

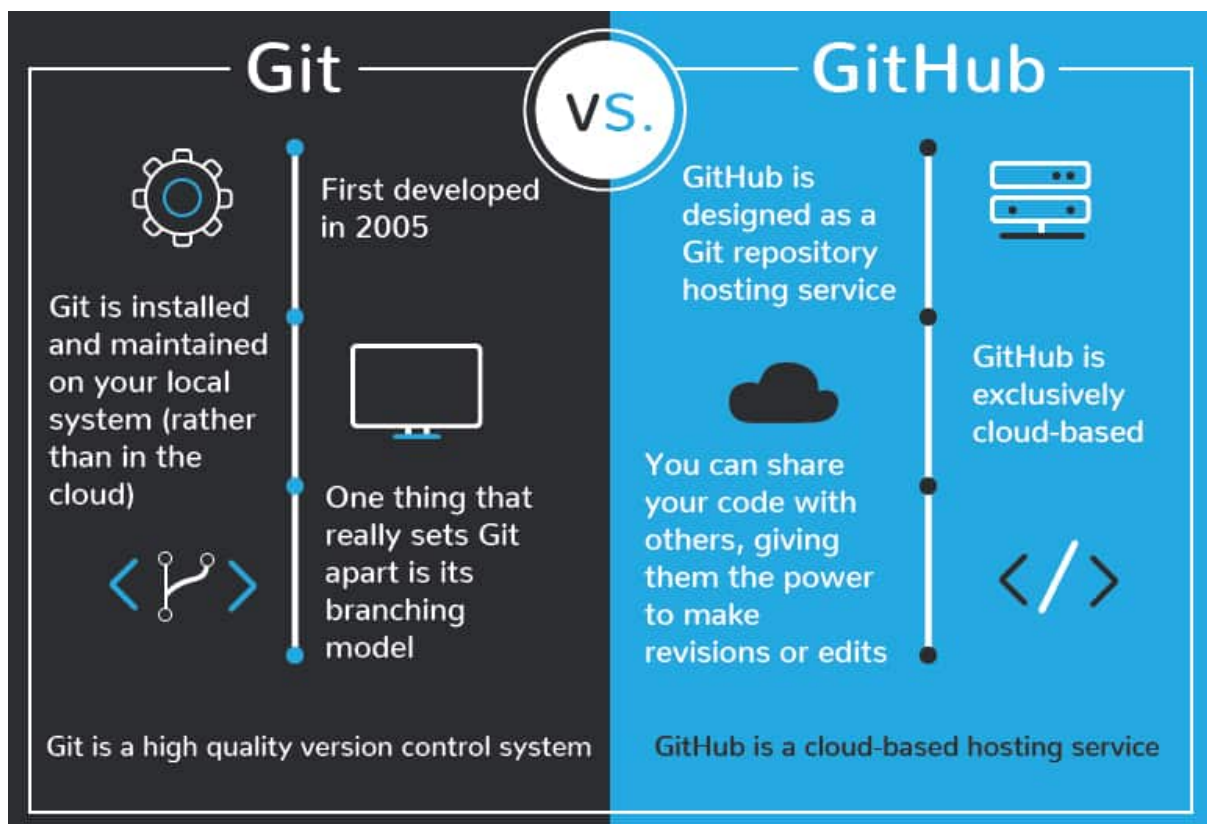
How to install git on Windows

Objective:

At the end of this session, Students should be able to

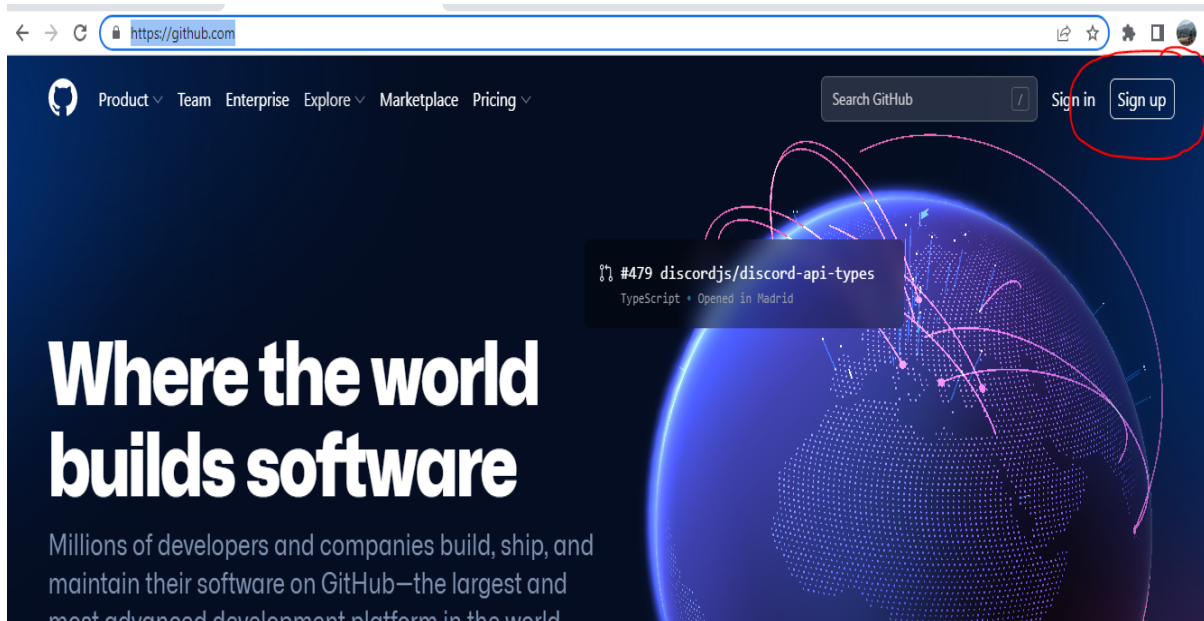
1. Understand the usage of git
2. Create github account and install git locally on Windows
3. Create repository and clone them
4. Familiarize with commands like: clone, add, commit, push, pull

• Usage of git?



Step 1: Create a github account

1. Access the link <https://github.com/>
2. Sign up using your gmail account



3. Enter your mail and click on continue and create a password and click on continue and then give a user name and click on continue, then give yes or no, if you want to receive any product updates and click on continue



Welcome to GitHub!
Let's begin the adventure

Enter your email
✓ vanitha.g@anudip.org

Create a password
→ 

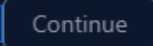


Welcome to GitHub!
Let's begin the adventure

Enter your email
✓ vanitha.g@anudip.org

Create a password
✓

Enter a username
→ Vanitha





Welcome to GitHub!
Let's begin the adventure

Enter your email
✓ vanitha.g@anudip.org

Create a password
✓

Enter a username
✓ Vanitha1986

Would you like to receive product updates and announcements via email?
Type "y" for yes or "n" for no

