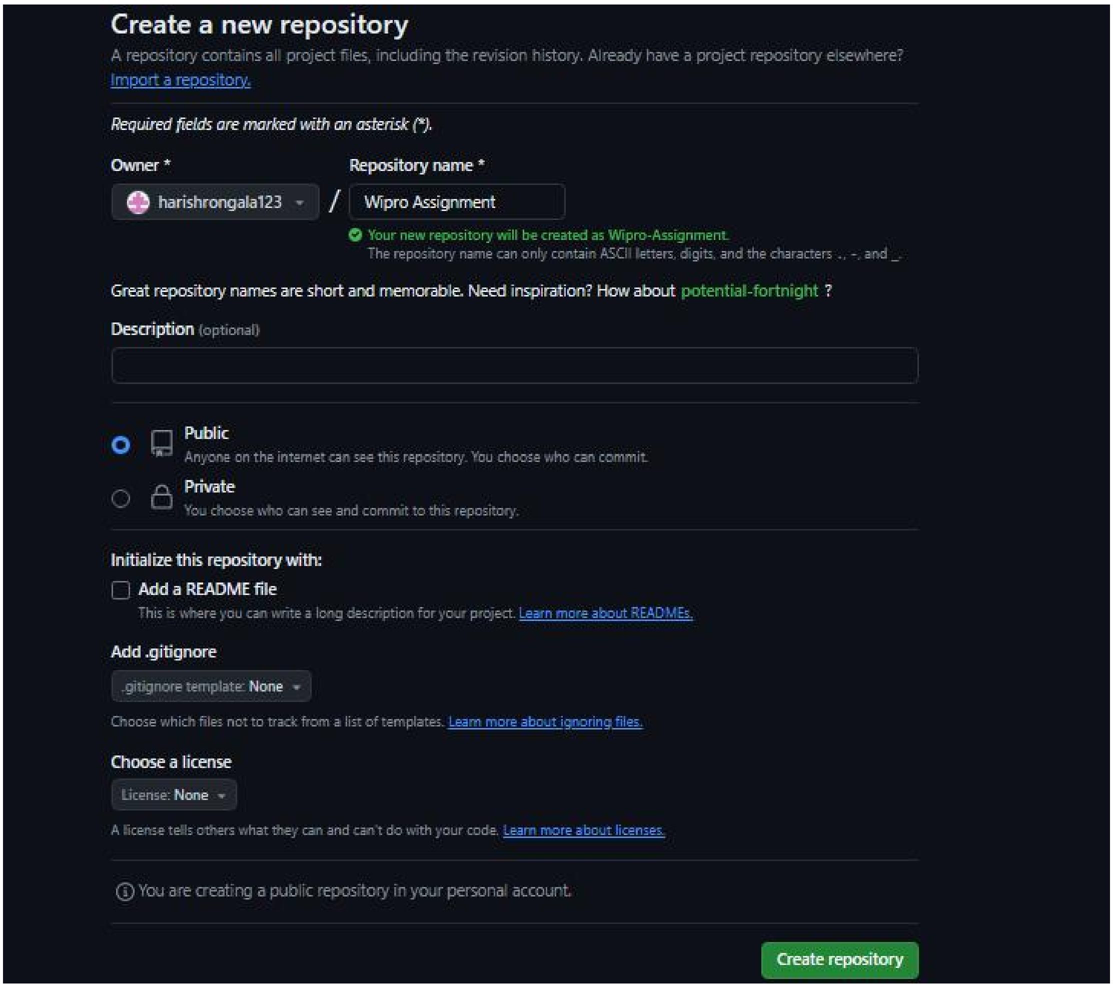
Git Assignment

Assignment 1: Initialize a new Git repository in a directory of your choice. Add a simple text file to the repository and make the first commit.

Initialize a new Git Repository:

Step 1: Firstly we need to create an account in GitHub. After that we need to create a new Repository with a name in the GitHub where all the files be stored.



