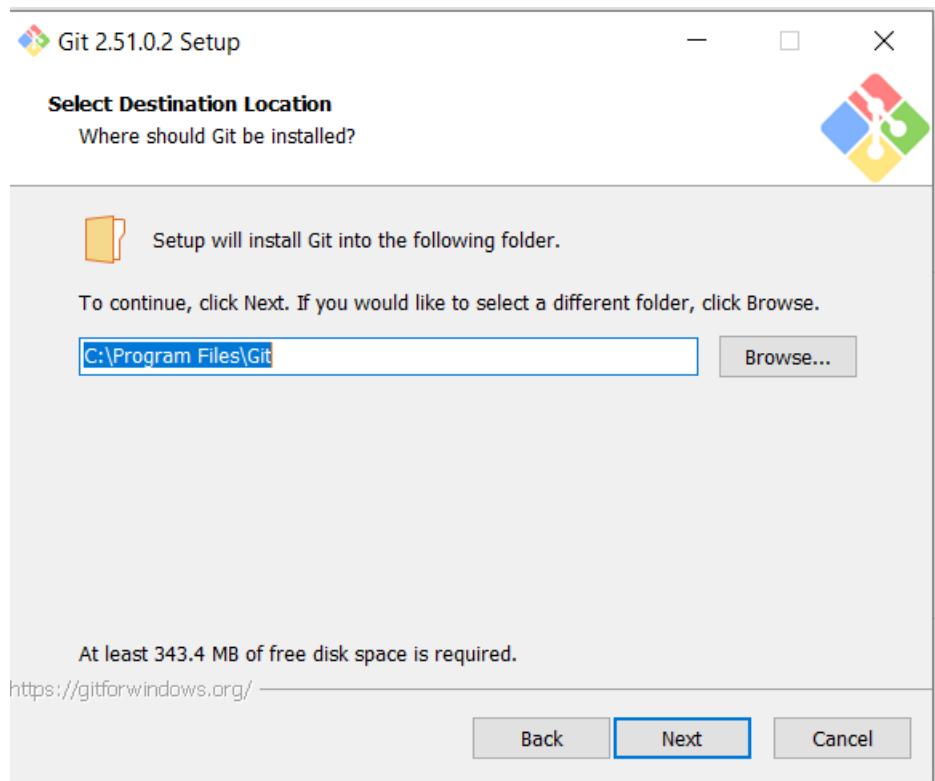
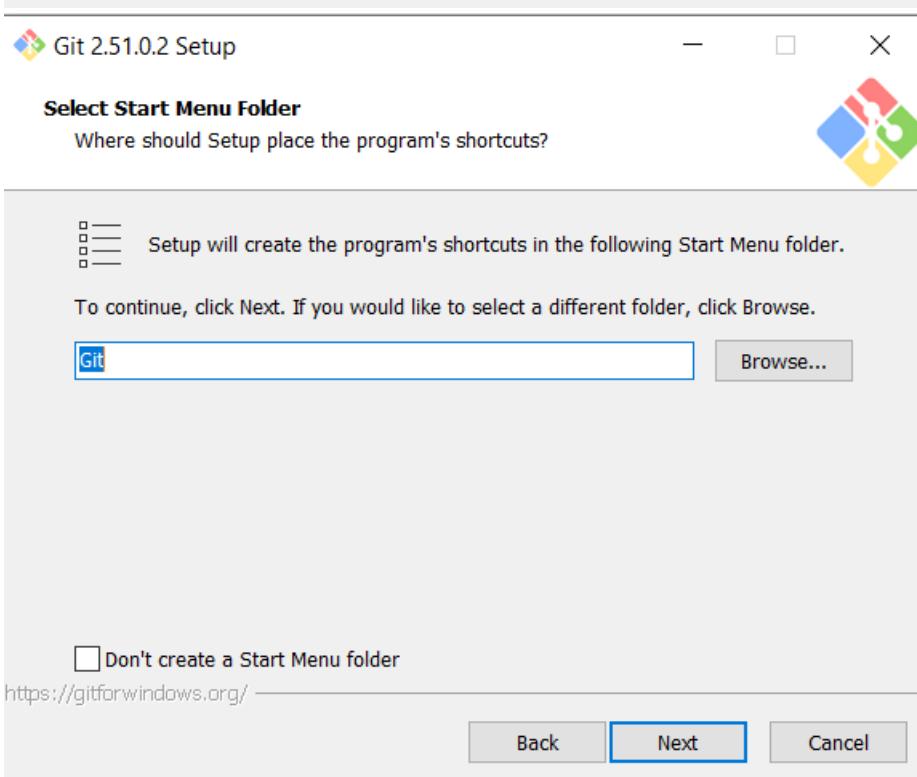
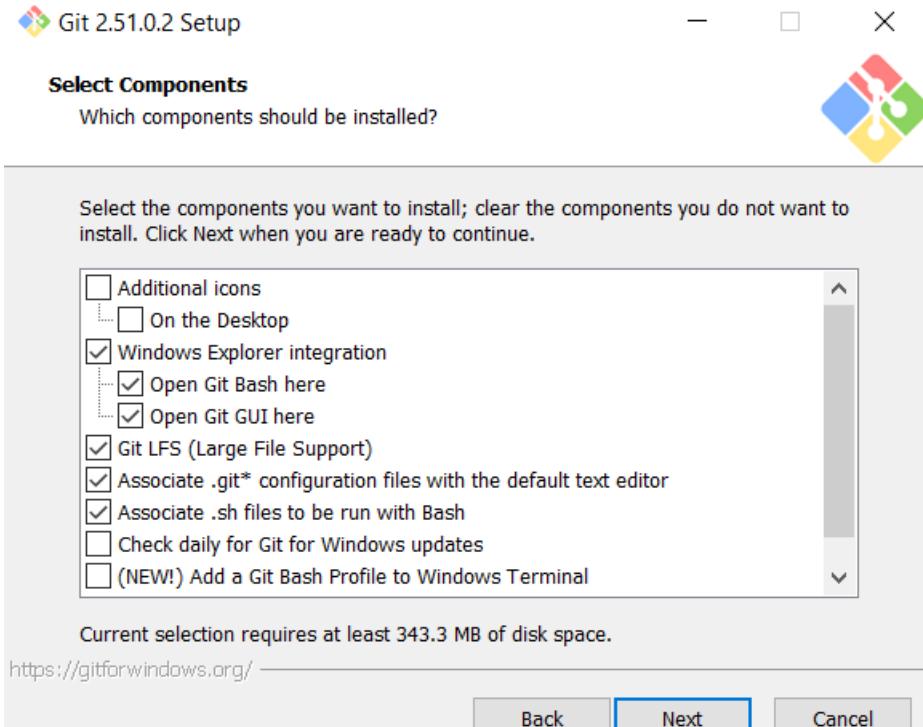

LAB 02

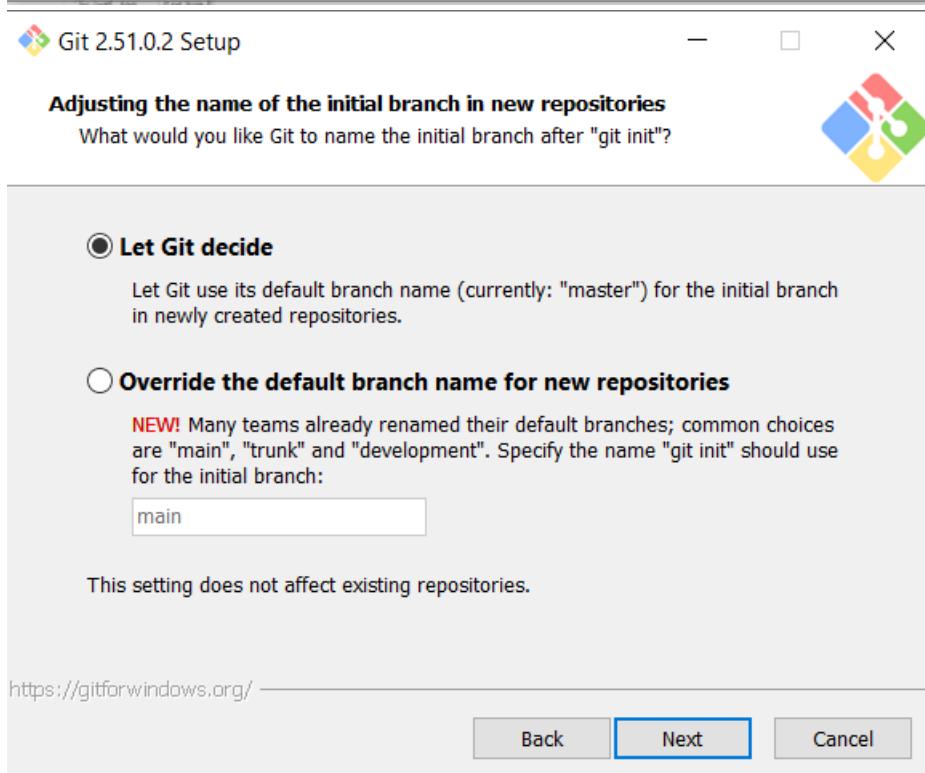
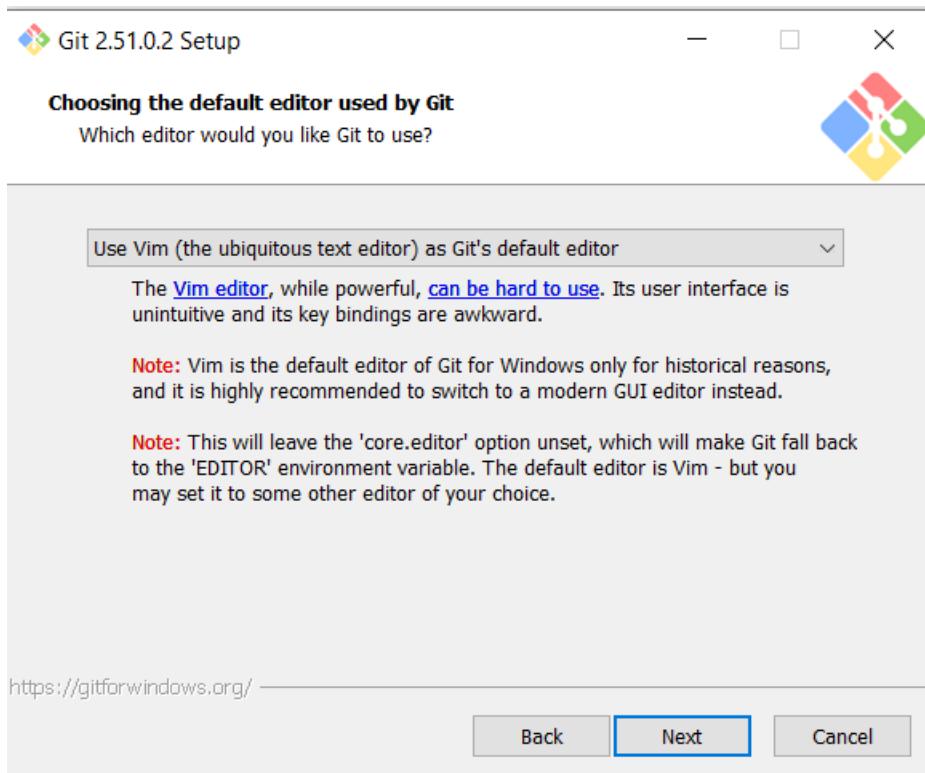
**NAME: SHUMAIL ZAHRA
REGISTRATION #: 2023-BSE-061
DEPARTMENT: BSE(5B)**