→ n

Continue

4. Solve the Puzzle to authenticate yourself, click on Start puzzle, once verification is done, click on create account

Verify your account

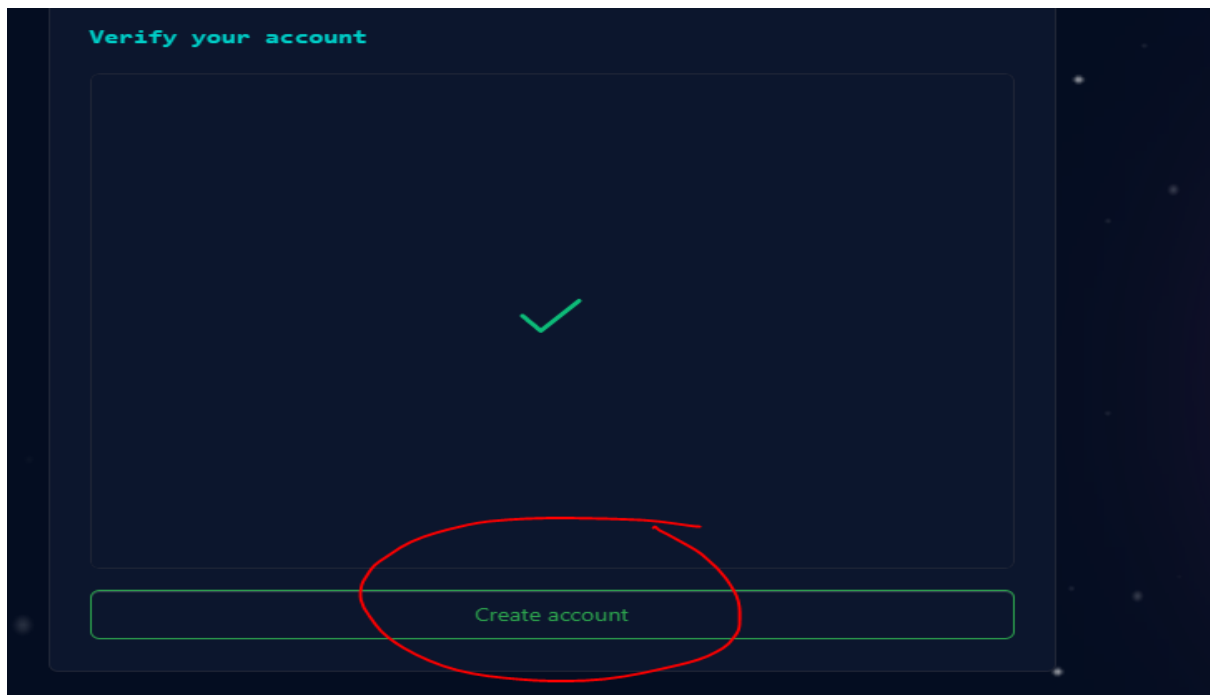
Please solve this puzzle to verify that you are human
Click "Start puzzle" to continue

Start puzzle

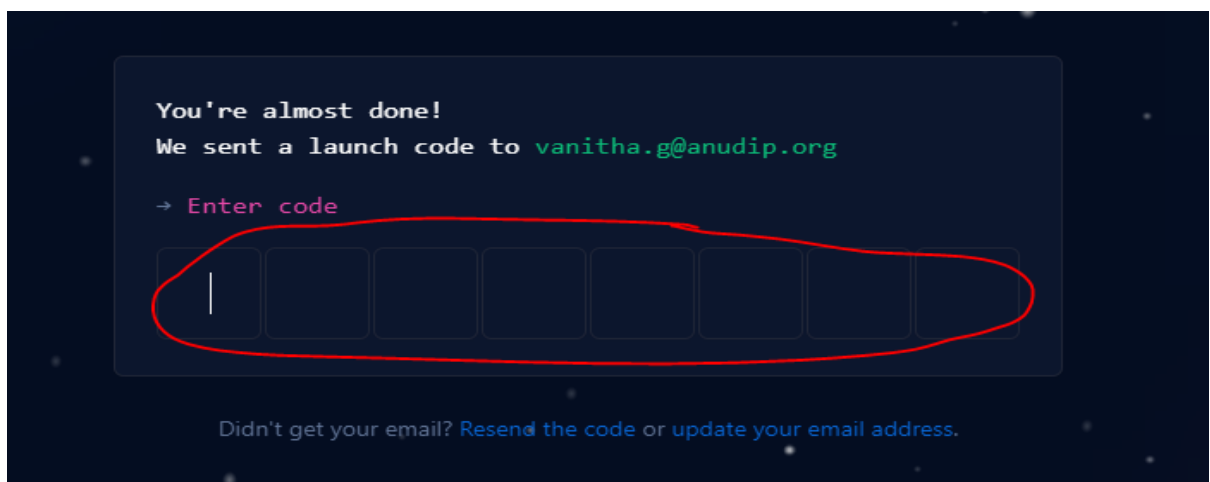
↺

🔊

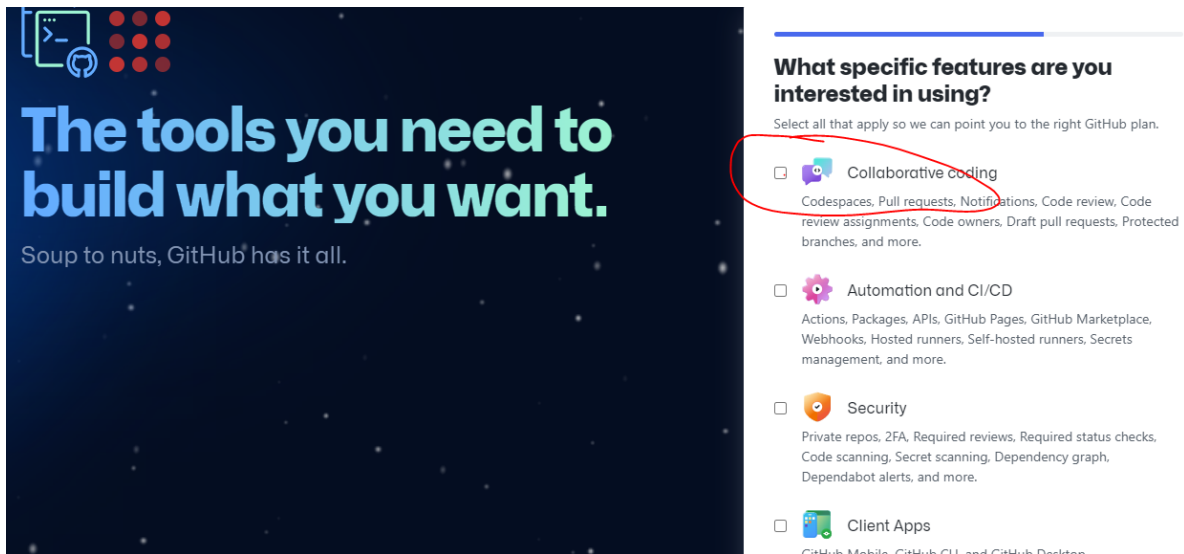
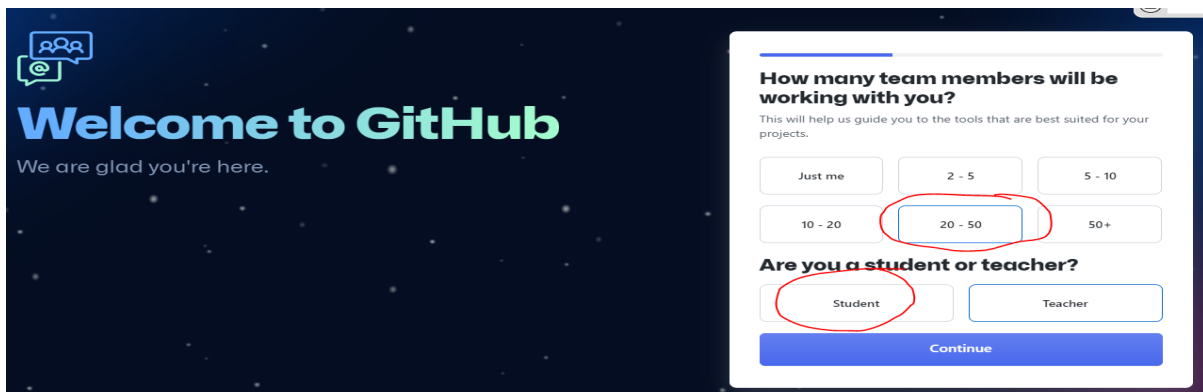