Create a new repository

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

Required fields are marked with an asterisk (*).

Owner * harishrongala123 / Repository name * Wipro Assignment

Your new repository will be created as Wipro-Assignment.
The repository name can only contain ASCII letters, digits, and the characters ., -, and _.

Great repository names are short and memorable. Need inspiration? How about potential-fortnight ?

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:

□ Add a README file
This is where you can write a long description for your project. Learn more about READMEs.

Add .gitignore
.gitignore template: None
Choose which files not to track from a list of templates. Learn more about ignoring files.

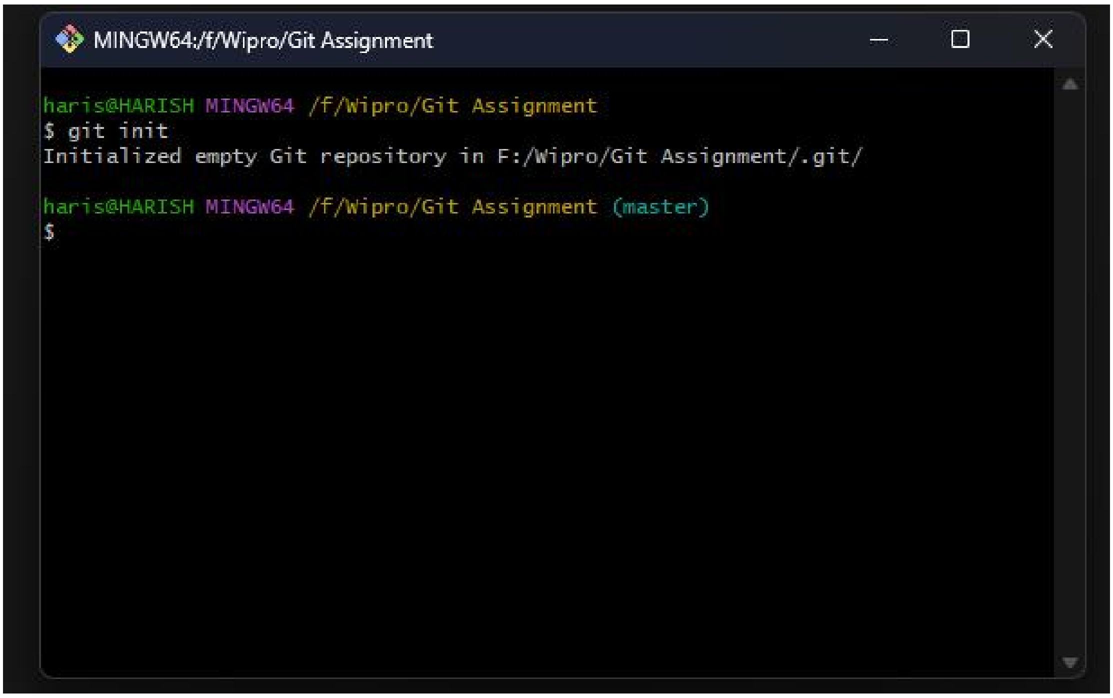
Choose a license
License: None
A license tells others what they can and can't do with your code. Learn more about licenses.

ⓘ You are creating a public repository in your personal account.

Step 2:

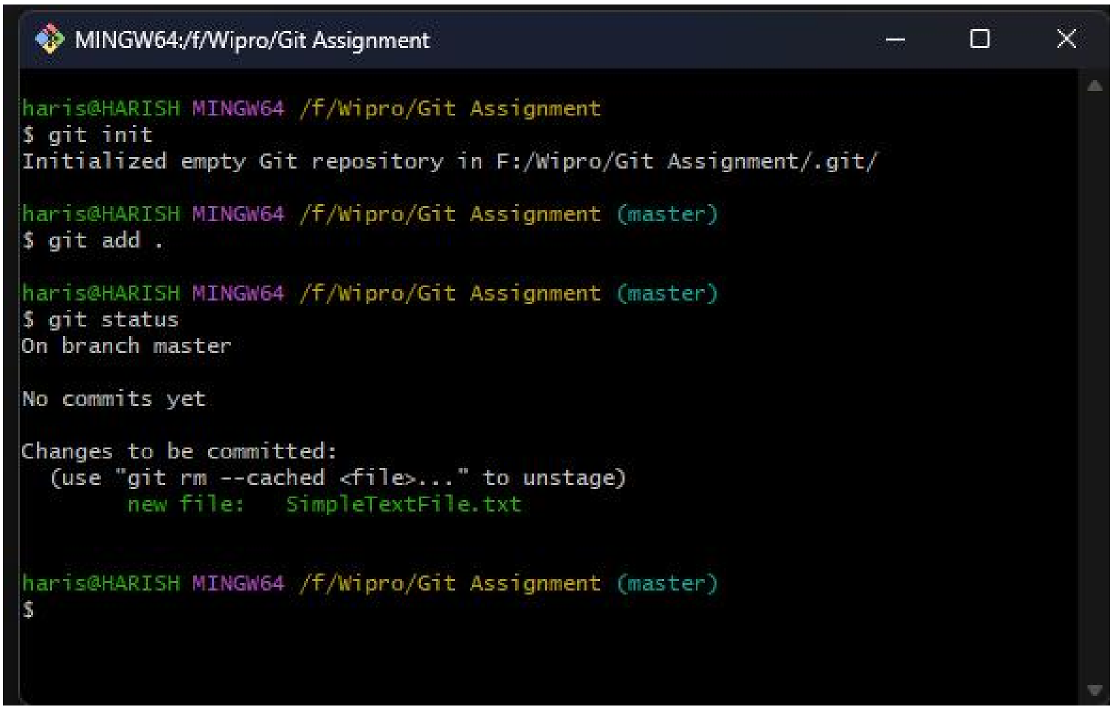
Make Sure we have Git installed in the PC. Go to the file which we need to add in the repository and open the git Bash or command prompt with the same address.

Step 3:
In the Command prompt use **"git init"** command to initialize the Local Repository



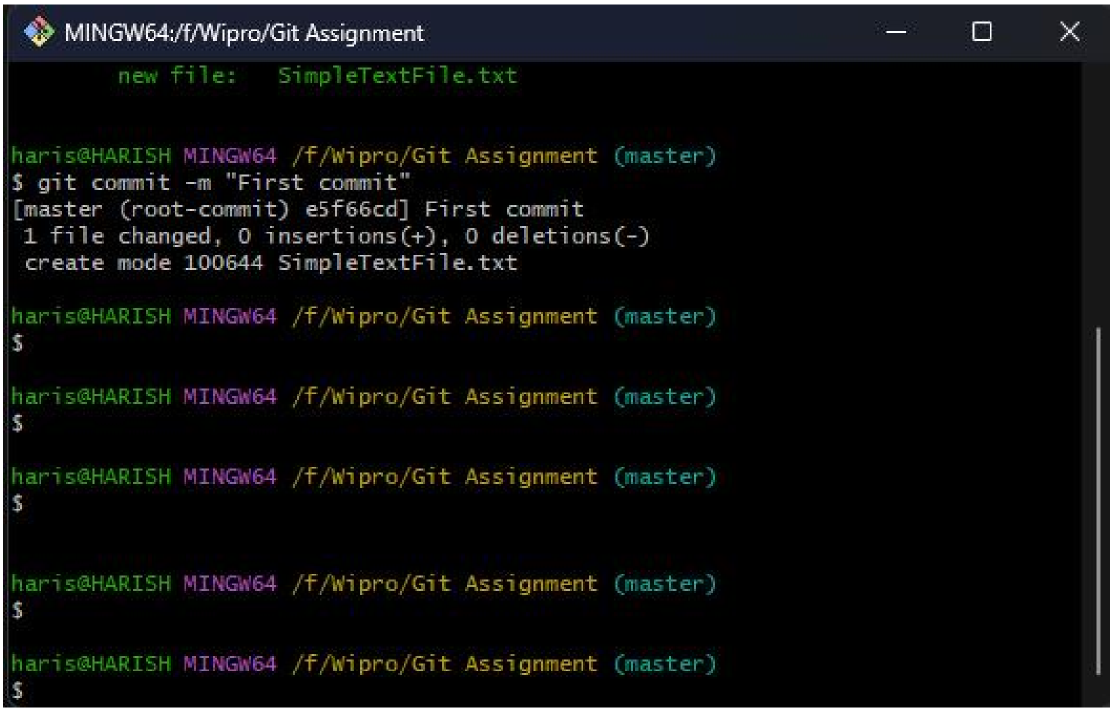
```
haris@HARISH MINGW64 /f/Wipro/Git Assignment
$ git init
Initialized empty Git repository in F:/Wipro/Git Assignment/.git/

haris@HARISH MINGW64 /f/Wipro/Git Assignment (master)
$
```