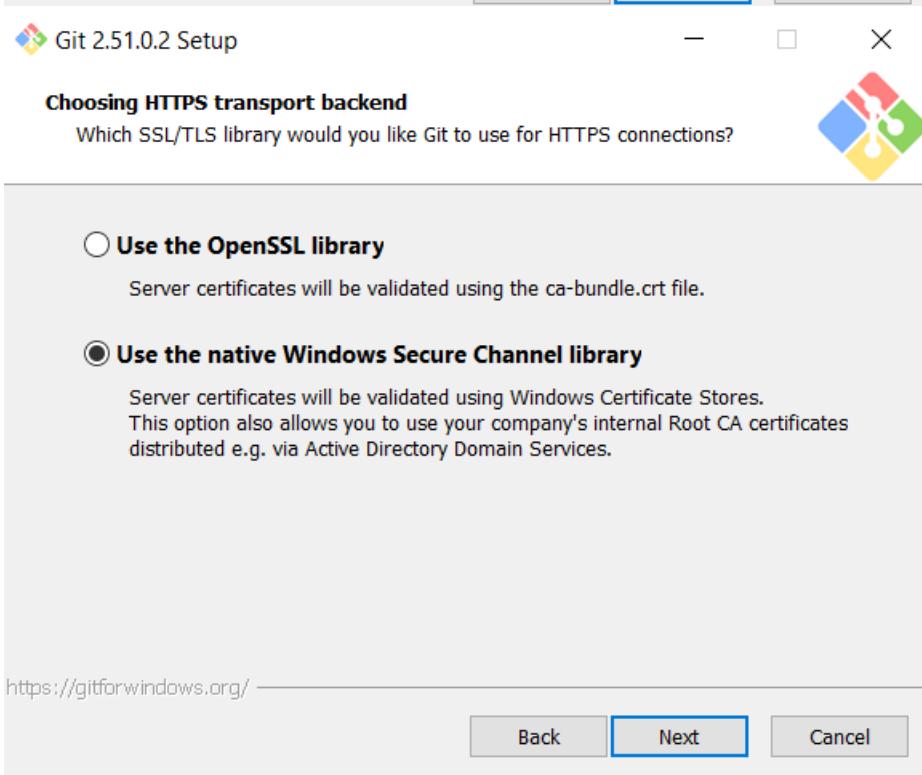
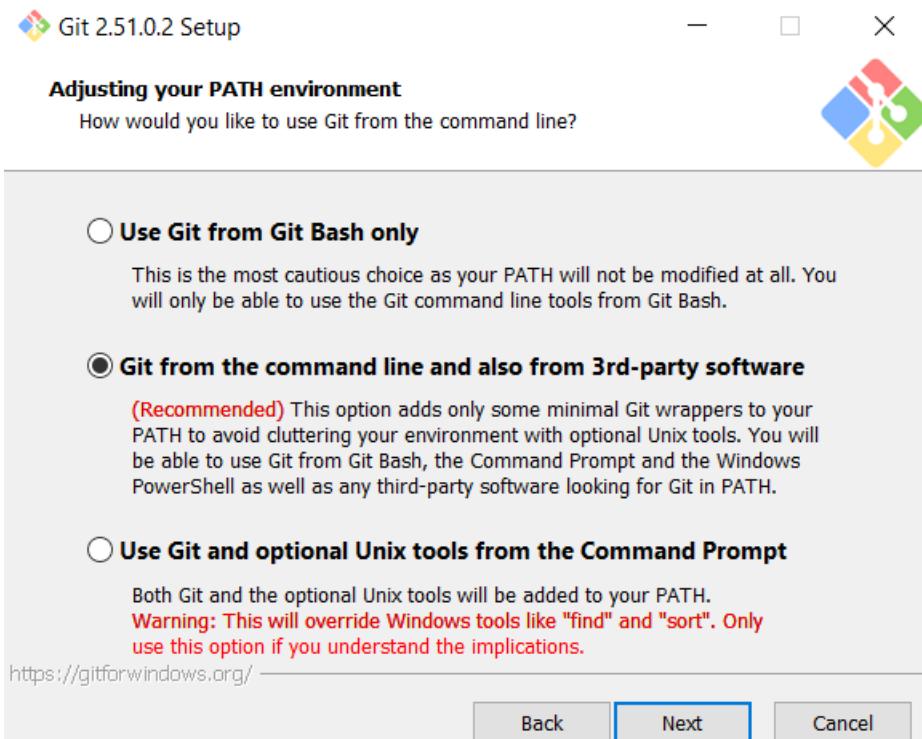
LAB TASK

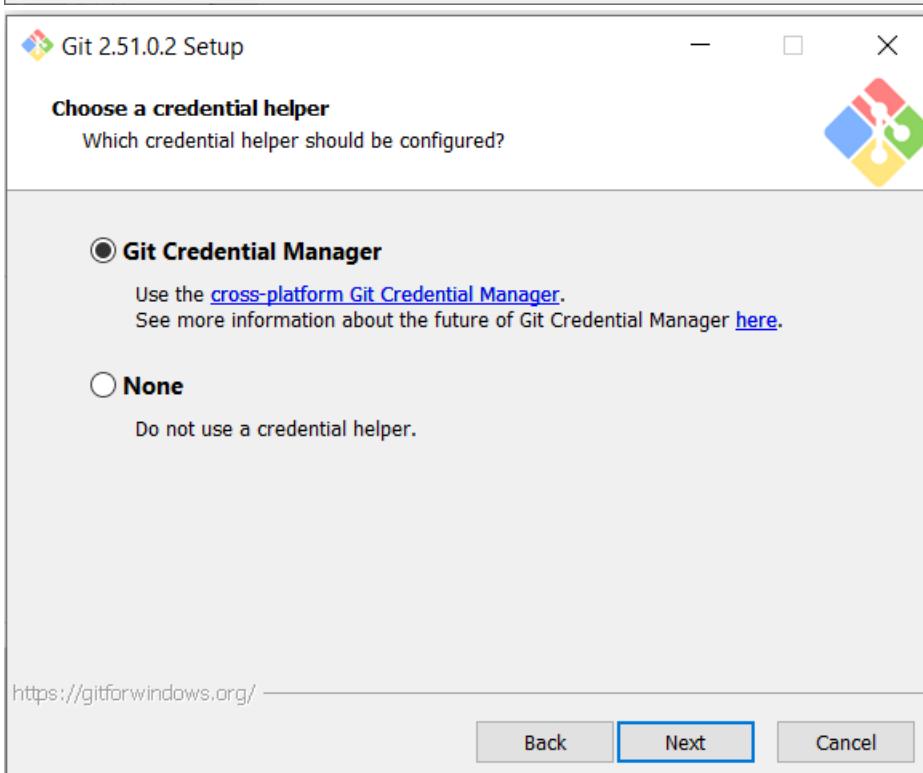
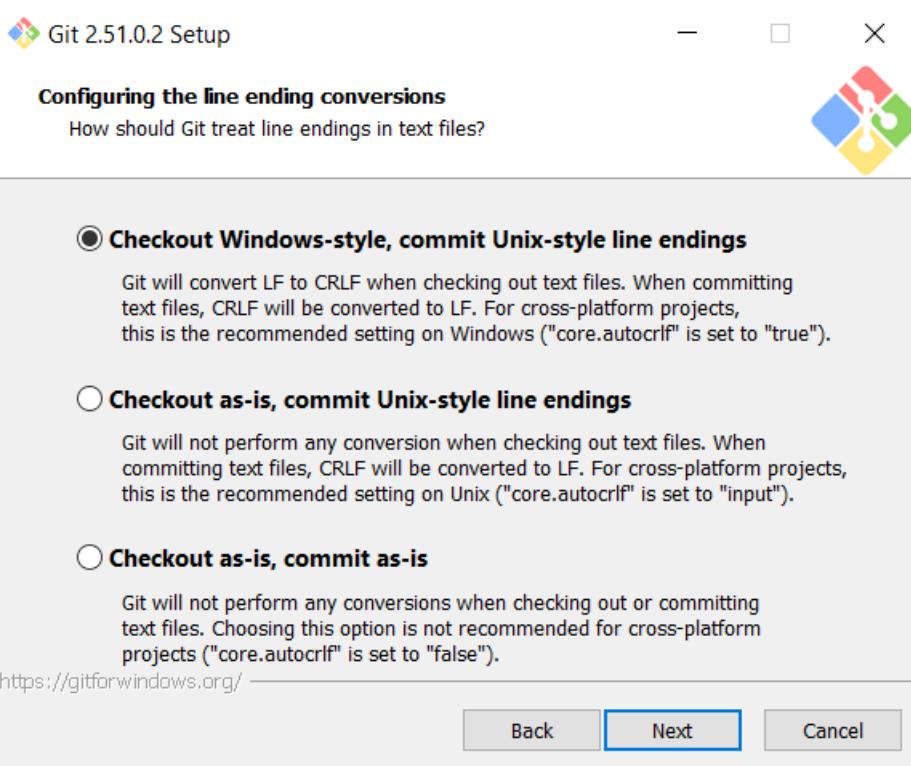
Git Installation:

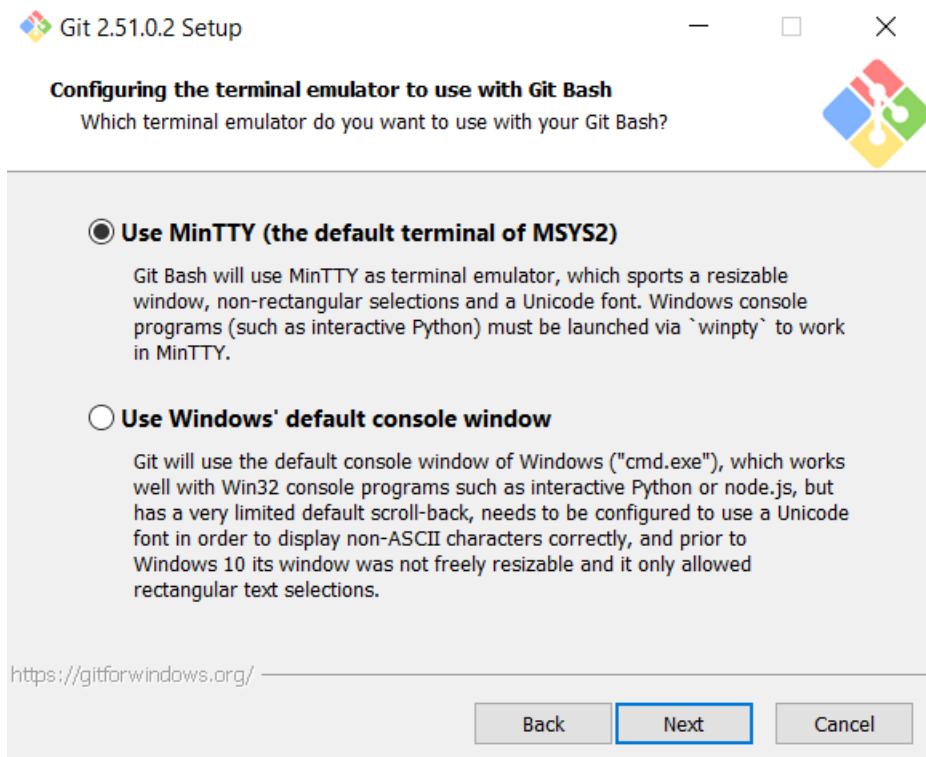
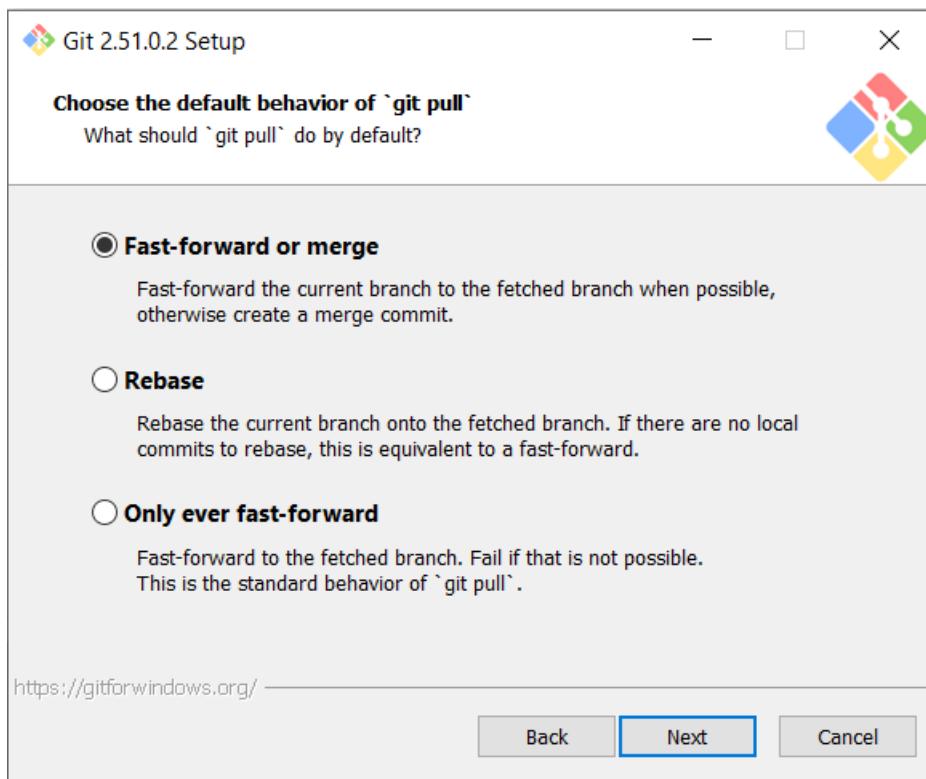


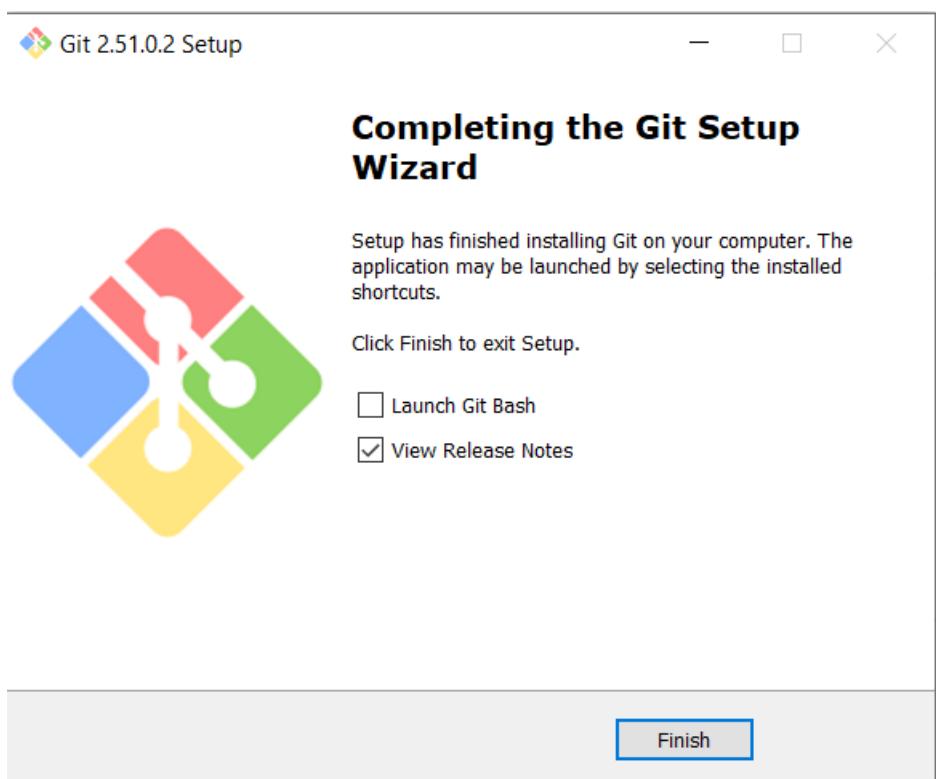
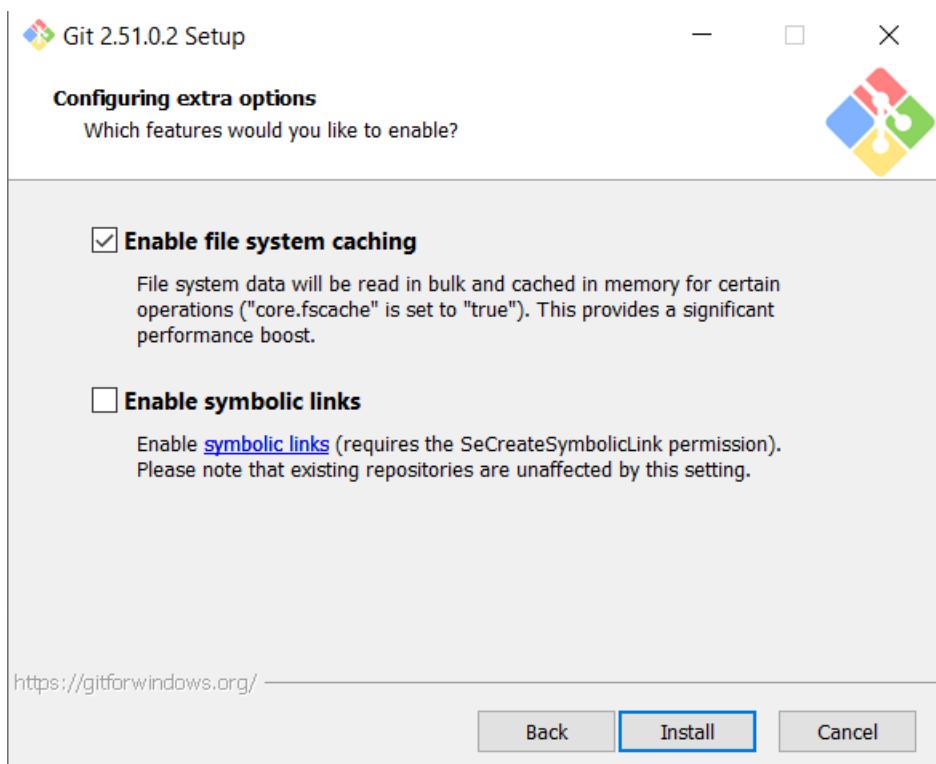












- **Task 1:**

```
Syed@DESKTOP-S50GK51 MINGW64 ~
$ git --version
git version 2.51.0.windows.2

Syed@DESKTOP-S50GK51 MINGW64 ~
$ |
```

A screenshot of a GitHub repository settings page. The top navigation bar shows the repository path "23-22411-061-rgb / lab-2". The "General" tab is selected. The repository name is "Lab-2". There are buttons for "Rename" and "Change visibility". Other tabs visible include "Code", "Issues", "Pull requests", "Actions", "Projects", "Security", "Insights", and "Settings". A search bar at the top right contains the placeholder "Type / to search".

Danger Zone

Change repository visibility

This repository is currently private.

[Change visibility](#)

Disable branch protection rules

Disable branch protection rules enforcement and APIs

[Disable branch protection rules](#)

Transfer ownership

Transfer this repository to another user or to an organization where you have the ability to create repositories.

[Transfer](#)

Archive this repository

Mark this repository as archived and read-only.

[Archive this repository](#)

Delete this repository

Once you delete a repository, there is no going back. Please be certain.

