

## Experiment -1.1

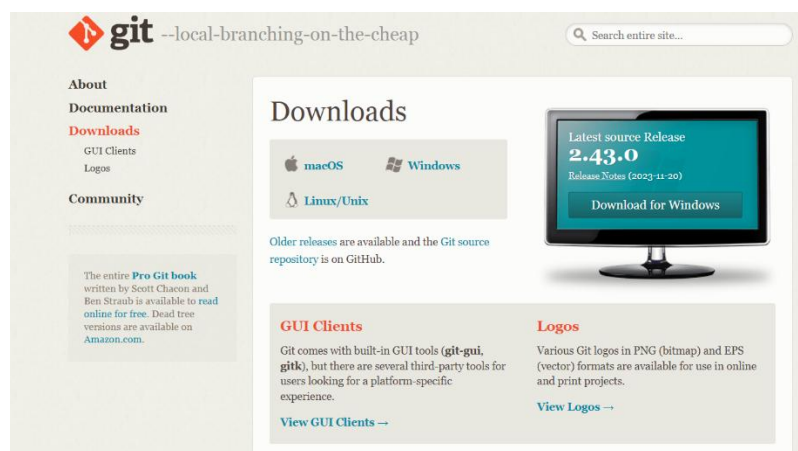
**Student Name:** ANAND TIWARI  
**Branch:** CSE(DEVOPS)  
**Semester:** 4TH  
**Subject Name:** GIT AND GITHUB

**UID:** 22BDO10022  
**Section/Group:** 22BCD-1/A  
**Date of Performance:** 17/01/2023  
**Subject Code:** 22CSH-293

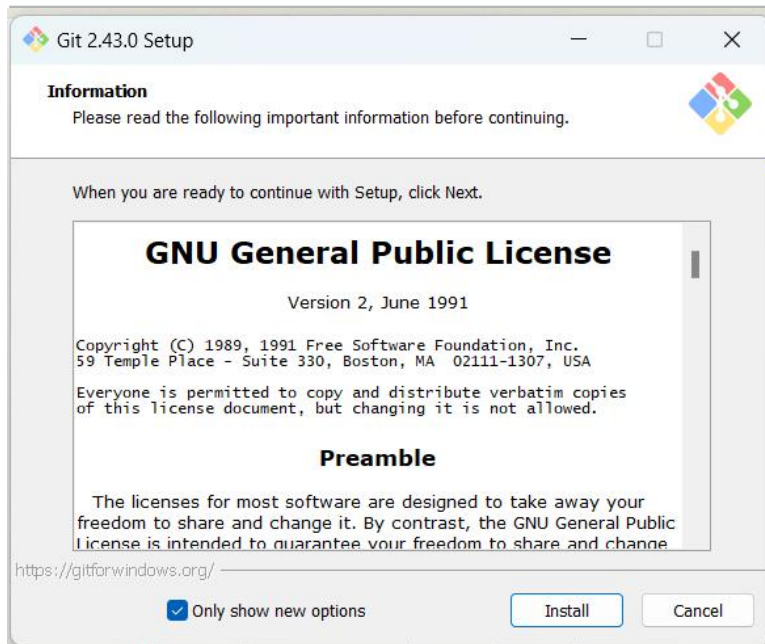
- 1. Aim/Overview of the practical:.** Install Git and creating repository
- 2. Software used:** Git Bash and Github.
- 3. Hardware Used:** Computer system.
- 4. Steps for experiment:**

### For Installation of Git :

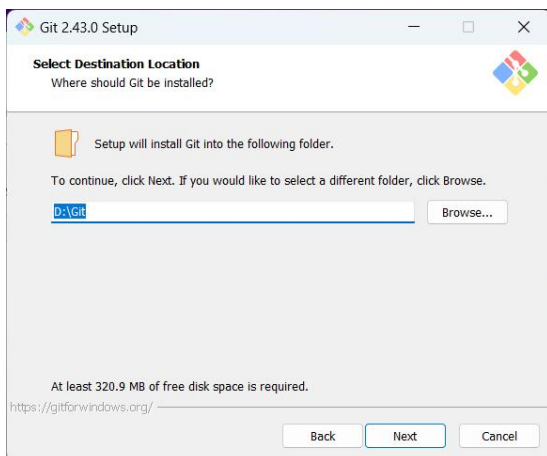
#### 1. Download Git for Windows using Chrome.