Step 4:
To add all the files in the local repository we use **"git add ."** command. Here dot represents all the files. "git status" command is used to show the status of the local repository.



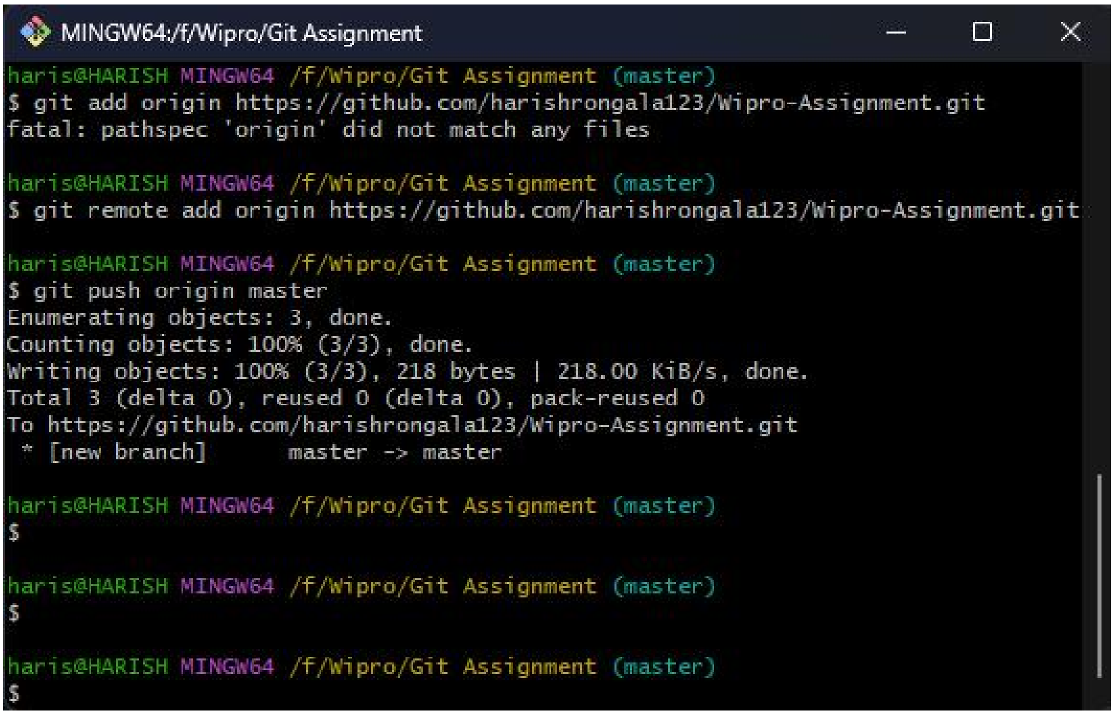
```
haris@HARISH MINGW64 /f/Wipro/Git Assignment
$ git init
Initialized empty Git repository in F:/Wipro/Git Assignment/.git/

haris@HARISH MINGW64 /f/Wipro/Git Assignment (master)
$ git add .

haris@HARISH MINGW64 /f/Wipro/Git Assignment (master)
$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
        new file:   SimpleTextFile.txt


haris@HARISH MINGW64 /f/Wipro/Git Assignment (master)
$
```