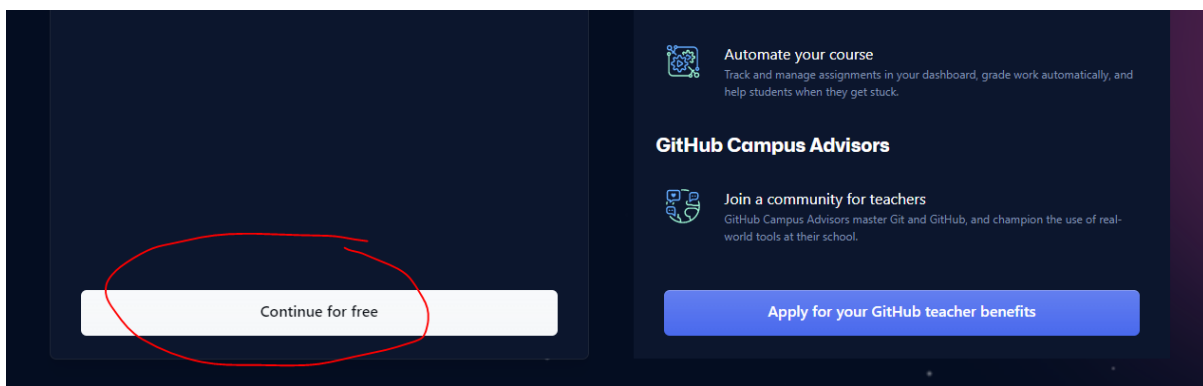
5. Enter the code you have received in your mailing account



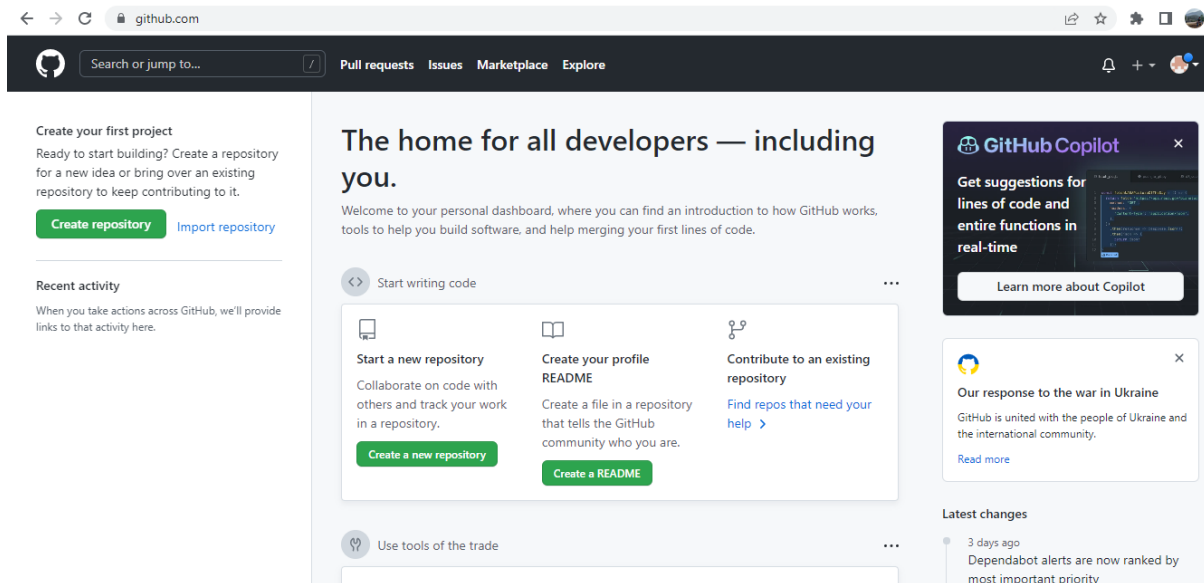
6. Select a student option for yourself, click on continue and select what for it you are using



7. Continue for free



8. Account is created, your dashboard should look like this



Step 2: Creating a repository in Github

1. Click on the + icon and select New repository, give a repository name, let it be public and select the option of add a Readme file and click on create repository option.



Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere?

[Import a repository.](#)

Owner *



Vanitha1986 ▾

Repository name *

/ Core_Java ✓

Great repository names are short and memorable. Need inspiration? How about [congenial-funicular?](#)

Description (optional)



Public

Anyone on the internet can see this repository. You choose who can commit.



Private

You choose who can see and commit to this repository.

Initialize this repository with:

Skip this step if you're importing an existing repository.



Add a README file

This is where you can write a long description for your project. [Learn more.](#)

Add .gitignore

Skip this step if you're importing an existing repository.



Add a README file

This is where you can write a long description for your project. [Learn more.](#)

Add .gitignore

Choose which files not to track from a list of templates. [Learn more.](#)

.gitignore template: None ▾

Choose a license

A license tells others what they can and can't do with your code. [Learn more.](#)

License: None ▾

This will set main as the default branch. Change the default name in your [settings](#).

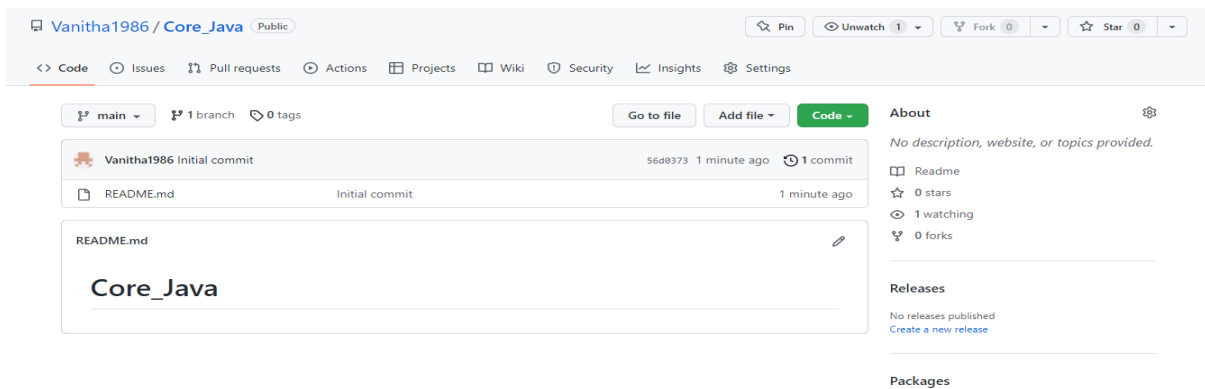
You are creating a public repository in your personal account.