2. Select the Windows option and opt for the 64-bit installer.
3. Click on install



4. Select the location for installation for the git.



6. Click on next for all default settings.

### Git 2.43.0 Setup

Select Components

Which components should be installed?

Select the components you want to install; clear the components you do not want to install. Click Next when you are ready to continue.

- ☐ Additional Icons
- ☐ On the Desktop
- ☒ Windows Explorer integration
- ☒ Open Git Bash here
- ☒ Open Git GUI here
- ☒ Git LFS (Large File Support)
- ☒ Associate .git\* configuration files with the default text editor
- ☒ Associate .sh files to be run with Bash
- ☒ Check daily for Git for Windows updates
- ☒ (NEW!) Add a Git Bash Profile to Windows Terminal

Current selection requires at least 320.8 MB of disk space.

<https://gitforwindows.org/>

Back Next Cancel

### Git 2.43.0 Setup

Choosing the default editor used by Git

Which editor would you like Git to use?

Use Vim (the ubiquitous text editor) as Git's default editor

The Vim editor, while powerful, can be hard to use. Its user interface is unintuitive and its key bindings are awkward.

**Note:** Vim is the default editor of Git for Windows only for historical reasons, and it is highly recommended to switch to a modern GUI editor instead.

**Note:** This will leave the 'core.editor' option unset, which will make Git fall back to the 'EDITOR' environment variable. The default editor is Vim - but you may set it to some other editor of your choice.

<https://gitforwindows.org/>

Back Next Cancel

### Git 2.43.0 Setup

Adjusting the name of the initial branch in new repositories

What would you like Git to name the initial branch after "git init"?

☒ Let Git decide

Let Git use its default branch name (currently: "master") for the initial branch in newly created repositories. The Git project intends to change this default to a more inclusive name in the near future.

☐ Override the default branch name for new repositories

**NEW!** Many teams already renamed their default branches; common choices are "main", "trunk" and "development". Specify the name "git init" should use for the initial branch:

main

This setting does not affect existing repositories.

<https://gitforwindows.org/>

Back Next Cancel

### Git 2.43.0 Setup

Adjusting your PATH environment

How would you like to use Git from the command line?

☐ Use Git from Git Bash only

This is the most cautious choice as your PATH will not be modified at all. You will only be able to use the Git command line tools from Git Bash.

☒ Git from the command line and also from 3rd-party software

**(Recommended)** This option adds only some minimal Git wrappers to your PATH to avoid cluttering your environment with optional Unix tools. You will be able to use Git from Git Bash, the Command Prompt and the Windows PowerShell as well as any third-party software looking for Git in PATH.

☐ Use Git and optional Unix tools from the Command Prompt

Both Git and the optional Unix tools will be added to your PATH.

**Warning:** This will override Windows tools like "find" and "sort". Only use this option if you understand the implications.

<https://gitforwindows.org/>

Back Next Cancel

### Git 2.43.0 Setup

Choosing the SSH executable

Which Secure Shell client program would you like Git to use?

☒ Use bundled OpenSSH

This uses ssh.exe that comes with Git.

☐ Use external OpenSSH

**NEW!** This uses an external ssh.exe. Git will not install its own OpenSSH (and related) binaries but use them as found on the PATH.

<https://gitforwindows.org/>

Back Next Cancel

### Git 2.43.0 Setup

Choosing HTTPS transport backend

Which SSL/TLS library would you like Git to use for HTTPS connections?