[Delete this repository](#)

The screenshot shows a GitHub repository named "lab-2". At the top, there is a large input field for dragging files, with the placeholder text "Drag additional files here to add them to your repository" and a link "Or choose your files". Below this, two files are listed: "git_installation.png" and "repo_private.png.PNG", each with a delete icon. A modal window titled "Commit changes" is open, containing fields for "Add files via upload" and "Add an optional extended description...". At the bottom of the modal are "Commit changes" and "Cancel" buttons. The main repository page below shows the uploaded files in the "main" branch, their upload times, and the commit message "23-22411-061-rgb Add files via upload". The repository statistics show 0 stars, 0 forks, and 0 watches. There are sections for "About", "Releases", and "Packages", all currently empty.

- **Task 2:**

```

PS C:\Users\Syed> ssh-keygen -t ed25519 -C "23-22411-061@se.fjwu.edu.pk"
Generating public/private ed25519 key pair.
Enter file in which to save the key (C:\Users\Syed\.ssh/id_ed25519):
Enter same passphrase again:
Your identification has been saved in C:\Users\Syed\.ssh/id_ed25519
Your public key has been saved in C:\Users\Syed\.ssh/id_ed25519.pub
The key fingerprint is:
SHA256:uthttBXad051MxcxSGvArYj0EkTuMo5Q7ud7bbI4Rw 23-22411-061@se.fjwu.edu.pk
The key's randomart image is:
+--[Ed25519 256]--+
|          .o...o |
|        .o ..o..oo 0 |
|       o ..oo..o..+o |
|      o ..o+...     |
|     . o ..+S      |
|    . + o o       |
|     oE =         |
|    .+o+ .        |
|     .+o.          |
+----[SHA256]-----

PS C:\Users\Syed> \ssh
' ssh' is not recognized as the name of a cmdlet, function, script file, or operable program.
Check the spelling of the name, or if a path was included, verify that the path is correct and try again.
At line:1 char:1
+ \ssh
+-----+CategoryInfo : ObjectNotFound {(\>.\ssh\>String) []}, CommandNotFoundException
+ FullyQualifiedErrorId : CommandNotFoundException

PS C:\Users\Syed> cd $env:USERPROFILE\.ssh
>> dir

Directory: C:\Users\Syed\.ssh

Mode                LastWriteTime         Length Name
----                -----
-a----   10/3/2025  8:25 AM            419 id_ed25519
-a----  10/3/2025  8:25 AM           110 id_ed25519.pub
-a----  9/30/2025  10:40 AM          846 known hosts
-a----  9/30/2025  10:40 AM          98 known_hosts.old

PS C:\Users\Syed> notepad id_ed25519.pub
PS C:\Users\Syed>

```



 23-22411-061-rgb (23-22411-061-rgb)
Your personal account

[Go to your personal profile](#)

[Public profile](#)
[Account](#)
[Appearance](#)
[Accessibility](#)
[Notifications](#)

[Access](#)
[Billing and licensing](#)
[Emails](#)
[Password and authentication](#)
[Sessions](#)
SSH and GPG keys
[Organizations](#)
[Enterprises](#)
[Moderation](#)

[Code, planning, and automation](#)
[Repositories](#)

SSH keys

There are no SSH keys associated with your account.
Check out our guide to [connecting to GitHub using SSH keys](#) or [troubleshoot common SSH problems](#).

[New SSH key](#)

 23-22411-061-rgb (23-22411-061-rgb)
Your personal account

[Go to your personal profile](#)

[Public profile](#)
[Account](#)
[Appearance](#)
[Accessibility](#)
[Notifications](#)

[Access](#)
[Billing and licensing](#)
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SSH and GPG keys
[Organizations](#)
[Enterprises](#)
[Moderation](#)

[Code, planning, and automation](#)

Add new SSH Key

Title

Key type

Key

```
ssh-ed25519 AAAAC3NzaC1lZDI1NTE5AAAAIEkNI0zmnwAMcQVGS0OzeNE3EZLjqDRN1IxFrSUm+ 23-22411-061@se.fju.edu.pk
```

[Add SSH key](#)

You have successfully added the key 'My Laptop Key'.

 23-22411-061-rgb (23-22411-061-rgb)
Your personal account

[Go to your personal profile](#)

[Public profile](#)
[Account](#)
[Appearance](#)
[Accessibility](#)
[Notifications](#)

[Access](#)
[Billing and licensing](#)
[Emails](#)
[Password and authentication](#)

SSH keys

This is a list of SSH keys associated with your account. Remove any keys that you do not recognize.

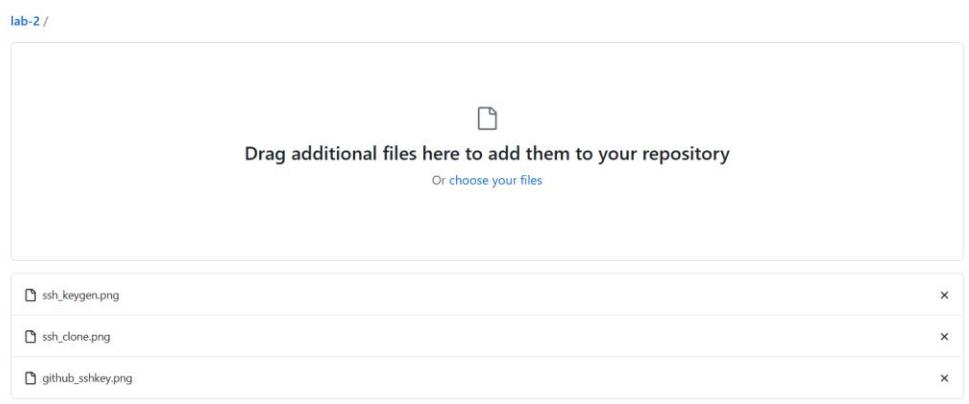
Authentication keys

 My Laptop Key SSH256: hutBtEBka8513McxSGvArYjDEkTuMoSQ7ud7sbbI4Rw Added on Oct 3, 2025 Never used — Read/write	Delete
---	------------------------

[Check out our guide to connecting to GitHub using SSH keys](#) or [troubleshoot common SSH problems](#).

```
PS C:\Users\Syed\.ssh> ssh -T git@github.com
Hi 23-22411-061-rgb! You've successfully authenticated, but GitHub does not provide shell access.
PS C:\Users\Syed\.ssh>
```

```
PS C:\Users\Syed\Documents> git clone git@github.com:23-22411-061-rgb/lab-2.git
Cloning into 'lab-2'...
remote: Enumerating objects: 4, done.
remote: Counting objects: 100% (4/4), done.
remote: Compressing objects: 100% (4/4), done.
remote: Total 4 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
Receiving objects: 100% (4/4), 44.26 KiB | 154.00 KiB/s, done.
PS C:\Users\Syed\Documents>
```



- Task 3:

```
PS C:\Users\Syed\Documents> git config --global user.name "Shumail Zahra"
PS C:\Users\Syed\Documents> git config --global user.email "23-22411-061@se.fjwu.edu.pk"
PS C:\Users\Syed\Documents>
```

```
PS C:\Users\Syed\Documents> 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=schannel
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
gui.recentrepo=C:/Users/Syed/yyyyyy
gui.recentrepo=C:/Users/Syed/Lab2
gui.recentrepo=C:/Users/Syed/Pictures/lab 2
user.email=23-22411-061@se.fjwu.edu.pk
user.name=Shumail Zahra
PS C:\Users\Syed\Documents>
```

```
PS C:\Users\Syed\Documents\lab-2> Move-Item "git_installation.png" "$env:USERPROFILE\Documents\lab-2"
>> Move-Item "repo_private.png" "$env:USERPROFILE\Documents\lab-2"
>> Move-Item "ssh_keygen.png" "$env:USERPROFILE\Documents\lab-2"
>> Move-Item "github_sshkey.png" "$env:USERPROFILE\Documents\lab-2"
>> Move-Item "ssh_clone.png" "$env:USERPROFILE\Documents\lab-2"
>> Move-Item "git_identity.png" "$env:USERPROFILE\Documents\lab-2"
>> Move-Item "git_config_list.png" "$env:USERPROFILE\Documents\lab-2"
>>
PS C:\Users\Syed\Documents\lab-2> cd $env:USERPROFILE\Documents\lab-2
>>
PS C:\Users\Syed\Documents\lab-2> git add *.png
>>
PS C:\Users\Syed\Documents\lab-2> git commit -m "Added all lab screenshots"
>>
[main 80c989d] Added all lab screenshots
 7 files changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 git_config_list.png
 create mode 100644 git_identity.png
 create mode 100644 git_installation.png
 create mode 100644 github_sshkey.png
 create mode 100644 repo_private.png
 create mode 100644 ssh_clone.png
 create mode 100644 ssh_keygen.png
```

```

PS C:\Users\Syed\Documents\lab-2> cd $env:USERPROFILE\Documents\lab-2
PS C:\Users\Syed\Documents\lab-2> git add *.png
PS C:\Users\Syed\Documents\lab-2> git commit -m "Added all lab screenshots"
>>
[detached HEAD 6ddbb7e] Added all lab screenshots
 1 file changed, 0 insertions(+), 0 deletions(-)
 delete mode 100644 git_installation.png
PS C:\Users\Syed\Documents\lab-2> git pull origin main --rebase
From github.com:23-22411-061-rgb/lab-2
 * branch           main      -> FETCH_HEAD
fatal: It seems that there is already a rebase-merge directory, and
I wonder if you are in the middle of another rebase. If that is the
case, please try
    git rebase (--continue | --abort | --skip)
If that is not the case, please
    rm -fr ".git/rebase-merge"
and run me again. I am stopping in case you still have something
valuable there.

PS C:\Users\Syed\Documents\lab-2> git rebase --continue
>>
Successfully rebased and updated refs/heads/main.
PS C:\Users\Syed\Documents\lab-2> git pull origin main --rebase
>>
From github.com:23-22411-061-rgb/lab-2
 * branch           main      -> FETCH_HEAD
Current branch main is up to date.
PS C:\Users\Syed\Documents\lab-2>
PS C:\Users\Syed\Documents\lab-2> git push origin main
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), 427 bytes | 427.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To github.com:23-22411-061-rgb/lab-2.git
  0ba4493..9c3a1b2  main -> main
PS C:\Users\Syed\Documents\lab-2> git log --oneline
>>
9c3a1b2 (HEAD -> main, origin/main, origin/HEAD) Added all lab screenshots
6ddbb7e Added all lab screenshots

