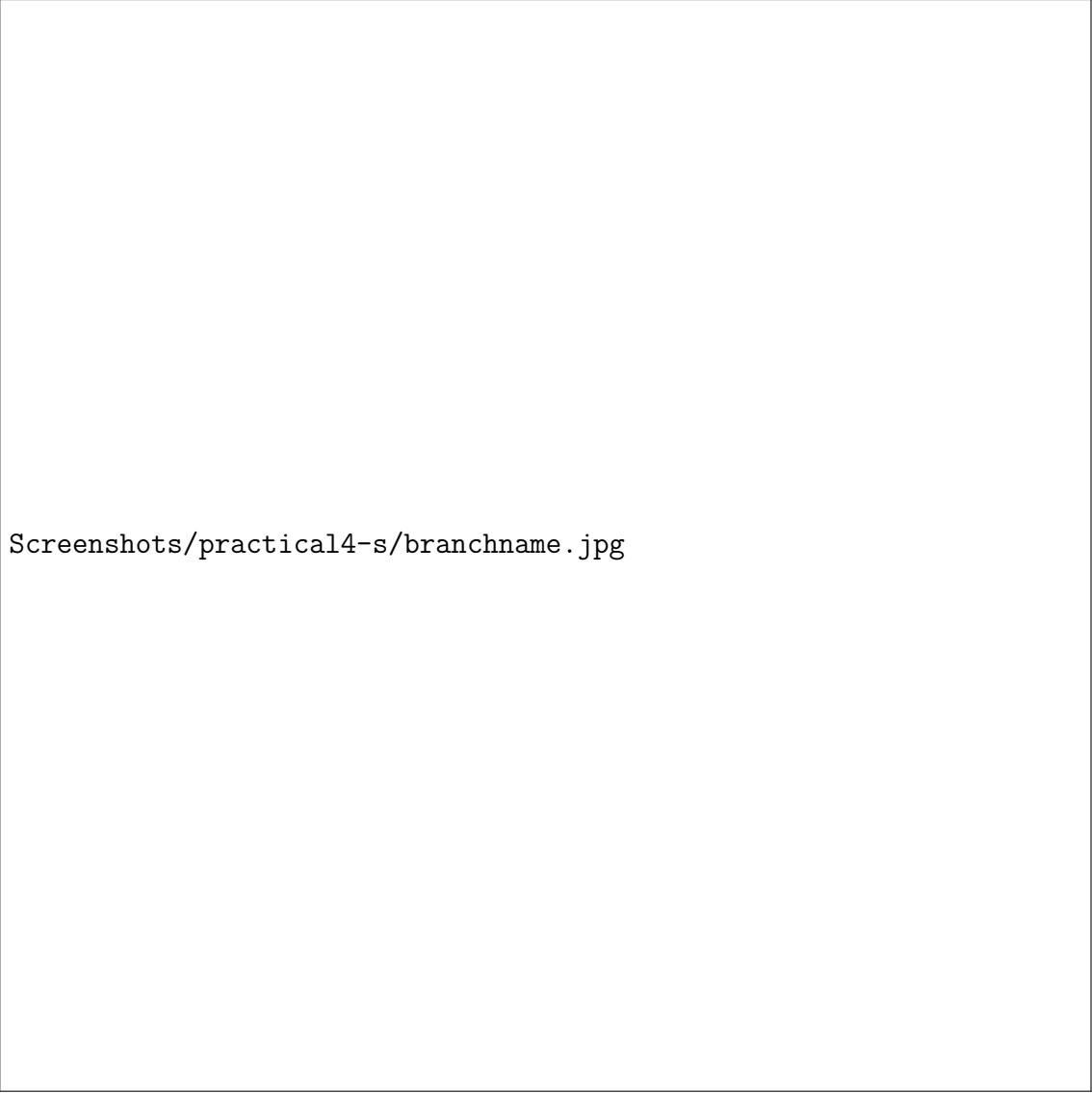
4.1 Creating a branch:-

1. After creating a file or uploading a file from local directory to GitHub, we can create branches for our GitHub repository.