Step 5:
Commit the added file using **"git commit -m"**



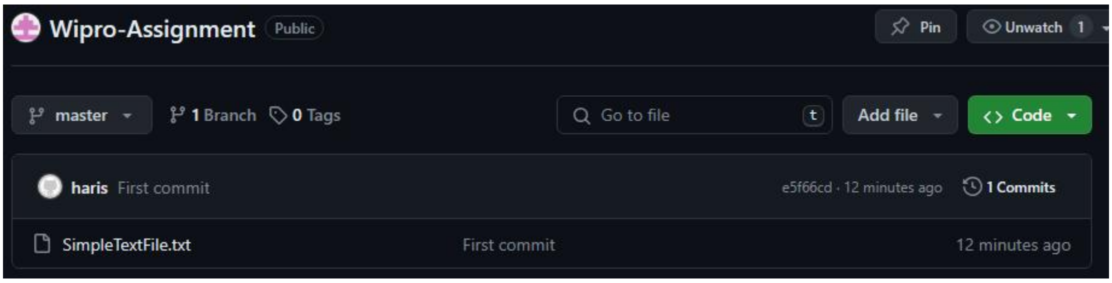
```
        new file:   SimpleTextFile.txt


haris@HARISH MINGW64 /f/Wipro/Git Assignment (master)
$ git commit -m "First commit"
[master (root-commit) e5f66cd] First commit
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 SimpleTextFile.txt

haris@HARISH MINGW64 /f/Wipro/Git Assignment (master)
$

haris@HARISH MINGW64 /f/Wipro/Git Assignment (master)
$

haris@HARISH MINGW64 /f/Wipro/Git Assignment (master)
$


haris@HARISH MINGW64 /f/Wipro/Git Assignment (master)
$

haris@HARISH MINGW64 /f/Wipro/Git Assignment (master)
$
```

Step 6:
Use "git push origin master" command to push all the files which are committed in the GitHub repository



```
haris@HARISH MINGW64 /f/Wipro/Git Assignment (master)
$ git add origin https://github.com/harishrongala123/Wipro-Assignment.git
fatal: pathspec 'origin' did not match any files

haris@HARISH MINGW64 /f/Wipro/Git Assignment (master)
$ git remote add origin https://github.com/harishrongala123/Wipro-Assignment.git

haris@HARISH MINGW64 /f/Wipro/Git Assignment (master)
$ git push origin master
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Writing objects: 100% (3/3), 218 bytes | 218.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/harishrongala123/Wipro-Assignment.git
 * [new branch]      master -> master

haris@HARISH MINGW64 /f/Wipro/Git Assignment (master)
$

haris@HARISH MINGW64 /f/Wipro/Git Assignment (master)
$

haris@HARISH MINGW64 /f/Wipro/Git Assignment (master)
$
```