```

bug

```

>>
9c3a1b2 (HEAD -> main, origin/main, origin/HEAD) Added all lab screenshots
6ddbb7e Added all lab screenshots
0ba4493 Add files via upload
d806aa2 Add files via upload
956ef3e Delete ssh_keygen.png
87a2995 Delete ssh_clone.png
46d68ac Delete repo_private.png.PNG
ed009f8 Delete github_sshkey.png
034d803 Delete git_installation.png
75b4d48 Delete git_identity.png..PNG
dfa591f Delete git_config_list.png..PNG
7b2b1fa Add files via upload
a873e46 Add files via upload
3baaf9bd Add files via upload
PS C:\Users\Syed\Documents\lab-2> git status
>>
On branch main
Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean
PS C:\Users\Syed\Documents\lab-2> cd $env:USERPROFILE\Documents\lab-2
>> git add git_identity.png git_config_list.png
>> git commit -m "Added Git identity and config screenshots"
>> git push origin main
>>
On branch main
Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean
Everything up-to-date

```

```
PS C:\Users\Syed\Documents\lab-2> dir *.png
```

```
Directory: C:\Users\Syed\Documents\lab-2
```

Mode	LastWriteTime	Length	Name
----	-----	-----	-----
-a---	10/3/2025 8:39 AM	55672	github_sshkey.png
-a---	10/3/2025 9:33 AM	193471	git_config_list.png
-a---	10/3/2025 9:36 AM	16860	git_identity.png
-a---	10/3/2025 10:05 AM	8777	git_installation.png
-a---	10/3/2025 9:25 AM	46191	repo_private.png
-a---	10/3/2025 8:45 AM	20195	ssh_clone.png
-a---	10/3/2025 8:47 AM	44502	ssh_keygen.png

- Task 4:

```
PS C:\Users\Syed\Documents\lab-2> cd $env:USERPROFILE\Documents\lab-2
>>
PS C:\Users\Syed\Documents\lab-2> ls -Force
>>

Directory: C:\Users\Syed\Documents\lab-2

Mode                LastWriteTime      Length Name
----                -----          ---- 
d--h--           10/3/2025 10:12 AM          .git
-a---             10/3/2025 8:39 AM       55672 github_sshkey.png
-a---             10/3/2025 9:33 AM      193471 git_config_list.png
-a---             10/3/2025 9:36 AM      16860 git_identity.png
-a---             10/3/2025 10:05 AM      8777 git_installation.png
-a---             10/3/2025 9:25 AM      46191 repo_private.png
-a---             10/3/2025 8:45 AM       20195 ssh_clone.png
-a---             10/3/2025 8:47 AM      44502 ssh_keygen.png
```

```

PS C:\Users\Syed\Documents\lab-2> Get-ChildItem -Force .git
>>

    Directory: C:\Users\Syed\Documents\lab-2\.git

Mode                LastWriteTime      Length Name
----                -----          ---- 
d-----        10/3/2025   8:44 AM           hooks
d-----        10/3/2025   8:44 AM           info
d-----        10/3/2025   8:44 AM           logs
d-----        10/3/2025  10:05 AM          objects
d-----        10/3/2025   8:44 AM          refs
-a----        10/3/2025  10:12 AM         42 COMMIT_EDITMSG
-a----        10/3/2025   8:44 AM        300 config
-a----        10/3/2025   8:44 AM        73 description
-a----        10/3/2025  10:05 AM        93 FETCH_HEAD
-a----        10/3/2025  10:05 AM        21 HEAD
-a----        10/3/2025  10:12 AM       641 index
-a----        10/3/2025   9:57 AM        41 ORIG_HEAD
-a----        10/3/2025   8:44 AM       112 packed-refs

```

```

PS C:\Users\Syed\Documents\lab-2> ls -Force .git
>>

```

```

    Directory: C:\Users\Syed\Documents\lab-2\.git

Mode                LastWriteTime      Length Name
----                -----          ---- 
d-----        10/3/2025   8:44 AM           hooks
d-----        10/3/2025   8:44 AM           info
d-----        10/3/2025   8:44 AM           logs
d-----        10/3/2025  10:05 AM          objects
d-----        10/3/2025   8:44 AM          refs
-a----        10/3/2025  10:12 AM         42 COMMIT_EDITMSG
-a----        10/3/2025   8:44 AM        300 config
-a----        10/3/2025   8:44 AM        73 description
-a----        10/3/2025  10:05 AM        93 FETCH_HEAD
-a----        10/3/2025  10:05 AM        21 HEAD
-a----        10/3/2025  10:12 AM       641 index
-a----        10/3/2025   9:57 AM        41 ORIG_HEAD
-a----        10/3/2025   8:44 AM       112 packed-refs

```

- **Task 5:**

```
MINGW64:/c/Users/Syed
Syed@DESKTOP-S50GK51 MINGW64 ~
$ rm -rf .git

Syed@DESKTOP-S50GK51 MINGW64 ~
$ |
```

```
Syed@DESKTOP-S50GK51 MINGW64 ~
$ git init
Initialized empty Git repository in C:/Users/Syed/.git/
Syed@DESKTOP-S50GK51 MINGW64 ~ (master)
$ |
```

```
Syed@DESKTOP-S50GK51 MINGW64 ~ (master)
$ echo "# Lab 2 Git Practice" > README.md

Syed@DESKTOP-S50GK51 MINGW64 ~ (master)
$ git add README.md
warning: in the working copy of 'README.md', LF will be replaced by CRLF the next time Git touches it

Syed@DESKTOP-S50GK51 MINGW64 ~ (master)
$ git commit -m "Initial commit"
[master (root-commit) 3afd596] Initial commit
 1 file changed, 1 insertion(+)
 create mode 100644 README.md
```

```
Syed@DESKTOP-S50GK51 MINGW64 ~ (master)
$ git remote add origin git@github.com:23-22411-061-rgb/lab-2.git

Syed@DESKTOP-S50GK51 MINGW64 ~ (master)
$ git push -u origin main
error: src refspec main does not match any
error: failed to push some refs to 'github.com:23-22411-061-rgb/lab-2.git'

Syed@DESKTOP-S50GK51 MINGW64 ~ (master)
$ git push -u origin master
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Writing objects: 100% (3/3), 245 bytes | 61.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote:
remote: Create a pull request for 'master' on GitHub by visiting:
remote:     https://github.com/23-22411-061-rgb/lab-2/pull/new/master
remote:
To github.com:23-22411-061-rgb/lab-2.git
 * [new branch]      master -> master
branch 'master' set up to track 'origin/master'.
```

- **Task 6:**

```
PS C:\Users\Syed\Documents\lab-2> notepad notes.txt
PS C:\Users\Syed\Documents\lab-2> git status
On branch main
Your branch is up to date with 'origin/main'.

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    notes.txt

nothing added to commit but untracked files present (use "git add" to track)
PS C:\Users\Syed\Documents\lab-2>
```

```
PS C:\Users\Syed\Documents\lab-2> git add notes.txt
PS C:\Users\Syed\Documents\lab-2> git commit -m "Add notes.txt"
[main ef581ad] Add notes.txt
 1 file changed, 1 insertion(+)
 create mode 100644 notes.txt
PS C:\Users\Syed\Documents\lab-2>
```

• Task 7:

The screenshot shows the GitHub interface for a repository named 'lab-2'. The 'Code' tab is selected. A modal dialog is open, titled 'Switch branches/tags', with a search bar containing 'bugfix/user-auth-error'. Below the search bar are tabs for 'Branches' and 'Tags'. Under 'Branches', there is an option to 'Create branch bugfix/user-auth-error from main'. The main page displays a list of recent commits, with one commit by '9c3a1b2' from '1 hour ago'.

```
Syed@DESKTOP-S50GK51 MINGW64 ~ (main)
$ cd ~/Documents/lab-2

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (main)
$ git pull origin bugfix/user-auth-error
From github.com:23-22411-061-rgb/lab-2
 * branch            bugfix/user-auth-error  -> FETCH_HEAD
 * [new branch]      bugfix/user-auth-error -> origin/bugfix/user-auth-error
Already up to date.
```

```
Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Tab-2 (bugfix/user-auth-error)
$ git branch
* bugfix/user-auth-error
  main
```

- Task 8:

```
Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (bugfix/user-auth-error)
$ git checkout -b feature/db-connection
Switched to a new branch 'feature/db-connection'

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (feature/db-connection)
$ git push origin feature/db-connection
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote:
remote: Create a pull request for 'feature/db-connection' on GitHub by visiting
remote:     https://github.com/23-22411-061-rgb/lab-2/pull/new/feature/db-conne
ction
remote:
To github.com:23-22411-061-rgb/lab-2.git
 * [new branch]      feature/db-connection -> feature/db-connection
```

- Task 9

```
Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (main)
$ git checkout -b feature-1
fatal: a branch named 'feature-1' already exists

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (main)
$ git branch
  bugfix/user-auth-error
  feature-1
  feature/db-connection
* main
```

```
Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (main)
$ git add main.py

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (main)
$ git commit -m "Add new function to main.py"
On branch main
Your branch is ahead of 'origin/main' by 3 commits.
  (use "git push" to publish your local commits)

nothing to commit, working tree clean

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (main)
$ git commit -m "Add new function to main.py"
On branch main
Your branch is ahead of 'origin/main' by 3 commits.
  (use "git push" to publish your local commits)

nothing to commit, working tree clean

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (main)
$ git push origin main
Enumerating objects: 9, done.
Counting objects: 100% (9/9), done.
Delta compression using up to 8 threads
Compressing objects: 100% (6/6), done.
Writing objects: 100% (8/8), 700 bytes | 87.00 KiB/s, done.
Total 8 (delta 4), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (4/4), completed with 1 local object.
To github.com:23-22411-061-rgb/lab-2.git
  9c3a1b2..d6bb084  main -> main
```

```
MINGW64:c/Users/Syed/Documents/lab-2
Merge branch 'feature-1'
# Please enter a commit message to explain why this merge is necessary,
# especially if it merges an updated upstream into a topic branch.
# Lines starting with '#' will be ignored, and an empty message aborts
# the commit.
```

```

.git/MERGE\_MSG [unix] (12:00 03/10/2025)