Screenshots/practical4-s/branch.jpg

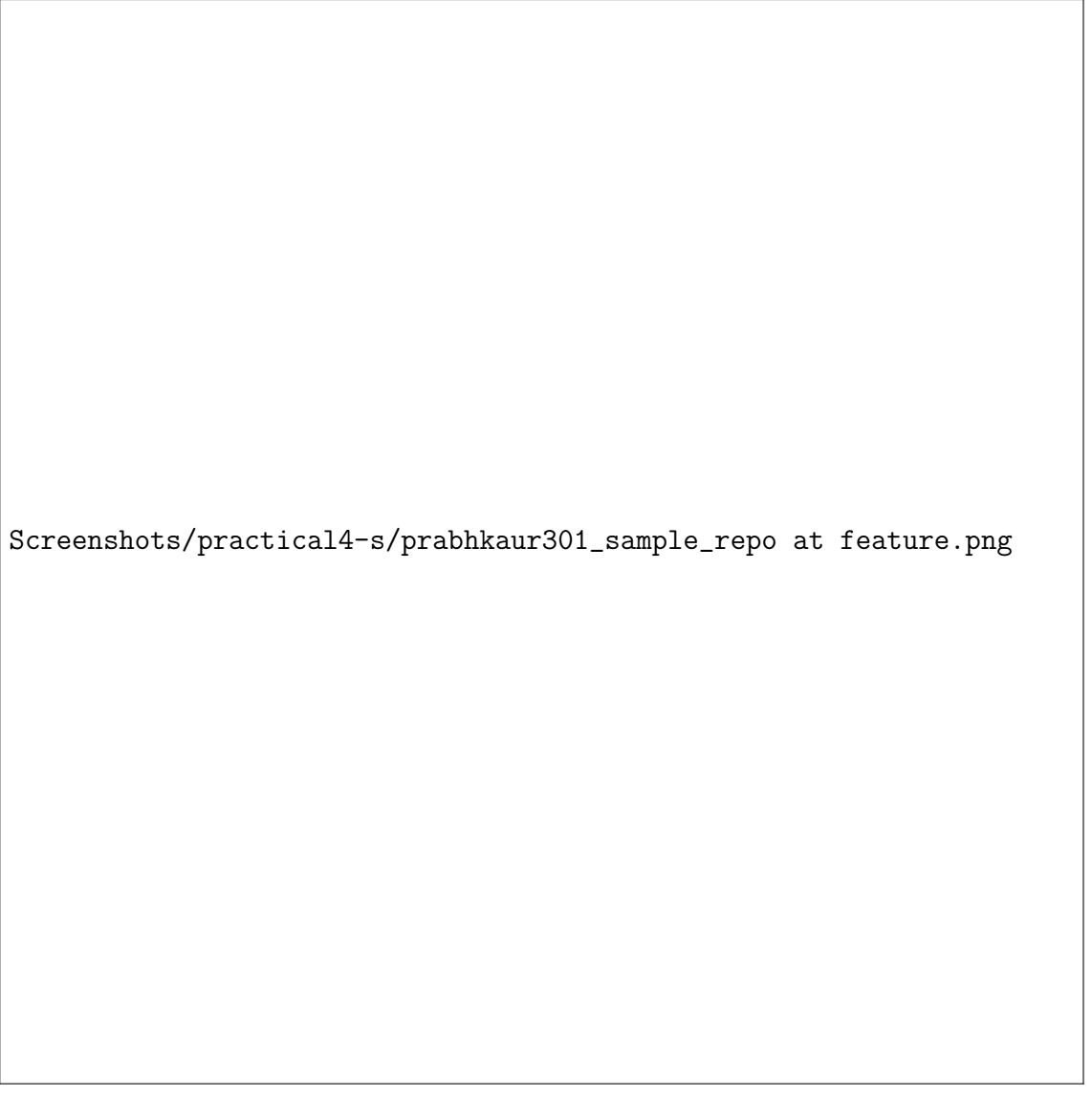
2. After clicking on branch icon, a dialog box will appear. Then add new branch name in the input box and click on Create branch.