Step 7:
We can see the file added in the GitHub

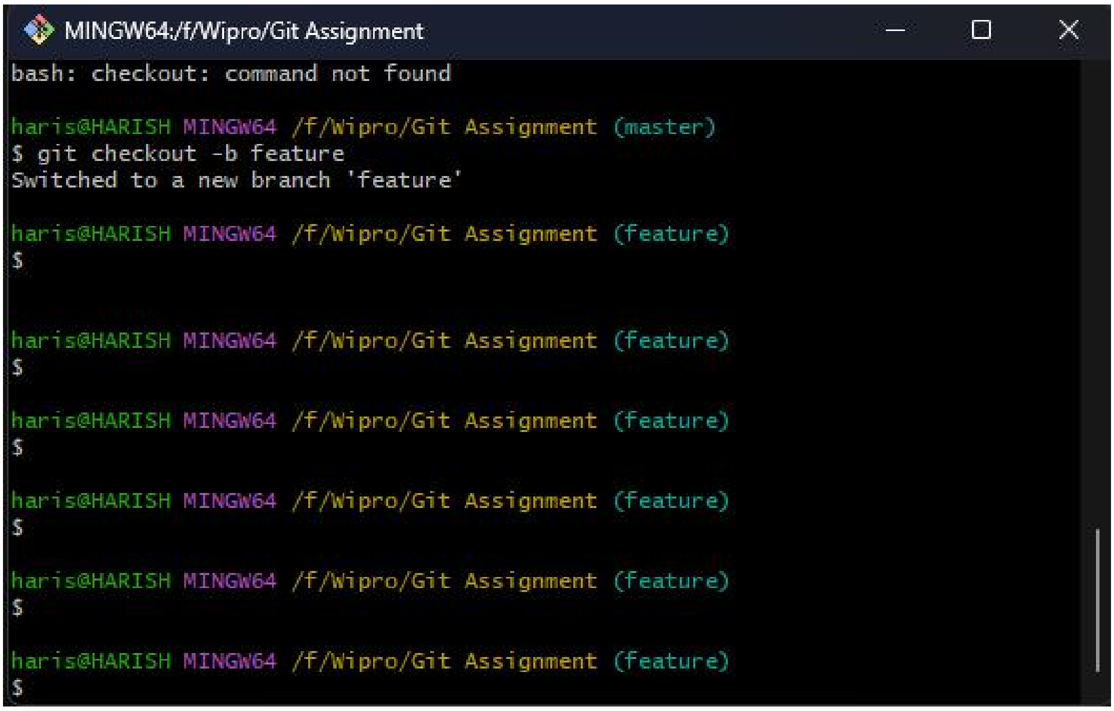


haris First commit e5f66cd · 12 minutes ago 1 Commits

SimpleTextFile.txt First commit 12 minutes ago

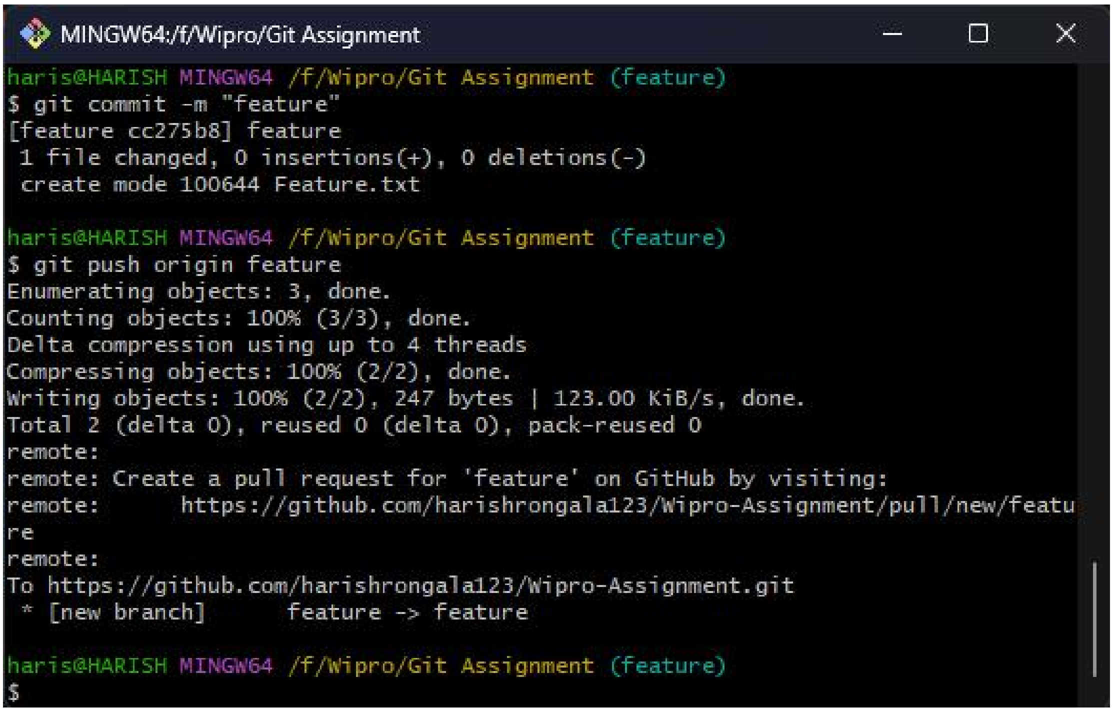
Assignment 2: Branch Creation and Switching
Create a new branch named 'feature' and switch to it. Make changes in the 'feature' branch and commit them