```
Merge branch 'feature-1'
```

```
Merge made by the 'ort' strategy.
main.py | 1 +
1 file changed, 1 insertion(+)
create mode 100644 main.py
```

```
Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (main)
$ git checkout main
Already on 'main'
Your branch is up to date with 'origin/main'.
```

```
Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (main)
$ git merge feature-1
Already up to date.
```

```
Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (main)
$ git push origin main
Everything up-to-date

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (main)
$ git push origin feature-1
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote:
remote: Create a pull request for 'feature-1' on GitHub by visiting:
remote: https://github.com/23-22411-061-rgb/lab-2/pull/new/feature-1
remote:
To github.com:23-22411-061-rgb/lab-2.git
 * [new branch] feature-1 -> feature-1
```

## • Task 10:

### Open a pull request

Create a new pull request by comparing changes across two branches. If you need to, you can also compare across forks. [Learn more about diff comparisons here.](#)

The screenshot shows the GitHub pull request creation interface. At the top, it says "base: feature/db-connection" and "compare: main". A green checkmark indicates "Able to merge". Below this, there are fields for "Add a title" and "Add a description". The description area includes a rich text editor toolbar and a text input field with placeholder "Add your description here...". To the right of the description, there are sections for "Reviewers" (No reviews), "Assignees" (No one—assign yourself), "Labels" (None yet), "Projects" (None yet), "Milestone" (No milestone), and "Development" (Use Closing keywords in the description to automatically close issues). Below these, there is a note about GitHub Community Guidelines and a "Create pull request" button. The main body of the interface shows a comparison between two branches. It lists "3 commits" and "2 files changed" with "1 contributor". The commits are: "Add notes.txt" (23-22411-061-rgb, 1 hour ago), "Add new function to main.py" (23-22411-061-rgb, 31 minutes ago), and "Merge branch 'feature-1'" (23-22411-061-rgb, 29 minutes ago). Below the commits, it says "Showing 2 changed files with 2 additions and 0 deletions." It displays the diff for "main.py" and "notes.txt". The "main.py" diff shows a single addition: "print('Hello World')". The "notes.txt" diff shows a single addition: "abc". There are "Split" and "Unified" buttons at the bottom of the diff view.

my pull request #1

**Merged** 23-22411-061-rgb merged 3 commits into [feature/db-connection](#) from [main](#) 1 minute ago

Conversation 0 Commits 3 Checks 0 Files changed 2 +2 -0

23-22411-061-rgb commented 2 minutes ago  
lab

23-22411-061-rgb added 3 commits 1 hour ago

- Add notes.txt
- Add new function to main.py
- Merge branch 'feature-1'

23-22411-061-rgb merged commit [0458941](#) into [feature/db-connection](#) 1 minute ago

Pull request successfully merged and closed  
You're all set — the branch has been merged.

Reviewers  
No reviews  
Still in progress? [Convert to draft](#)

Assignees  
No one—[assign yourself](#)

Labels  
None yet

Projects  
None yet

Milestone  
None

Development  
Successfully merging this pull request may close these issues.  
[Merge list](#)

**Open** my pull request #1  
23-22411-061-rgb wants to merge 3 commits into [feature/db-connection](#) from [main](#)

- Add new function to main.py
- Merge branch 'feature-1'

Commit message  
Merge pull request #1 from 23-22411-061-rgb/main

Extended description  
my pull request

This commit will be authored by 23-22411-061@se.fjwu.edu.pk.

Confirm merge Cancel

None yet

Projects  
None yet

Milestone  
None

Development  
Successfully merging this pull request may close these issues.  
None yet

Notifications  
[Unsubscribe](#) Customize  
You're receiving notifications because you authored the thread.

1 participant

Code Issues Pull requests Actions Projects Security Insights Settings

pull request#2

**Merged** 23-22411-061-rgb merged 1 commit into [feature/db-connection](#) from [revert-1-main](#) now

Conversation 0 Commits 1 Checks 0 Files changed 2 +0 -2

23-22411-061-rgb commented now  
Reverts #1

23-22411-061-rgb reverted commit [b403693](#) into [feature/db-connection](#) now

Pull request successfully merged and closed  
You're all set — the [revert-1-main](#) branch can be safely deleted.

Reviewers  
No reviews  
Still in progress? [Convert to draft](#)

Assignees  
No one—[assign yourself](#)

Labels  
None yet

Projects  
None yet

Milestone  
None

## • Task 11:

### CREATION BRANCHES:

```

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (main)
$ git checkout main
Already on 'main'
Your branch is up to date with 'origin/main'.

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (main)
$ git pull origin main
From github.com:23-22411-061-rgb/lab-2
 * branch main -> FETCH_HEAD
Already up to date.

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (main)
$ git checkout -b develop
Switched to a new branch 'develop'

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (develop)
$ git push origin develop
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote:
remote: Create a pull request for 'develop' on GitHub by visiting:
remote: https://github.com/23-22411-061-rgb/lab-2/pull/new/develop
remote:
To github.com:23-22411-061-rgb/lab-2.git
 * [new branch] develop -> develop

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (develop)
$ git checkout -b staging
Switched to a new branch 'staging'
g
Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (staging)
$ git push origin staging
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote:
remote: Create a pull request for 'staging' on GitHub by visiting:
remote: https://github.com/23-22411-061-rgb/lab-2/pull/new/staging
remote:
To github.com:23-22411-061-rgb/lab-2.git
 * [new branch] staging -> staging

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (staging)

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (staging)
$ git checkout develop
Switched to branch 'develop'

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (develop)
$ git checkout -b feature/login-page
Switched to a new branch 'feature/login-page'

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (feature/login-page)
$ git push origin feature/login-page
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote:
remote: Create a pull request for 'feature/login-page' on GitHub by visiting:
remote: https://github.com/23-22411-061-rgb/lab-2/pull/new/feature/login-pa
ge
remote:
To github.com:23-22411-061-rgb/lab-2.git
 * [new branch] feature/login-page -> feature/login-page

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (feature/login-page)
$ git checkout develop
Switched to branch 'develop'

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (develop)
$ git checkout develop
Already on 'develop'

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (develop)
$ git checkout -b bugfix/header-error
Switched to a new branch 'bugfix/header-error'

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (bugfix/header-error)
$ git push origin bugfix/header-error
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote:
remote: Create a pull request for 'bugfix/header-error' on GitHub by visiting:
remote: https://github.com/23-22411-061-rgb/lab-2/pull/new/bugfix/header-er
ror
remote:
To github.com:23-22411-061-rgb/lab-2.git
 * [new branch] bugfix/header-error -> bugfix/header-error

```

## Example workflow:

```
Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (bugfix/header-error)
$ git checkout develop
Switched to branch 'develop'

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (develop)
$ git checkout -b feature/login-page
fatal: a branch named 'feature/login-page' already exists

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (develop)
$ git add main.py

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (develop)
$ git commit -m"Add login page function"
On branch develop
nothing to commit, working tree clean

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (develop)
$ git push origin feature/login-page
Everything up-to-date
```

```
Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (develop)
$ git checkout develop
git pull origin develop
git merge feature/login-page
git push origin develop
Already on 'develop'
From github.com:23-22411-061-rgb/lab-2
 * branch develop -> FETCH_HEAD
Already up to date.
Already up to date.
Everything up-to-date
```

```
Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (develop)
$ git checkout develop
Already on 'develop'

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (develop)
$ git pull origin develop
From github.com:23-22411-061-rgb/lab-2
 * branch develop -> FETCH_HEAD
Already up to date.

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (develop)
$ git merge feature/login-page
Already up to date.

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (develop)
$ git push origin develop
Everything up-to-date

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (develop)
$

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (develop)
$ git checkout staging
Switched to branch 'staging'

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (staging)
$ git pull origin staging
From github.com:23-22411-061-rgb/lab-2
 * branch staging -> FETCH_HEAD
Already up to date.

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (staging)
$ git merge develop
Already up to date.

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (staging)
$ git push origin staging
Everything up-to-date

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (staging)
$ git checkout main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (main)
$ git pull origin main
From github.com:23-22411-061-rgb/lab-2
 * branch main -> FETCH_HEAD
Already up to date.
git
Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (main)
$ git merge staging
Already up to date.

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (main)
$ git push origin main
Everything up-to-date
```

```
Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (develop)
$ git checkout staging
Switched to branch 'staging'

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (staging)
$ git pull origin staging
From github.com:23-22411-061-rgb/lab-2
 * branch staging -> FETCH_HEAD
Already up to date.

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (staging)
$ git merge develop
Already up to date.

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (staging)
$ git push origin staging
Everything up-to-date

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (staging)
$ git checkout main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (main)
$ git pull origin main
From github.com:23-22411-061-rgb/lab-2
 * branch main -> FETCH_HEAD
Already up to date.
gin
Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (main)
$ git merge staging
Already up to date.

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (main)
$ git push origin main
Everything up-to-date

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (main)
$ |
```

## ➤ Bonus

```
Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (main)
$ git checkout -b collab
git push origin collab
Switched to a new branch 'collab'
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote:
remote: Create a pull request for 'collab' on GitHub by visiting:
remote: https://github.com/23-22411-061-rgb/lab-2/pull/new/collab
remote:
To github.com:23-22411-061-rgb/lab-2.git
 * [new branch] collab -> collab
```

```
Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (collab)
$ git checkout collab
git pull origin collab
Already on 'collab'
From github.com:23-22411-061-rgb/lab-2
 * branch collab -> FETCH_HEAD
Already up to date.

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (collab)
$ git add notes.txt
git commit -m "Add Shumail's fun fact"
git push origin collab
On branch collab
nothing to commit, working tree clean
Everything up-to-date

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (collab)
$ git add notes.txt

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (collab)
$ git commit -m "Add Shumail's fun fact"
On branch collab
nothing to commit, working tree clean

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (collab)
$ git push origin collab
Everything up-to-date
```

```
Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (collab)
$ git checkout main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.

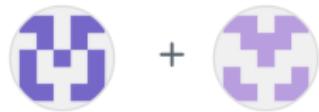
Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (main)
$ git pull origin main
From github.com:23-22411-061-rgb/lab-2
 * branch main -> FETCH_HEAD
Already up to date.

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (main)
$ git merge collab
Already up to date.