☒ Use the OpenSSL library

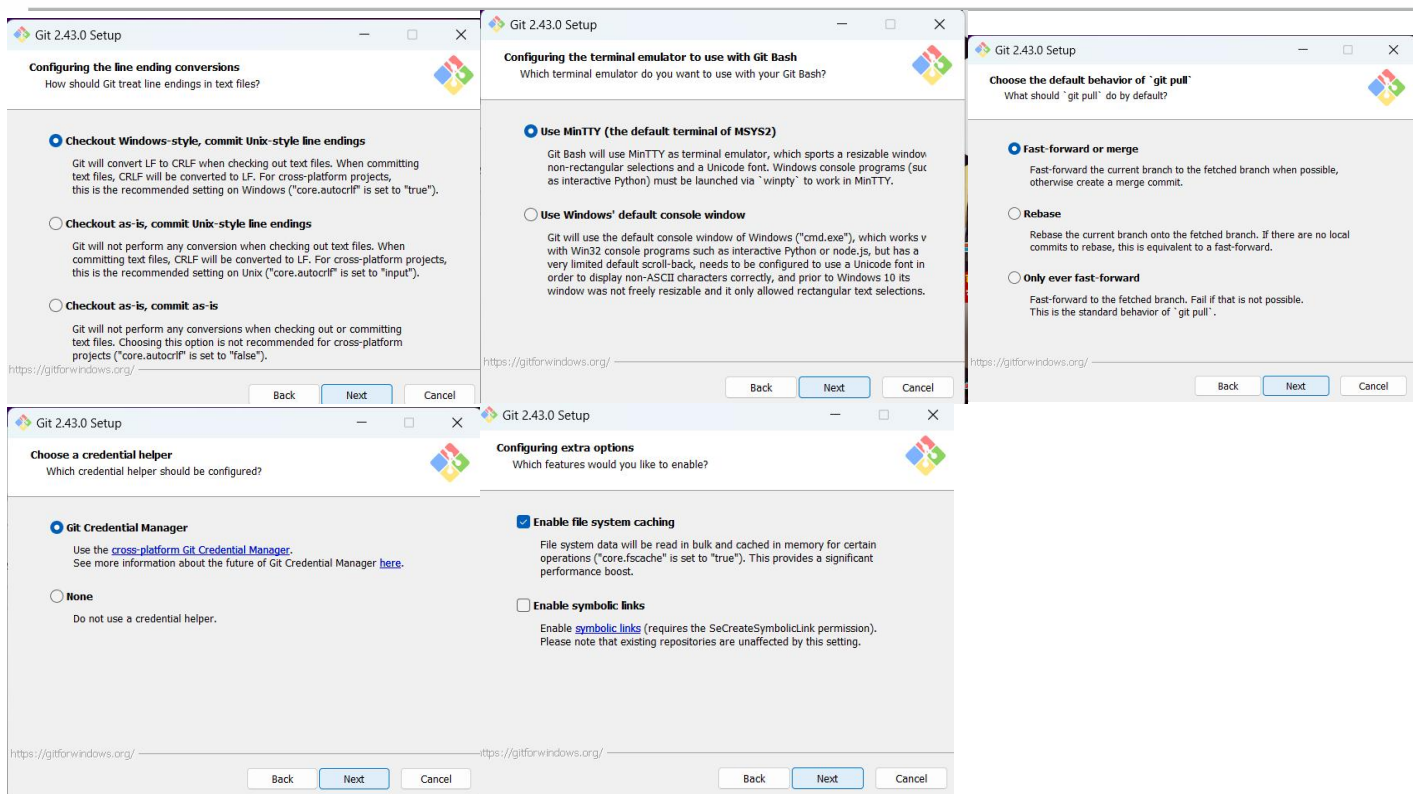
Server certificates will be validated using the ca-bundle.crt file.