Create repository

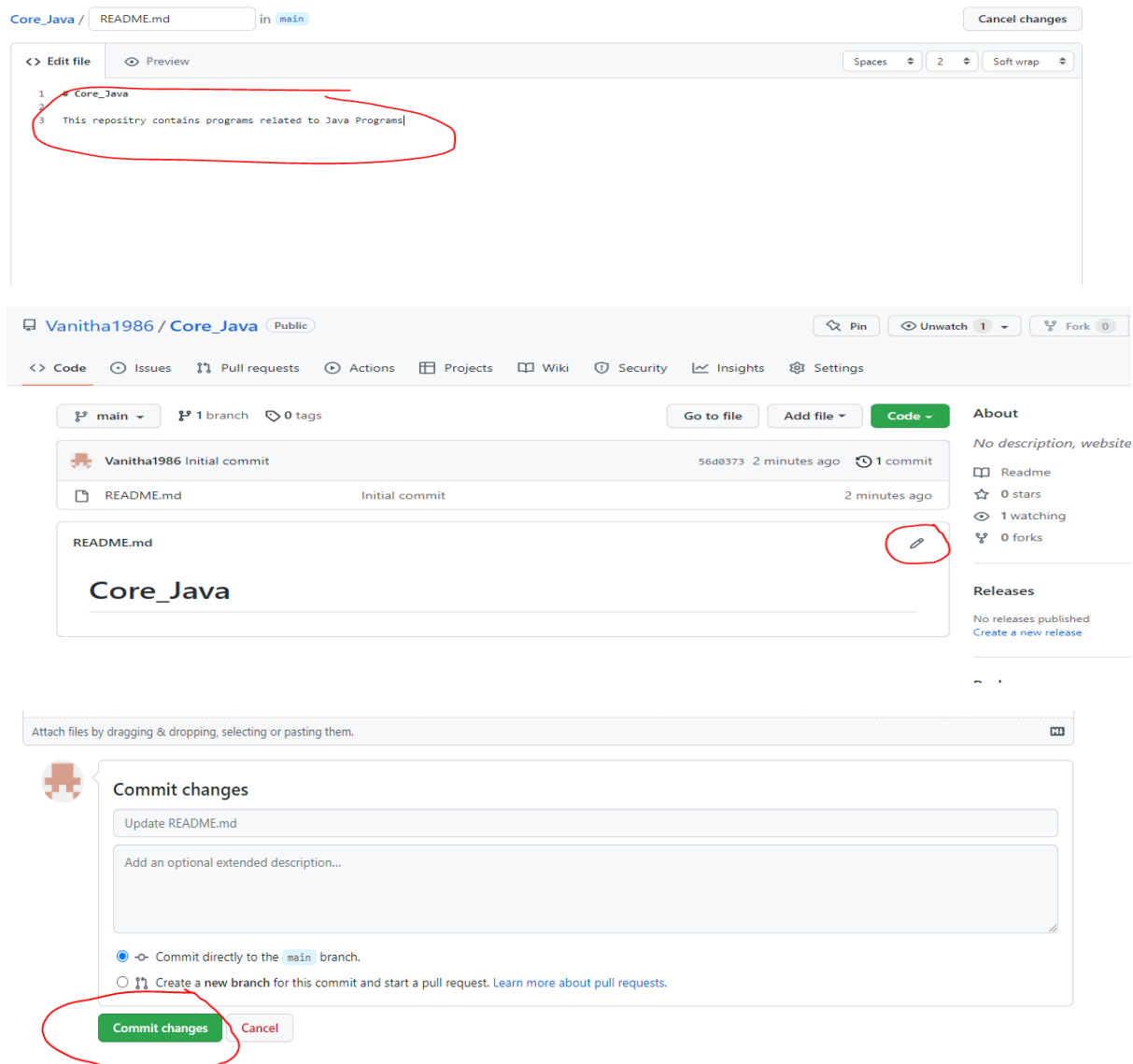


Edit with WPS Office

2. You should be able to see the dashboard as below

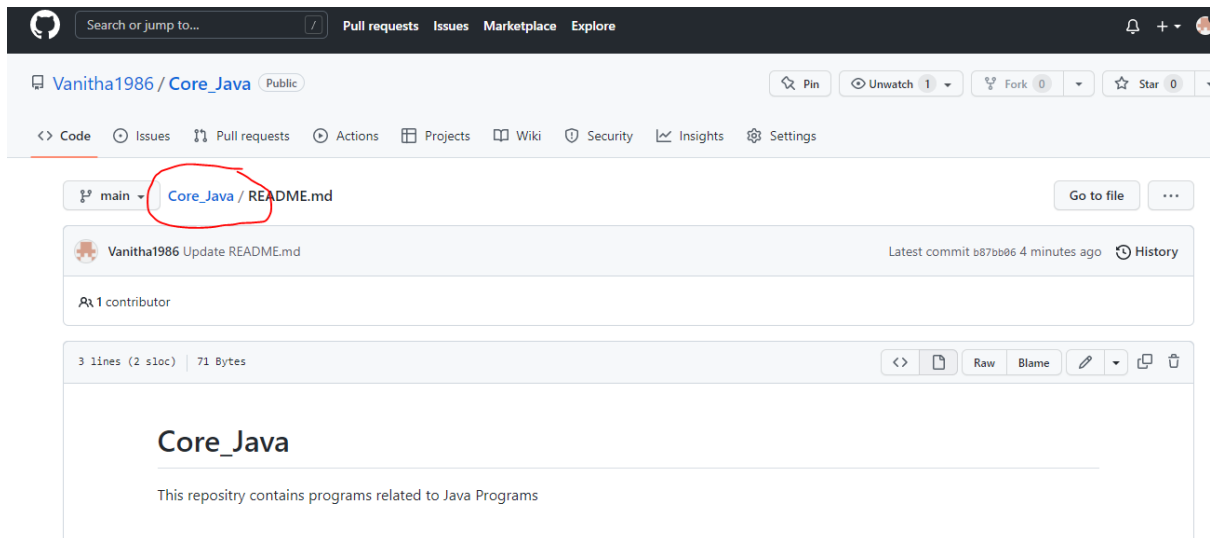


3. Click on the pencil icon and just add few lines of description for the repository, scroll down and click on commit changes