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/lab-2 (main)
$ git push origin main
Everything up-to-date
```

- **Task 12: word**





[23-22411-061-rgb](#) invited you to collaborate on  
[23-22411-061-rgb/lab-2](#)

[Accept invitation](#)

[Decline invitation](#)

Owners of lab-2 will be able to see:

- Your public profile information
- [Certain activity](#) within this repository
- Country of request origin
- Your access level for this repository
- Your IP address

Is this user sending spam or malicious content?

[Block 23-22411-061-rgb](#)

**lab-2** (Private) [Watch](#)

---

[main](#) [11 Branches](#) [0 Tags](#) Go to file  [t](#) [Add file](#) [Code](#)

---

|  | 23-22411-061-rgb Merge branch 'feature-1' | d6bb084 · 10 hours ago <a href="#">17 Commits</a> |
|--|-------------------------------------------|---------------------------------------------------|
|  | git_config_list.png                       | Add files via upload · 13 hours ago               |
|  | git_identity.png                          | Add files via upload · 13 hours ago               |
|  | git_installation.png                      | Added all lab screenshots · 12 hours ago          |
|  | github_sshkey.png                         | Add files via upload · 13 hours ago               |
|  | main.py                                   | Add new function to main.py · 11 hours ago        |
|  | notes.txt                                 | Add notes.txt · 11 hours ago                      |
|  | repo_private.png                          | Add files via upload · 13 hours ago               |
|  | ssh_clone.png                             | Add files via upload · 13 hours ago               |
|  | ssh_keygen.png                            | Add files via upload · 13 hours ago               |

The screenshot shows a GitHub pull request interface. The repository is 23-22411-057-sudo and the branch is Lab2. The pull request has 1 commit and 1 file changed. The file changed is feature2.py, which contains the following diff:

```
@@ -0,0 +1 @@
1 + Print('Feature 2')
```

The review comment is: "Please fix function name and add error handling." The interface includes a rich text editor toolbar and buttons for Cancel, Add single comment, and Start a review.

The screenshot shows a GitHub pull request interface for notes.txt. The pull request has 1 commit and 1 file changed. The file changed is notes.txt, which contains the following diff:

```
@@ -1 +1 @@
1 - abc
```

The review comment is: "Leave a comment". The interface includes a rich text editor toolbar and buttons for Cancel, Add review comment, and a reply section with previous comments from the pull request.

## 1. Reviewer Actions and Approves:

```
Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (feature-2)
$ git checkout feature-hello
error: pathspec 'feature-hello' did not match any file(s) known to git

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (feature-2)
$ ^C

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (feature-2)
$ git checkout -b feature-hello
Switched to a new branch 'feature-hello'

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (feature-hello)
$ echo "def say_hello():\n print('Hello World')" > main.py

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (feature-hello)
$ cat main.py
def say_hello():
 print('Hello World')

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (feature-hello)
$ git add main.py
warning: in the working copy of 'main.py', LF will be replaced by CRLF the next time Git touches it

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (feature-hello)
$ git commit -m "Add say_hello function with fixed message"
[feature-hello 9d1eb44] Add say_hello function with fixed message
 1 file changed, 1 insertion(+), 1 deletion(-)

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (feature-hello)
$ git push origin feature-hello
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 331 bytes | 66.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
remote:
remote: Create a pull request for 'feature-hello' on GitHub by visiting:
remote: https://github.com/23-22411-057-sudo/Lab2/pull/new/feature-hello
remote:
To github.com:sudo:23-22411-057-sudo/Lab2.git
 * [new branch] feature-hello -> feature-hello

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (feature-hello)
$ |
```

### 1. Update the file main.py

```
Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (main)
$ echo "def say_hello(name):" > main.py
echo " print(f\"Hello {name}\")" >> main.py
echo "" >> main.py
echo "if __name__ == '__main__':" >> main.py
echo " say_hello(\"Shumail\")" >> main.py

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (main)
$ cat main.py
def say_hello(name):
 print(f"Hello {name}")

if __name__ == "__main__":
 say_hello("Shumail")

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (main)
$ git add main.py
warning: in the working copy of 'main.py', LF will be replaced by CRLF the next
time Git touches it

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (main)
$ git commit -m "Update say_hello test to use 'Shumail'"
[main 89beb98] Update say_hello test to use 'Shumail'
 1 file changed, 5 insertions(+), 1 deletion(-)

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (main)
$ git push origin feature-hello
Everything up-to-date

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (main)
$ |
```

## Merge the PR:

The image shows a GitHub pull request merge interface. At the top left is a green circular icon with a white checkmark and a gear symbol. Next to it is the text "No conflicts with base branch" and the subtext "Merging can be performed automatically." Below this is a green button labeled "Merge pull request" with a dropdown arrow, followed by the text "You can also merge this with the command line. [View command line instructions.](#)". To the left is a blue circular icon with a white gear symbol. Below these are sections for "Add a comment" with "Write" and "Preview" tabs, rich text editing tools (bold, italic, etc.), and a text input field "Add your comment here...". At the bottom left is a "Markdown is supported" link and a "Paste, drop, or click to add files" button. At the bottom right are "Close pull request" and "Comment" buttons. A note at the bottom left says "Remember, contributions to this repository should follow our [GitHub Community Guidelines](#).  
ProTip! Add comments to specific lines under [Files changed](#).

## 2. Branch handling after merge

## Delete the branch

 Pull request successfully merged and closed  
You're all set — the [feature-2](#) branch can be safely deleted.

[Delete branch](#)

 Add a comment

[Write](#) [Preview](#) 

Add your comment here...

 Markdown is supported  Paste, drop, or click to add files

 Comment

 Remember, contributions to this repository should follow our [GitHub Community Guidelines](#).

 [ProTip!](#) Add `.patch` or `.diff` to the end of URLs for Git's plaintext views.

### Keep the branch

- Keep the branch if you plan more work on it.
  - Document the reason in a file called REVIEW NOTES.md

```

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (feature-hello)
$ echo "# REVIEW_NOTES.md" > REVIEW_NOTES.md
echo "" >> REVIEW_NOTES.md
echo "## feature-hello branch" >> REVIEW_NOTES.md
echo "- Kept after merge for possible future enhancements." >> REVIEW_NOTES.md
echo "- Original change: Updated say_hello() to accept a name parameter." >> REVIEW_NOTES.md

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (feature-hello)
$ cat REVIEW_NOTES.md
REVIEW_NOTES.md

feature-hello branch
- Kept after merge for possible future enhancements.
- Original change: Updated say_hello() to accept a name parameter.

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (feature-hello)
$ git add REVIEW_NOTES.md
git commit -m "Add branch handling notes after PR merge"
git push origin feature-hello
warning: in the working copy of 'REVIEW_NOTES.md', LF will be replaced by CRLF the next time Git touches it
[feature-hello 1271070] Add branch handling notes after PR merge
 1 file changed, 5 insertions(+)
 create mode 100644 REVIEW_NOTES.md
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), 440 bytes | 88.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To github.com-sudo:23-22411-057-sudo/Lab2.git
 289a0bd..1271070 feature-hello -> feature-hello

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (feature-hello)

```

## ● Task 13: Branch Cleanup Best Practices

### Delete the Remote Branch via GitHub UI

23-22411-057-sudo deleted the [feature-2](#) branch [now](#)

**Pull request successfully merged and closed**  
You're all set — the branch has been merged.

Add a comment

Write Preview

Add your comment here...

Markdown is supported Paste, drop, or click to add files

Comment

Remember, contributions to this repository should follow our [GitHub Community Guidelines](#).

ProTip! Add [.patch](#) or [.diff](#) to the end of URLs for Git's plaintext views.

### Git Bash command to verify deletion (optional)

```
Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (feature-hello)
$

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (feature-hello)
$ git fetch -p
From github.com-sudo:23-22411-057-sudo/Lab2
 - [deleted] (none) -> origin/feature-2
remote: Enumerating objects: 4, done.
remote: Counting objects: 100% (4/4), done.
remote: Compressing objects: 100% (4/4), done.
remote: Total 4 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
Unpacking objects: 100% (4/4), 3.42 KiB | 102.00 KiB/s, done.
 7eec70a..cfbe442 feature/db-connection -> origin/feature/db-connection
 a28b864..2d17804 main -> origin/main

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (feature-hello)
$ |
```

## Update your Local Repository

```
Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (main)
$ git branch -d feature-hello
error: the branch 'feature-hello' is not fully merged
hint: If you are sure you want to delete it, run 'git branch -D feature-hello'
hint: Disable this message with "git config set advice.forceDeleteBranch false"

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (main)
$ git branch
 bugfix/header-error
 bugfix/user-auth-error
 collab
 develop
 feature-1
 feature-2
 feature-hello
 feature/db-connection
 feature/login-page
* main
 staging

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (main)
$ |
```

## Exam Evaluation Questions

### Q1\_branch\_created

```
Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab1 (master)
$ git checkout -b Q1-branch
Switched to a new branch 'Q1-branch'

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab1 (Q1-branch)
$ |
```

### Q1\_commit\_done

```
Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab1 (Q1-branch)
$ echo "This is a test for Q1" >> notes.txt

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab1 (Q1-branch)
$ git add notes.txt
warning: in the working copy of 'notes.txt', LF will be replaced by CRLF the
t time Git touches it

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab1 (Q1-branch)
$ git commit -m "Q1: Added test note"
[Q1-branch e59ac6b] Q1: Added test note
 1 file changed, 1 insertion(+)
 create mode 100644 notes.txt

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab1 (Q1-branch)
$ |
```

## Q1\_merge\_done

```
Syed@DESKTOP-S50GK51 MINGW64 ~ (master)
$ git checkout -b Q1-branch
Switched to a new branch 'Q1-branch'

Syed@DESKTOP-S50GK51 MINGW64 ~ (Q1-branch)
$ git checkout main
error: pathspec 'main' did not match any file(s) known to git

Syed@DESKTOP-S50GK51 MINGW64 ~ (Q1-branch)
$ git merge Q1-branch
Already up to date.

Syed@DESKTOP-S50GK51 MINGW64 ~ (Q1-branch)
$ |
```

## Q1\_merge\_history

```
Syed@DESKTOP-S50GK51 MINGW64 ~ (Q1-branch)
$ git log --oneline --graph --decorate --all
* 4d64cc5 (HEAD -> Q1-branch, master) Initial commit

Syed@DESKTOP-S50GK51 MINGW64 ~ (Q1-branch)
$ |
```

## Q2\_branches\_created.