Step 1:
Create a new branch named **"feature"** in the local repository using **"git checkout -b feature".**



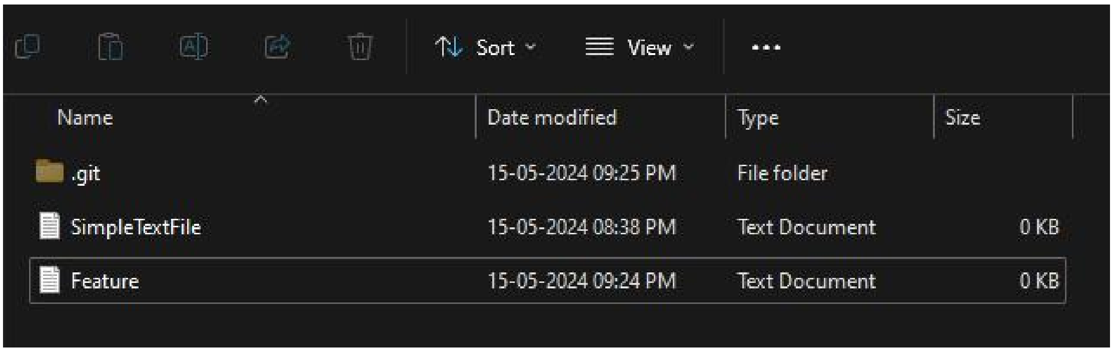
```
bash: checkout: command not found

haris@HARISH MINGW64 /f/Wipro/Git Assignment (master)
$ git checkout -b feature
Switched to a new branch 'feature'

haris@HARISH MINGW64 /f/Wipro/Git Assignment (feature)
$


haris@HARISH MINGW64 /f/Wipro/Git Assignment (feature)
$

haris@HARISH MINGW64 /f/Wipro/Git Assignment (feature)
$

haris@HARISH MINGW64 /f/Wipro/Git Assignment (feature)
$

haris@HARISH MINGW64 /f/Wipro/Git Assignment (feature)
$

haris@HARISH MINGW64 /f/Wipro/Git Assignment (feature)
$
```

Step 2:
Add a file in the feature branch



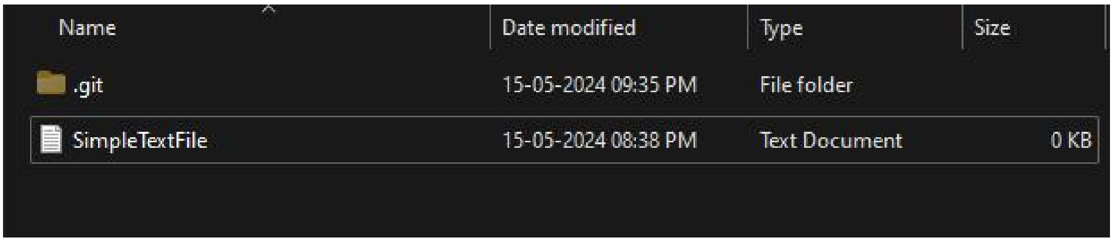
```
haris@HARISH MINGW64 /f/Wipro/Git Assignment (feature)
$ git commit -m "feature"
[feature cc275b8] feature
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 Feature.txt

haris@HARISH MINGW64 /f/Wipro/Git Assignment (feature)
$ git push origin feature
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Delta compression using up to 4 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (2/2), 247 bytes | 123.00 KiB/s, done.
Total 2 (delta 0), reused 0 (delta 0), pack-reused 0
remote:
remote: Create a pull request for 'feature' on GitHub by visiting:
remote:      https://github.com/harishrongala123/Wipro-Assignment/pull/new/featu
re
remote:
To https://github.com/harishrongala123/Wipro-Assignment.git
 * [new branch]      feature -> feature

haris@HARISH MINGW64 /f/Wipro/Git Assignment (feature)
$
```