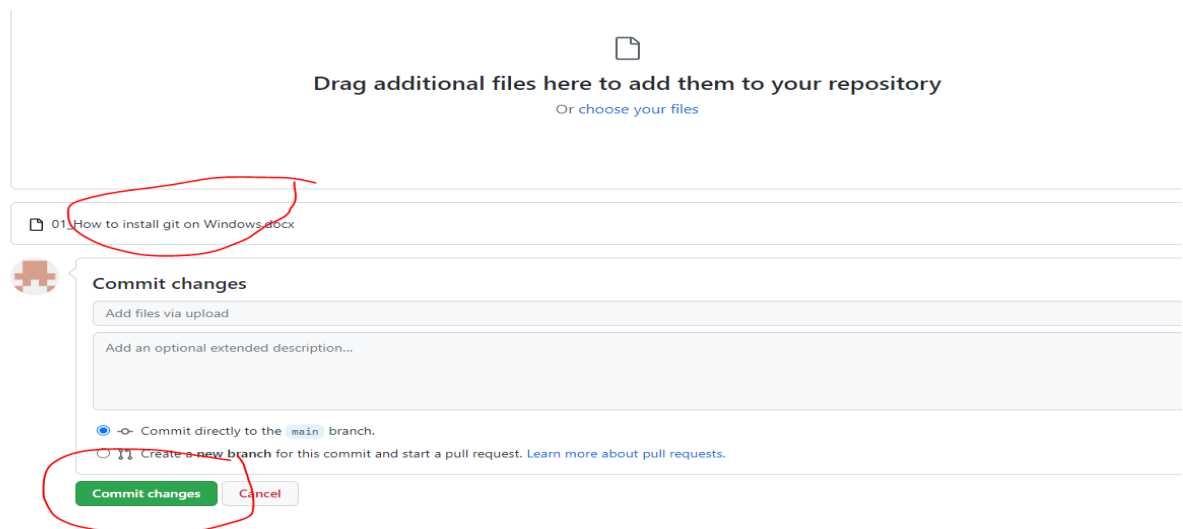


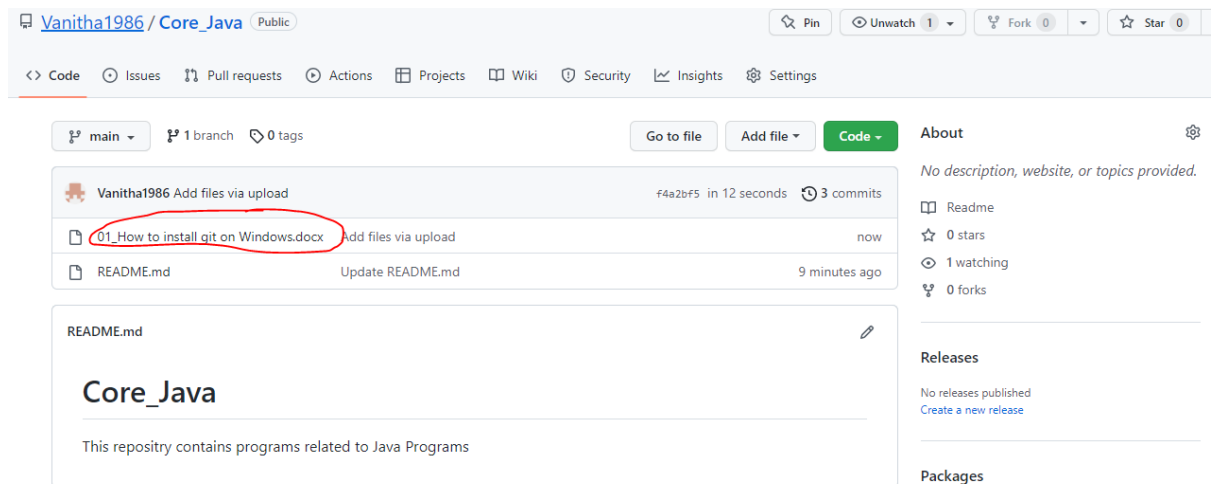
Step 3: Add files to Github account

1. Click on the repository created



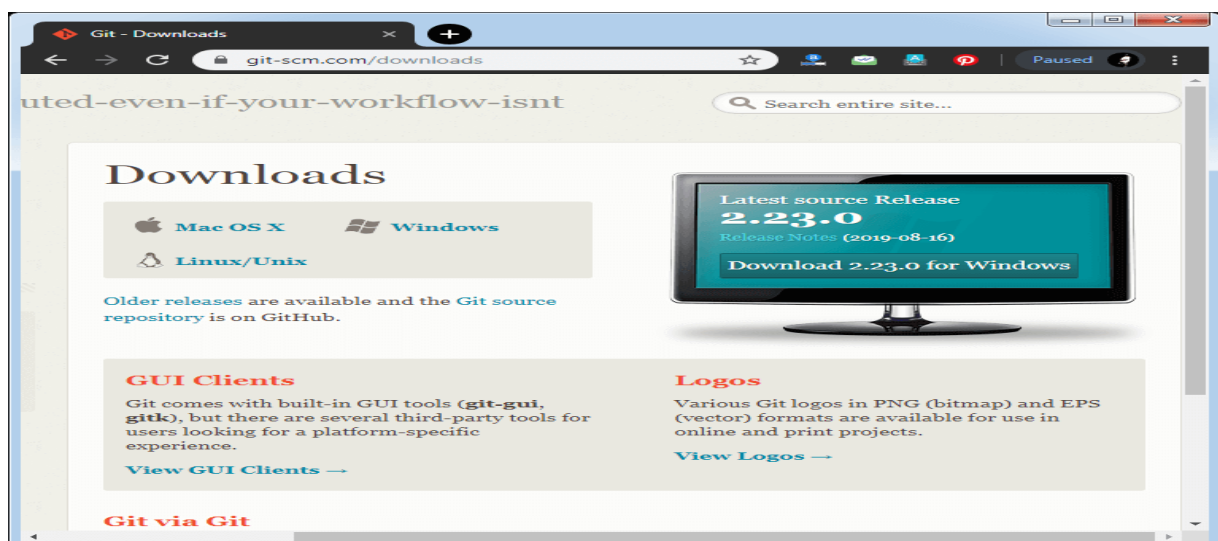
2. Click on add file→Upload file, browse for any of the files from local machine , upload and click on commit changes, then you should be able to see the file you have uploaded





Step 4: Installing git on windows

1. To download the Git installer, visit the Git's official site and go to download page. The link for the download page is <https://git-scm.com/downloads>. The page looks like as

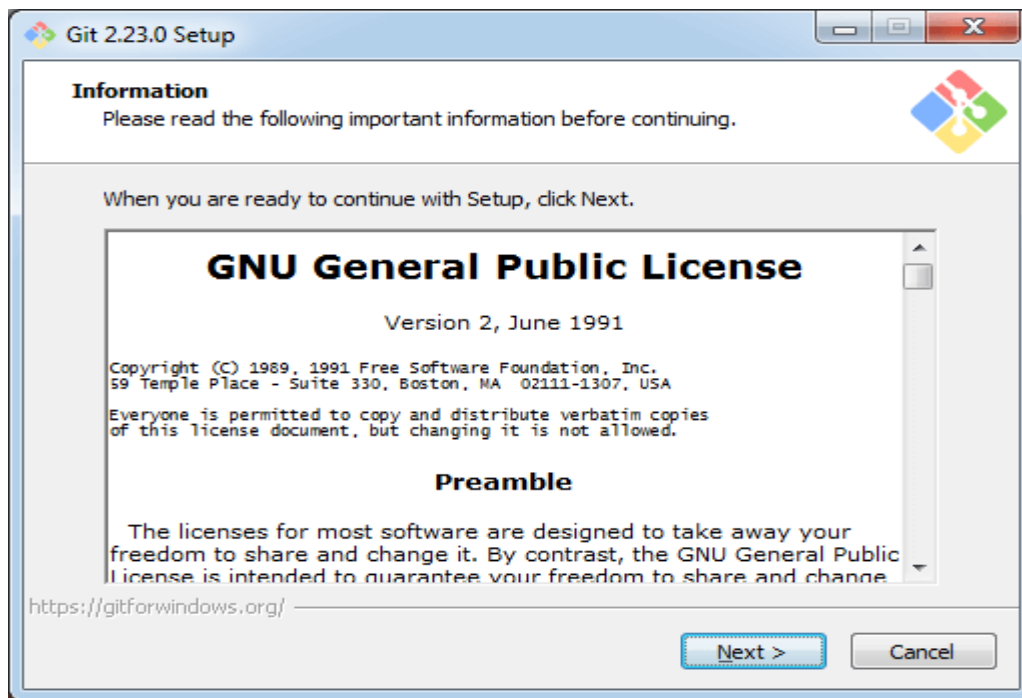


Click on the package given on the page as **download 2.23.0 for windows**. The download will start after selecting the package. Download the latest version, 32 bit/ 64 bit.

Now, the Git installer package has been downloaded.

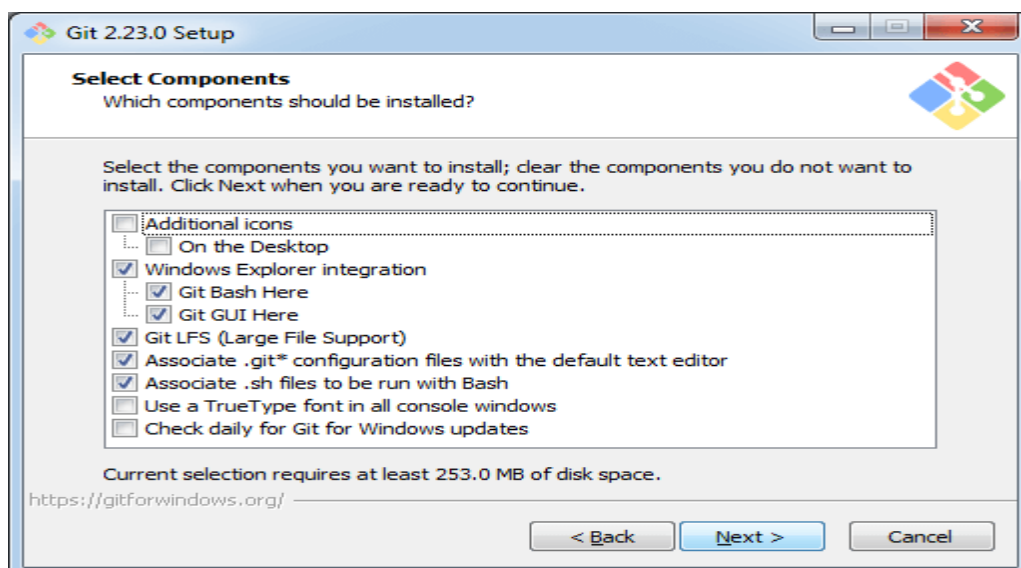
2. Click on the downloaded installer file and select **yes** to continue. After the selecting **yes** the installation begins, and the screen will look like as





Click on **next** to continue.