☐ Use the native Windows Secure Channel library

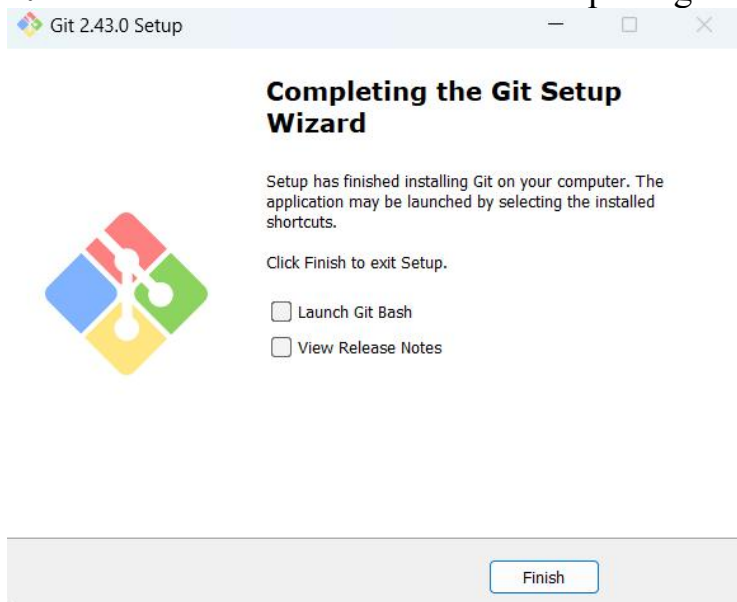
Server certificates will be validated using Windows Certificate Stores. This option also allows you to use your company's internal Root CA certificates distributed e.g. via Active Directory Domain Services.

<https://gitforwindows.org/>

Back Next Cancel



## 7. Click on Finish after successful completing the installation.



## 8. To verify git is installed in system or not follow these steps.

Go to CMD-> type “git”

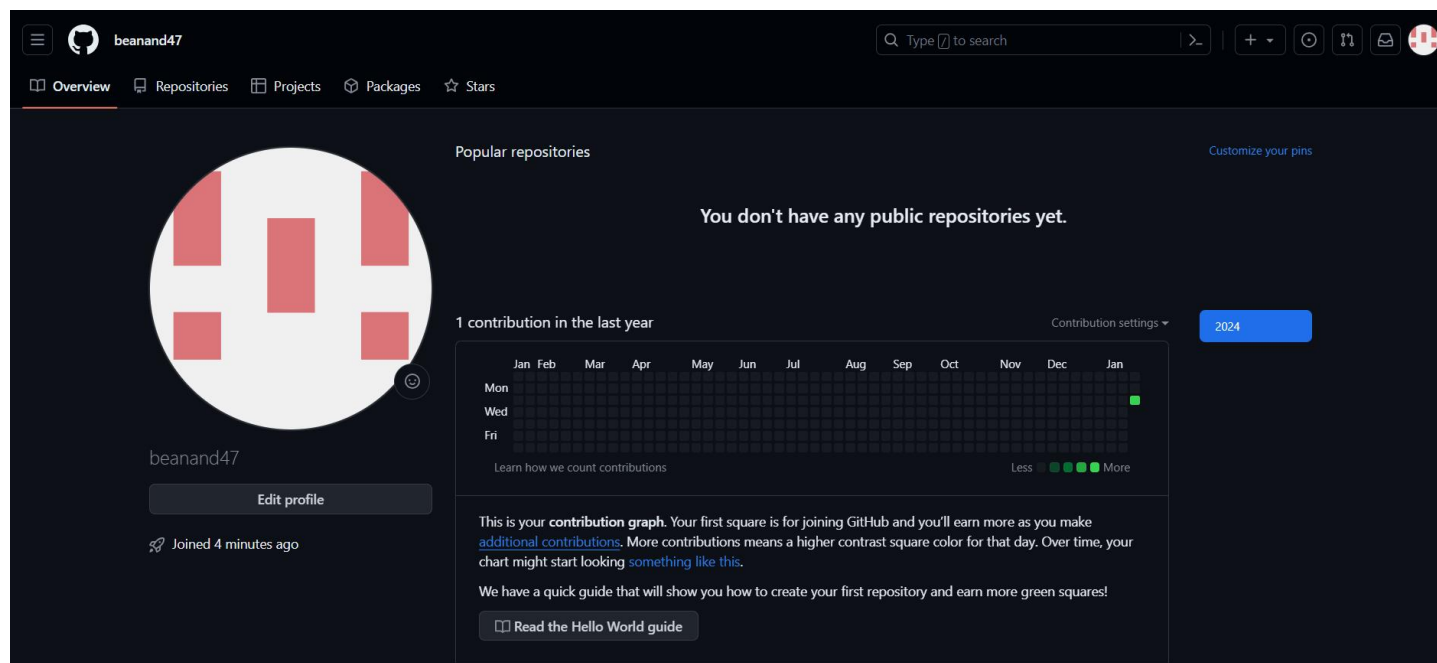
It will give version and description regarding Git