Screenshots/practical4-s/branchname.jpg

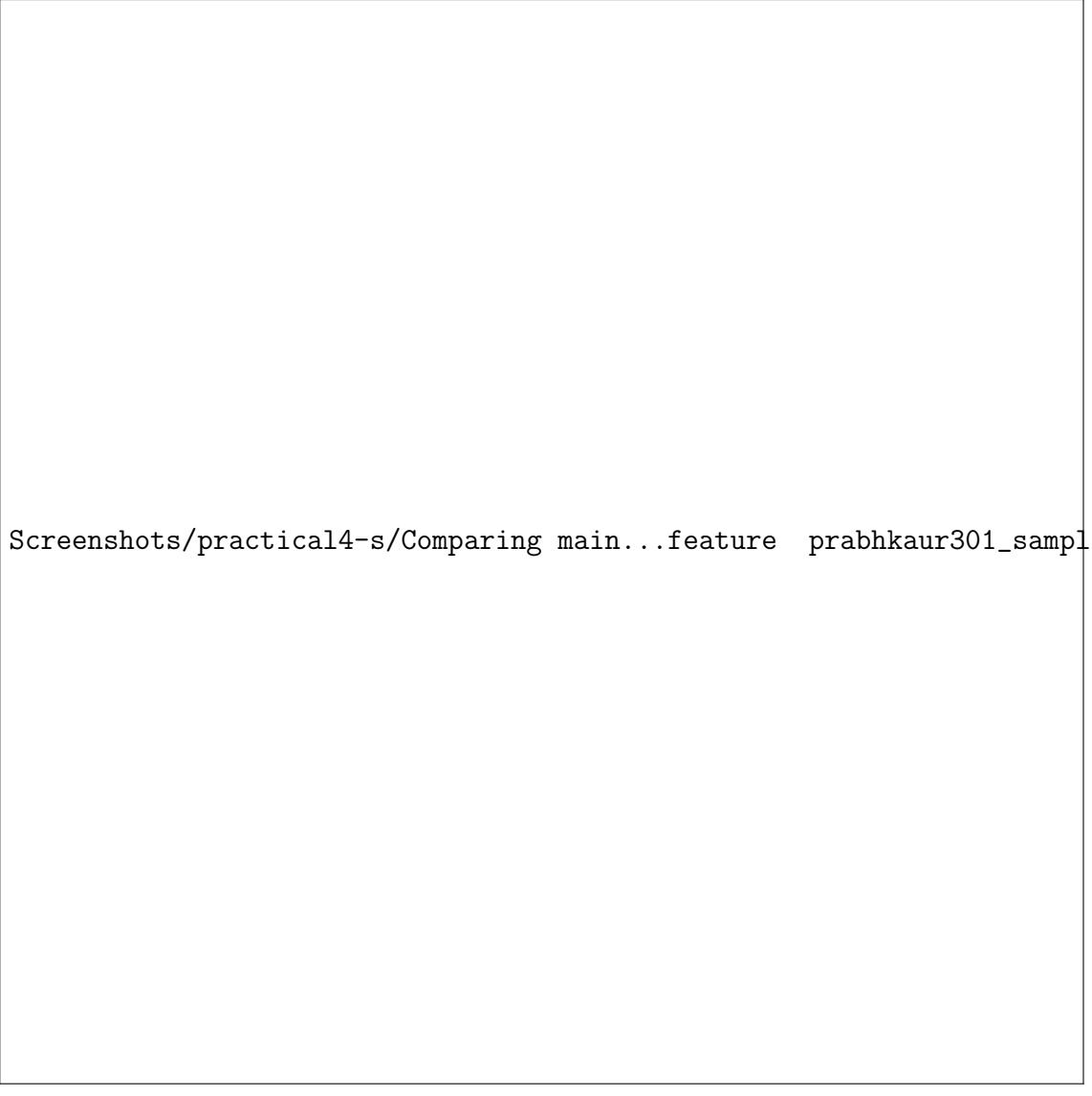
4.2 Merging a branch:-

1. After creating the branch and doing the required commits, we will have an option of creating a pull request on the repository dashboard .



Screenshots/practical4-s/prabhkaur301_sample_repo at feature.png

2. After clicking on this button, we will moved pull request page, where we need to put title for our pull request and description about it.Then click on **Create Pull Request** button.



Screenshots/practical4-s/Comparing main...feature prabhkaur301_sample_repo.png

3. After creating the pull request, the owner of the repository will get option of merging the branch. Merging of branch will be done by owner of repository after reviewing the code changes.



Screenshots/practical4-s/Add files via upload by prabhkaur301 Pull Request #1

4.3 Deleting a branch

- (a) After the merging of branch, the owner or the person who made this branch will get an option of deleting the branch. After clicking on that button, branch can be deleted.

Figure 1: Caption



Screenshots/practical4-s/Add files via upload by prabhkaur301 Pull Request #