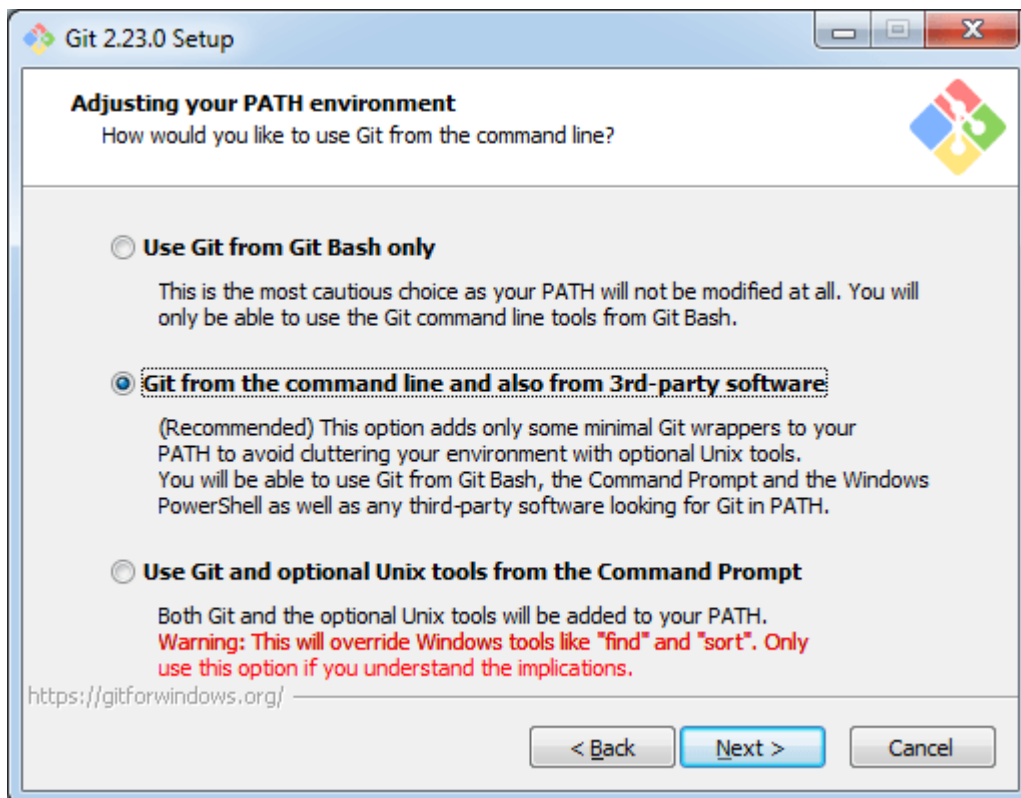
3. Default components are automatically selected in this step. You can also choose your required part.



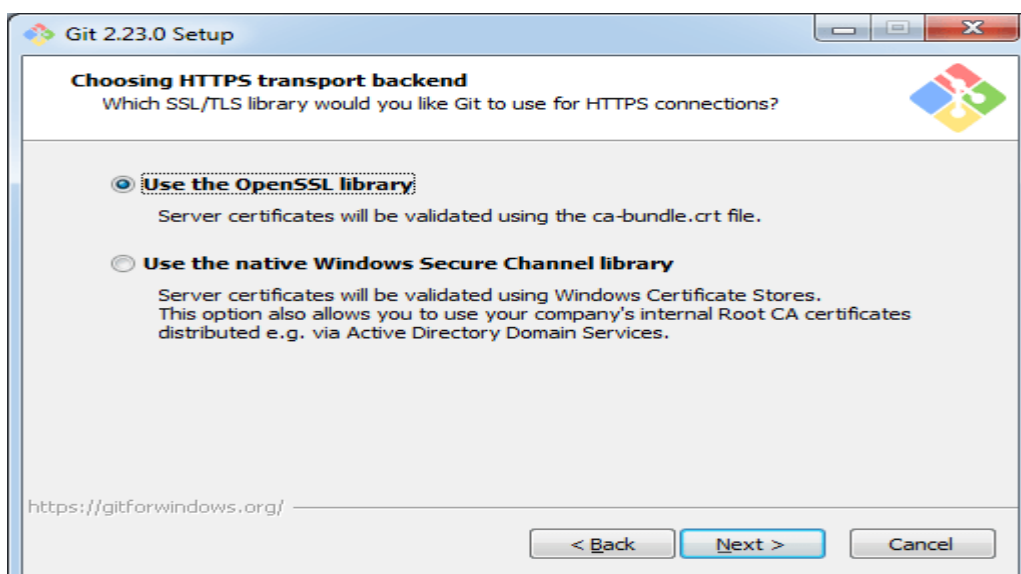
Click next to continue.

4. The default Git command-line options are selected automatically. You can choose your preferred choice. Click **next** to continue.