## Creation Of Account on Github

Follow these steps to create acoount on Github



1. Type Github on google.
2. Go for signup.
3. Login with email.
4. Give password.
5. Accept condition and fill necessary information like username DOB and more.
6. After completing formation of github account page will look like



## Creating repository on Github

Goto github account -> Repositories -> New -> Name the Repository -> write Description(optional) -> Public(to access openly) -> Add a README file(Details of Project) -> add .gitignore -> License(none)-> click “Create Repository”

The screenshot shows the 'Create a new repository' form on GitHub. The form includes fields for 'Owner' (set to 'beanand47') and 'Repository name'. A note states 'Great repository names are short and memorable. Need inspiration? How about [refactored-octo-succotash](#)?'. The 'Description' field is optional. The 'Public' option is selected under 'Initialize this repository with:'. Below this, there are checkboxes for 'Add a README file' and 'Add .gitignore'. The 'Add .gitignore' dropdown is set to 'None'. A link to 'Learn more about .gitignore files' is provided at the bottom.

## Configuration of Git And Github:

To configure Git and Github we have to write some commands in Git Bash which we enlist our username and email in git.

### Steps: For username

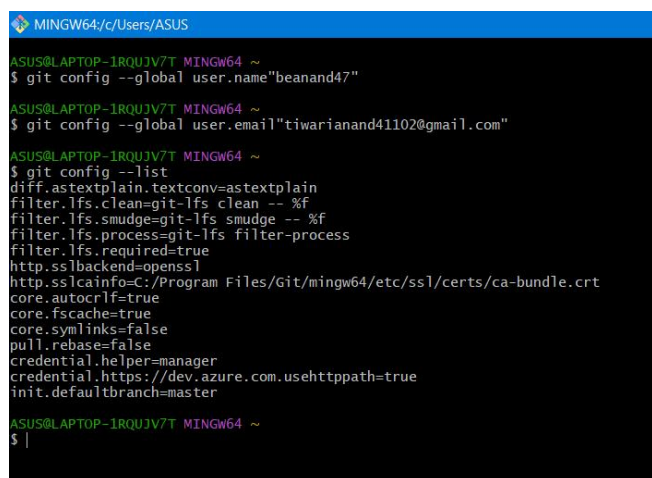
Type code:- `git config --global user.name "beanand47"`

### For email

Type code:- `git config --global user.email "tiwarianand41102@gmail.com"`

### To verify

Type code:- `git config --list`



```
MINGW64/c/Users/ASUS
ASUS@LAPTOP-IRQUJV7T MINGW64 ~
$ git config --global user.name "beanand47"
ASUS@LAPTOP-IRQUJV7T MINGW64 ~
$ git config --global user.email "tiwarianand41102@gmail.com"
ASUS@LAPTOP-IRQUJV7T MINGW64 ~
$ git config --list
diff.astextplain.textconv=astextplain
filter.lfs.clean=git-lfs clean -- %f
filter.lfs.smudge=git-lfs smudge -- %f
filter.lfs.process=git-lfs filter-process
filter.lfs.required=true
http.sslbackend=openssl
http.sslcainfo=C:/Program Files/Git/mingw64/etc/ssl/certs/ca-bundle.crt
core.autocrlf=true
core.fscache=true
core.symlinks=false
pull.rebase=false
credential.helper=manager
credential.https://dev.azure.com.usehttppath=true
init.defaultbranch=master
ASUS@LAPTOP-IRQUJV7T MINGW64 ~
$ |
```

## For cloning the repository:

Use Command

`git clone https://github.com/beanand47/simplework.git`

Note: link is of the HTTPS

Press enter.