```
Syed@DESKTOP-S50GK51 MINGW64 ~ (Q1-branch)
$ git checkout main
error: pathspec 'main' did not match any file(s) known to git

Syed@DESKTOP-S50GK51 MINGW64 ~ (Q1-branch)
$ git checkout -b develop
Switched to a new branch 'develop'

Syed@DESKTOP-S50GK51 MINGW64 ~ (develop)
$ git checkout -b staging
Switched to a new branch 'staging'

Syed@DESKTOP-S50GK51 MINGW64 ~ (staging)
$ |
```

## Q2\_feature\_branch\_commit

```
Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (develop)
$ git checkout develop
Already on 'develop'

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (develop)
$ git pull origin develop
From github.com-sudo:23-22411-057-sudo/Lab2
 * branch develop -> FETCH_HEAD
Already up to date.
e
Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (develop)
$ git merge feature/login-page
Already up to date.

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (develop)
$ git push origin develop
Everything up-to-date

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (develop)
$ git push origin staging
Everything up-to-date

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (develop)
$ git merge develop
Already up to date.

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (develop)
$ git push origin staging
Everything up-to-date
m
Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (develop)
$ git checkout main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (main)
$ git pull origin main
From github.com-sudo:23-22411-057-sudo/Lab2
 * branch main -> FETCH_HEAD
Already up to date.

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (main)
$ git merge staging
Already up to date.

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (main)
$ git push origin main
Everything up-to-date

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (main)
$ git checkout staging
Switched to branch 'staging'

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (staging)
$ git pull origin staging
From github.com-sudo:23-22411-057-sudo/Lab2
 * branch staging -> FETCH_HEAD
```

## Q2\_merge\_into\_develop



Git 2.51.0.2 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 343.3 MB of disk space.

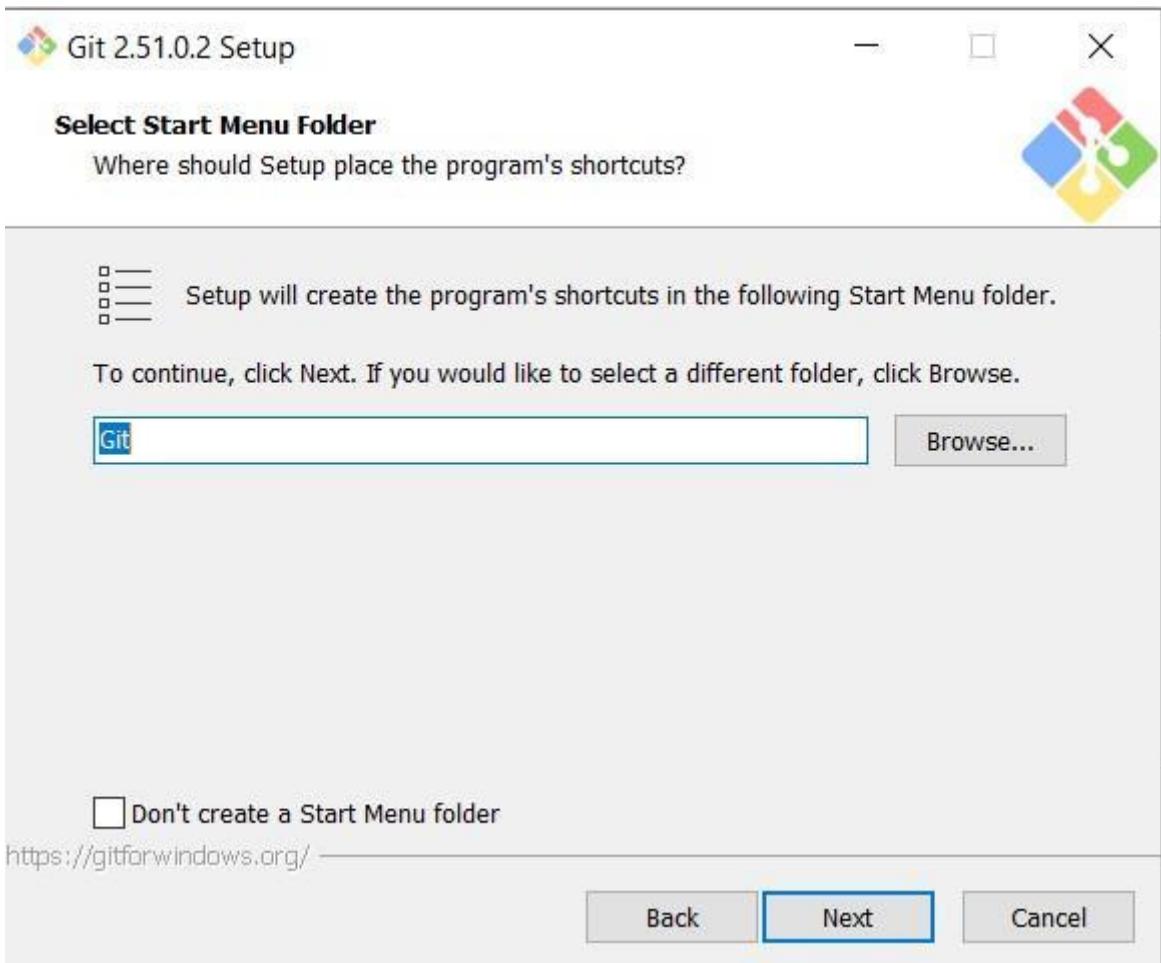
<https://gitforwindows.org/>

Back

Next

Cancel

**Q2\_merge\_into\_staging**



**Q2\_merge\_into\_main**

```
Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (main)
$ git pull origin main
From github.com-sudo:23-22411-057-sudo/Lab2
 * branch main -> FETCH_HEAD
Already up to date.

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (main)
$ git merge staging
Already up to date.

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (main)
$ git push origin main
Everything up-to-date

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (main)
$ git checkout staging
Switched to branch 'staging'

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (staging)
$ git pull origin staging
From github.com-sudo:23-22411-057-sudo/Lab2
 * branch staging -> FETCH_HEAD
Already up to date.
g
Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (staging)
$ git merge develop
Already up to date.

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (staging)
$ git push origin staging
Everything up-to-date
gi
Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (staging)
$ git checkout main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (main)
$ git pull origin main
From github.com-sudo:23-22411-057-sudo/Lab2
 * branch main -> FETCH_HEAD
Already up to date.
s
Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (main)
$ git merge staing
merge: staing - not something we can merge

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (main)
$ git merge staging
Already up to date.

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (main)
$ git push origin main
Everything up-to-date

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (main)
$ |
```

## **Q2\_stage\_verification**

```
'Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (collab)
$ git checkout main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (main)
$ git pull origin main
From github.com-sudo:23-22411-057-sudo/Lab2
 * branch main -> FETCH_HEAD
Already up to date.
cl
Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (main)
$ git merge collab
Already up to date.

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (main)
$ git push origin main
Everything up-to-date

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (main)
$ git checkout -b feature-2
Switched to a new branch 'feature-2'

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (feature-2)
$ echo "Print('Feature 2')" > feature2.py

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (feature-2)
$ git add feature2.py
warning: in the working copy of 'feature2.py', LF will be replaced by CRLF the next time Git touches it

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (feature-2)
$ git commit -m "Add feature2.py"
[feature-2 78df11b] Add feature2.py
 1 file changed, 1 insertion(+)
 create mode 100644 feature2.py

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (feature-2)
$ git push origin feature-2
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 299 bytes | 74.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
remote:
remote: Create a pull request for 'feature-2' on GitHub by visiting:
remote: https://github.com/23-22411-057-sudo/Lab2/pull/new/feature-2
remote:
To github.com-sudo:23-22411-057-sudo/Lab2.git
 * [new branch] feature-2 -> feature-2
```

## **Q3\_branches\_modified**

The screenshot shows a GitHub repository interface. At the top, there are two cards: one for 'feature/db-connection' (last pushed 28 minutes ago) and one for 'feature-2' (last pushed 2 minutes ago). Both cards have a 'Compare & pull request' button. Below these are search and filter options, including a 'Filters' dropdown set to 'is:pr is:open', a search bar with 'is:pr is:open', and buttons for 'Labels 9', 'Milestones 0', 'New pull request', and sorting. At the bottom, a message states 'There aren't any open pull requests.' followed by a link to an advanced search.

## Q3\_merge\_conflict

### Open a pull request

Create a new pull request by comparing changes across two branches. If you need to, you can also compare across forks. [Learn more about diff comparisons](#)

The screenshot shows a pull request creation interface. At the top, there are dropdown menus for 'base: main' and 'compare: feature-2'. A green checkmark indicates 'Able to merge. These branches can be automatically merged.' Below this, there's a title field with a purple icon containing a plus sign, labeled 'Add a title', and a text input field containing 'Add feature2.py'. Under 'Add a description', there's a rich text editor toolbar with 'Write' and 'Preview' tabs, and a text area containing the markdown string 'This PR adds feature2.py for testing Git workflow'. A note says 'Markdown is supported'. Below the text area is a file upload section with a placeholder 'Paste, drop, or click to add files'. At the bottom right is a green 'Create pull request' button.

## Q3\_conflict\_resolved

```
Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (staging)
$ git checkout develop
Switched to branch 'develop'

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (develop)
$ git checkout -b feature/login-page
Switched to a new branch 'feature/login-page'

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (feature/login-page)
$ git push origin feature/login-page
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote:
remote: Create a pull request for 'feature/login-page' on GitHub by visiting:
remote: https://github.com/23-22411-057-sudo/Lab2/pull/new/feature/login-pa
ge
remote:
To github.com:sudo:23-22411-057-sudo/Lab2.git
 * [new branch] feature/login-page -> feature/login-page

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (feature/login-page)
$ git checkout develop
Switched to branch 'develop'

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (develop)
$ git checkout develop
Already on 'develop'

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (develop)
$ git checkout -b bugfix/header-error
Switched to a new branch 'bugfix/header-error'

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (bugfix/header-error)
$ git push origin bugfix/header-error
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote:
remote: Create a pull request for 'bugfix/header-error' on GitHub by visiting:
remote: https://github.com/23-22411-057-sudo/Lab2/pull/new/bugfix/header-er
ror
remote:
To github.com:sudo:23-22411-057-sudo/Lab2.git
 * [new branch] bugfix/header-error -> bugfix/header-error

Syed@DESKTOP-S50GK51 MINGW64 ~/Documents/Lab2 (bugfix/header-error)
$ |
```

### Q3\_final\_file