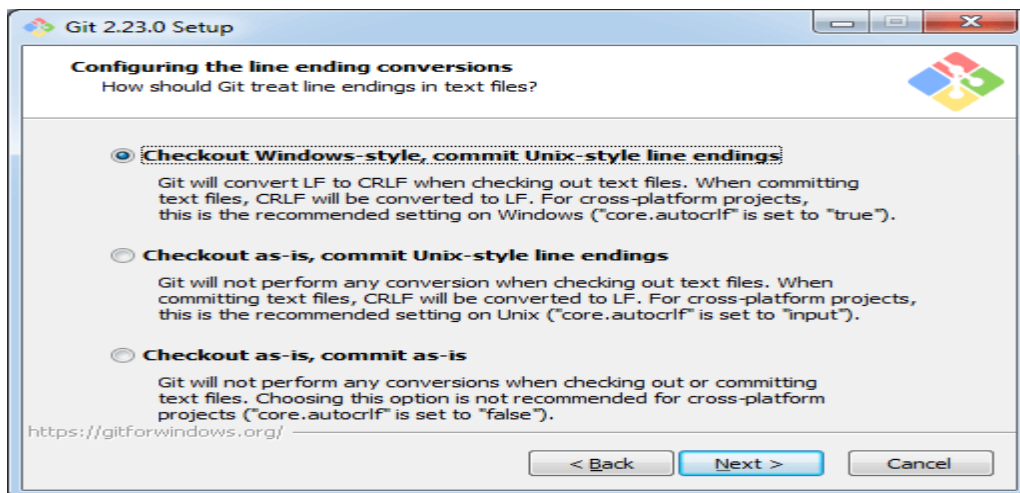


5. The default transport backend options are selected in this step. Click **next** to continue.

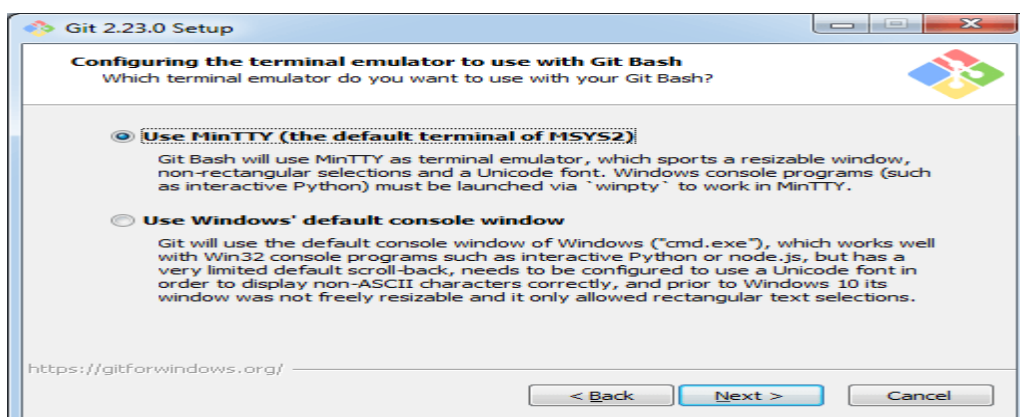


6. Select your required line ending option and click next to continue.

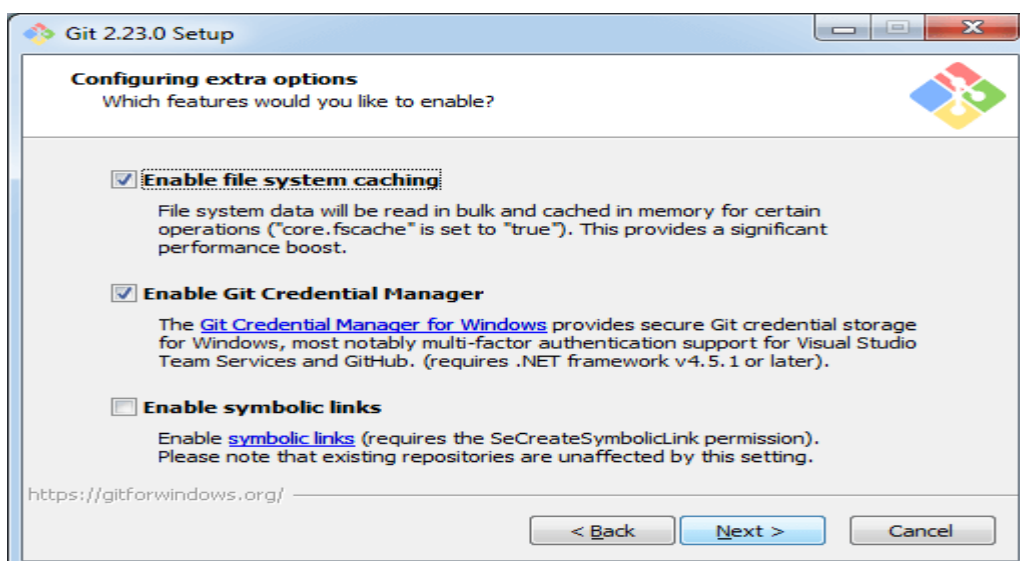




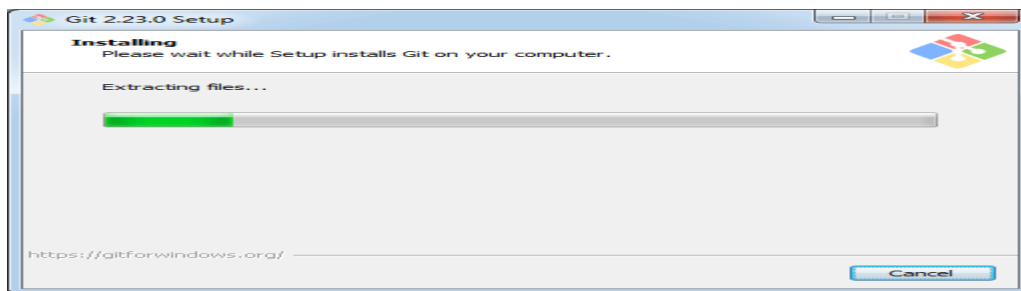
7. Select preferred terminal emulator clicks on the **next** to continue.



8. This is the last step that provides some extra features like system caching, credential management and symbolic link. Select the required features and click on the **next** option.

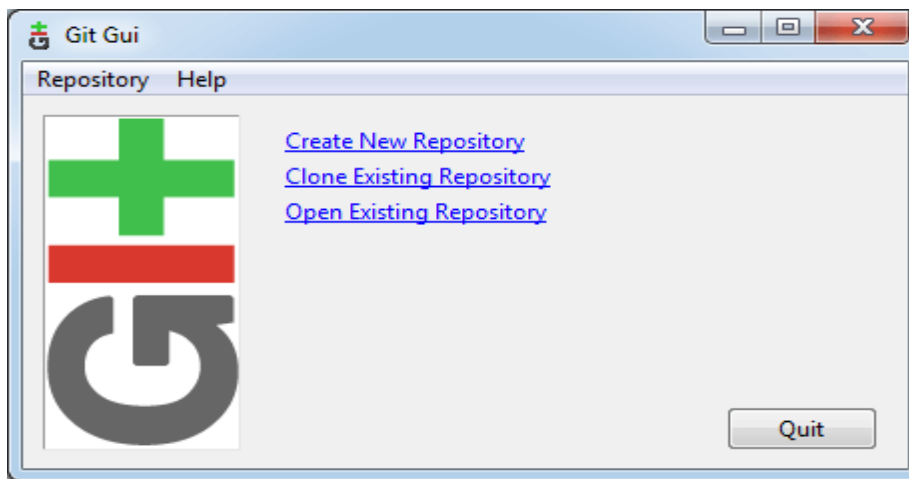


9. The files are being extracted in this step.



Therefore, The Git installation is completed. Now you can access the **Git Gui** and **Git Bash**.

The **Git Gui** looks like as

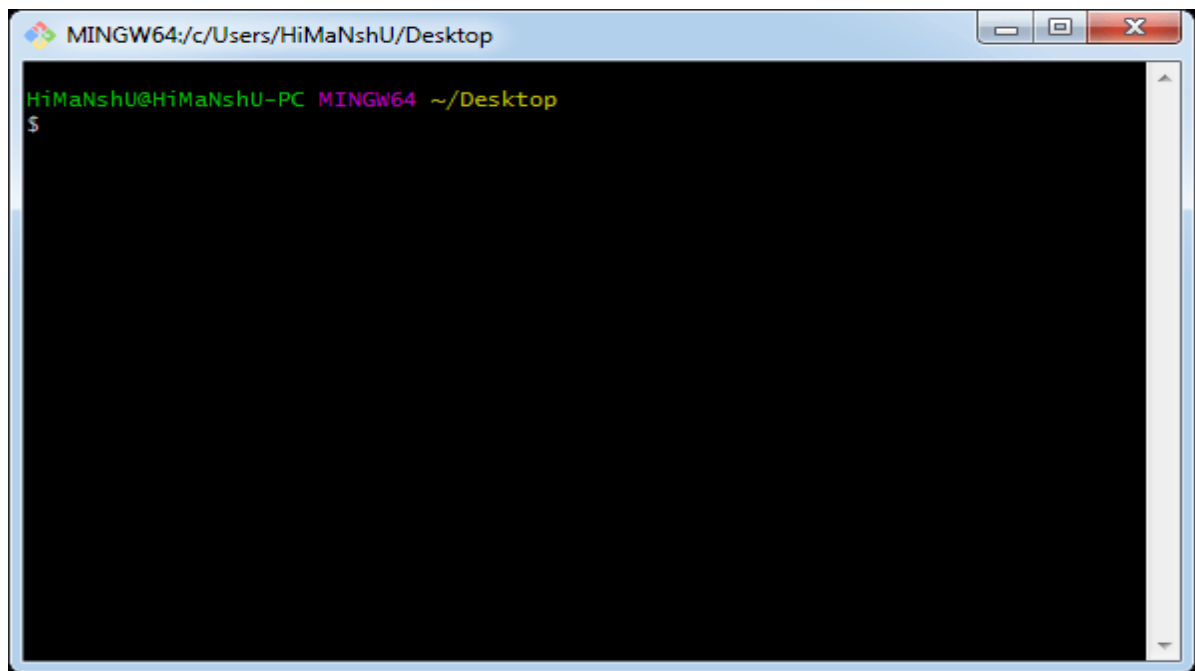


It facilitates with three features.