### Some useful command

cd- Change the directory

touch- it is used to create file.

ls- used to print no of files in repository.

pwd- used to print the current working directory.

```
ASUS@LAPTOP-1RQUJV7T MINGW64 ~
$ git clone https://github.com/beanand47/simplework.git
Cloning into 'simplework'...
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
Receiving objects: 100% (3/3), 12.68 KiB | 249.00 KiB/s, done.

ASUS@LAPTOP-1RQUJV7T MINGW64 ~
$ ls
'3D objects'/      Links/              OFFICE/             Videos/             pipwin/
AppData/           'Local Settings'@  OneDrive/           'VirtualBox VMs'/   pywhatkit_dbs.txt
'Application Data'@ MJKRegInfo_WLHF6G5GDO5A5AUT6EURO6RMAKGWUK6T Pictures/           anse/               simplework/
Contacts/          Music/              PrintHood@          battery-report.html  test.c
Cookies@           'My Documents'@    PycharmProjects/   d4ac4633ebd6440fa397b84f1bc94a3c.7z test.exe*
Desktop/           NTUSER.DAT         Recent@             inst.ini             useruid.ini
Documents/         NTUSER.DAT{c242fac9-3c33-11eb-81ad-f02f74478c05}.TM.b1f Searches/           ntuser.dat.LOG1     vmlogs/
Downloads/         NTUSER.DAT{c242fac9-3c33-11eb-81ad-f02f74478c05}.TM.Container00000000000000000001.regtrans-ms SendTo@            ntuser.dat.LOG2
Favorites/         NTUSER.DAT{c242fac9-3c33-11eb-81ad-f02f74478c05}.TM.Container00000000000000000002.regtrans-ms 'Start Menu'@       ntuser.ini
IdeaProjects/      NetHood@           Templates@          nuuid.ini
IntelGraphicsProfiles/ Nox_share/

ASUS@LAPTOP-1RQUJV7T MINGW64 ~
$ ls
'3D objects'/      Links/              OFFICE/             Videos/             pipwin/
AppData/           'Local Settings'@  OneDrive/           'VirtualBox VMs'/   pywhatkit_dbs.txt
'Application Data'@ MJKRegInfo_WLHF6G5GDO5A5AUT6EURO6RMAKGWUK6T Pictures/           anse/               simplework/
Contacts/          Music/              PrintHood@          battery-report.html  test.c
Cookies@           'My Documents'@    PycharmProjects/   d4ac4633ebd6440fa397b84f1bc94a3c.7z test.exe*
Desktop/           NTUSER.DAT         Recent@             inst.ini             useruid.ini
Documents/         NTUSER.DAT{c242fac9-3c33-11eb-81ad-f02f74478c05}.TM.b1f Searches/           ntuser.dat.LOG1     vmlogs/
Downloads/         NTUSER.DAT{c242fac9-3c33-11eb-81ad-f02f74478c05}.TM.Container00000000000000000001.regtrans-ms SendTo@            ntuser.dat.LOG2
Favorites/         NTUSER.DAT{c242fac9-3c33-11eb-81ad-f02f74478c05}.TM.Container00000000000000000002.regtrans-ms 'Start Menu'@       ntuser.ini
IdeaProjects/      NetHood@           Templates@          nuuid.ini
IntelGraphicsProfiles/ Nox_share/
```

```
ASUS@LAPTOP-1RQUJV7T MINGW64 ~
$ cd simplework

ASUS@LAPTOP-1RQUJV7T MINGW64 ~/simplework (main)
$ ls
LICENSE

ASUS@LAPTOP-1RQUJV7T MINGW64 ~/simplework (main)
$ pwd
/c/Users/ASUS/simplework
```

## 5. Result/Output/Writing Summary:

In this experiment we installed git, configured it with our GitHub account and write some commands such as clone to pull remote repository to our local machine, cd, touch, ls, pwd.

## Learning outcomes (What I have learnt):

1. Learnt how to install git.
2. Learnt how to configure git with GitHub account.
3. Learnt about some basic commands such as cd and cat.
4. Learnt using git clone command.
5. Also learnt how to add and commit updates to the GitHub account.

**Evaluation Grid (To be created as per the SOP and Assessment guidelines by the faculty):**

Sr. No.	Parameters	Marks Obtained	Maximum Marks
1.			
2.			
3.			