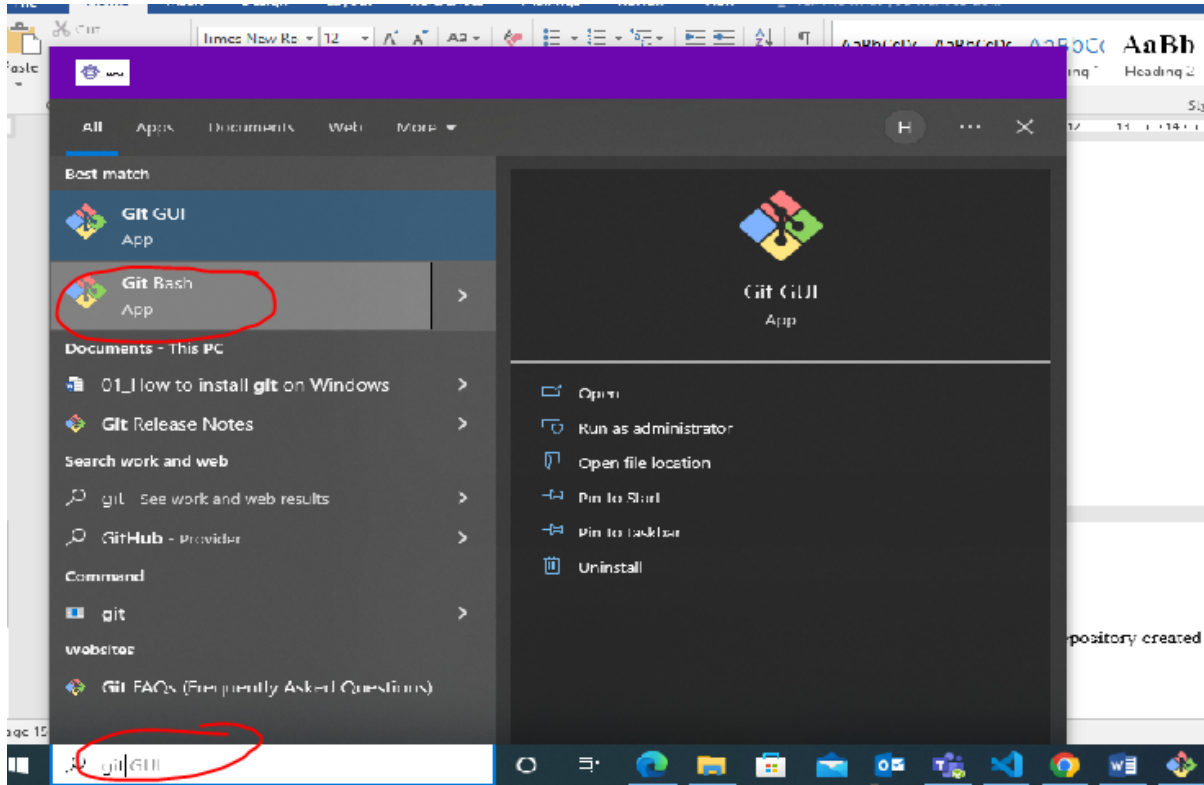
- o Create New Repository
- o Clone Existing Repository
- o Open Existing Repository

The **Git Bash** looks like as





Step 5: Launch the gitbash console, create a directory and clone the repository created in github

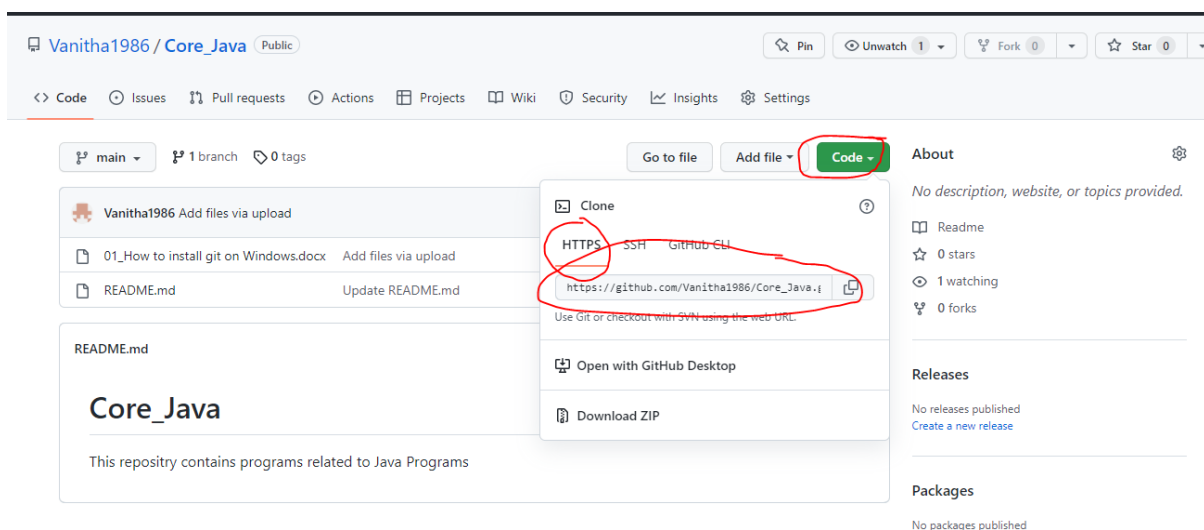


Commands:

Creating a directory: mkdir repo

Changing a directory: cd repo

Clone the repository created, go the github account you have created



Edit with WPS Office

Copy the HTTPS link and use the command clone, as below

```
hanumanthr@hanumanthr-LT MINGW64 ~
$ mkdir repository

hanumanthr@hanumanthr-LT MINGW64 ~
$ cd repository

hanumanthr@hanumanthr-LT MINGW64 ~/repository
$ git clone https://github.com/Vanitha1986/Core_Java.git
Cloning into 'Core_Java'...
remote: Enumerating objects: 9, done.
remote: Counting objects: 100% (9/9), done.
remote: Compressing objects: 100% (6/6), done.
remote: Total 9 (delta 0), reused 0 (delta 0), pack-reused 0
Receiving objects: 100% (9/9), 1.12 MiB | 555.00 KiB/s, done.

hanumanthr@hanumanthr-LT MINGW64 ~/repository
$ ls
Core_Java/

hanumanthr@hanumanthr-LT MINGW64 ~/repository
$ cd Core_Java/

hanumanthr@hanumanthr-LT MINGW64 ~/repository/Core_Java (main)
$ ls
'01_How to install git on Windows.docx'  README.md

hanumanthr@hanumanthr-LT MINGW64 ~/repository/Core_Java (main)
$ vim hello.java

hanumanthr@hanumanthr-LT MINGW64 ~/repository/Core_Java (main)
$ git add .
warning: in the working copy of 'hello.java', LF will be replaced by CRLF the next time Git touches it

hanumanthr@hanumanthr-LT MINGW64 ~/repository/Core_Java (main)
$ git commit -m .
[main bed85a3] .
Committer: Hanumantharaju R <hanumanthr@india.tejasnetworks.com>
Your name and email address were configured automatically based
on your username and hostname. Please check that they are accurate.
You can suppress this message by setting them explicitly. Run the
following command and follow the instructions in your editor to edit
your configuration file:

    git config --global --edit

After doing this, you may fix the identity used for this commit with:
```

```
hanumanthr@hanumanthr-LT MINGW64 ~/repository/Core_Java (main)
$ git push
info: please complete authentication in your browser...
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 8 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 364 bytes | 121.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/Vanitha1986/Core_Java.git
   f4a2bf5..bed85a3  main -> main
```

Refresh the github page, you should be able to see the hello.java file



The screenshot shows the GitHub interface for a repository named 'Core_Java' by user 'Vanitha1986'. The repository is public and has 1 branch and 0 tags. The commit history table shows three commits: '01_How to install git on Windows.docx' (33 minutes ago), 'README.md' (42 minutes ago), and 'hello.java' (6 minutes ago). The 'hello.java' file is circled in red. Below the commit history is the README.md content, which includes the title 'Core_Java' and the text 'This repository contains programs related to Java Programs'. On the right side, there are sections for 'About', 'Releases', and 'Packages'.

Now, create a file in github and run git pull command in local git

This screenshot shows the same GitHub repository page after a new file has been created. The commit history table now includes a new commit by 'Vanitha1986' titled 'Create Test' (1078d10, 15 seconds ago, 5 commits). The 'Test' file is circled in red. The README.md content remains the same. The right side of the page shows the 'About', 'Releases', and 'Packages' sections.

Run git pull command, run ls command to see the file which was created in github account

```
hanumanthr@hanumanthr-LT MINGW64 ~/repository/Core_Java (main)
$ git pull
remote: Enumerating objects: 4, done.
remote: Counting objects: 100% (4/4), done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 3 (delta 1), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (3/3), 639 bytes | 30.00 KiB/s, done.
From https://github.com/Vanitha1986/Core_Java
   bed85a3..1078d10  main       -> origin/main
Updating bed85a3..1078d10
Fast-forward
 Test | 1 +
 1 file changed, 1 insertion(+)
 create mode 100644 Test

hanumanthr@hanumanthr-LT MINGW64 ~/repository/Core_Java (main)
$ ls
'01_How to install git on Windows.docx'  README.md  Test  hello.java

hanumanthr@hanumanthr-LT MINGW64 ~/repository/Core_Java (main)
$ |
```

Summary:

- Learnt how to create github account
- Learnt how to install git in windows
- Explored the use some of the git commands like: clone, add, commit, push and pull