Step 3:
In the feature branch we can see the feature file in it



Name	Date modified	Type	Size
.git	15-05-2024 09:25 PM	File folder	
SimpleTextFile	15-05-2024 08:38 PM	Text Document	0 KB
Feature	15-05-2024 09:24 PM	Text Document	0 KB

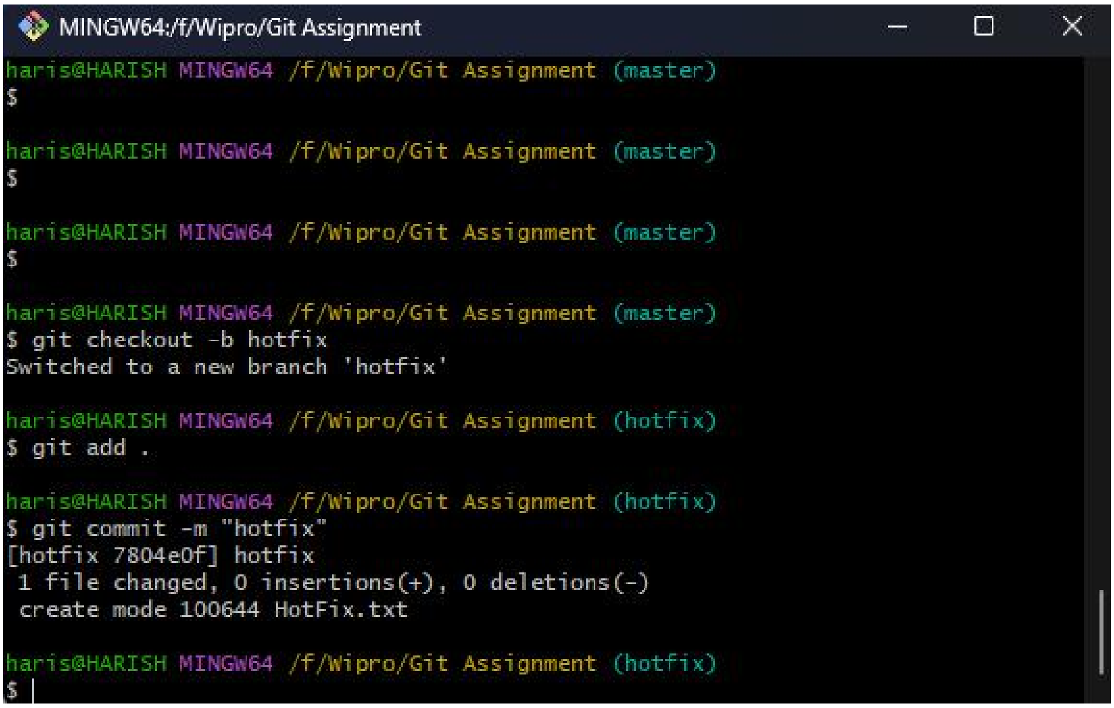
Step 4:
Once if we change the branch to feature to master, in the same address the master branch has no feature file, use git checkout master to switch from feature to master.



Name	Date modified	Type	Size
.git	15-05-2024 09:35 PM	File folder	
SimpleTextFile	15-05-2024 08:38 PM	Text Document	0 KB

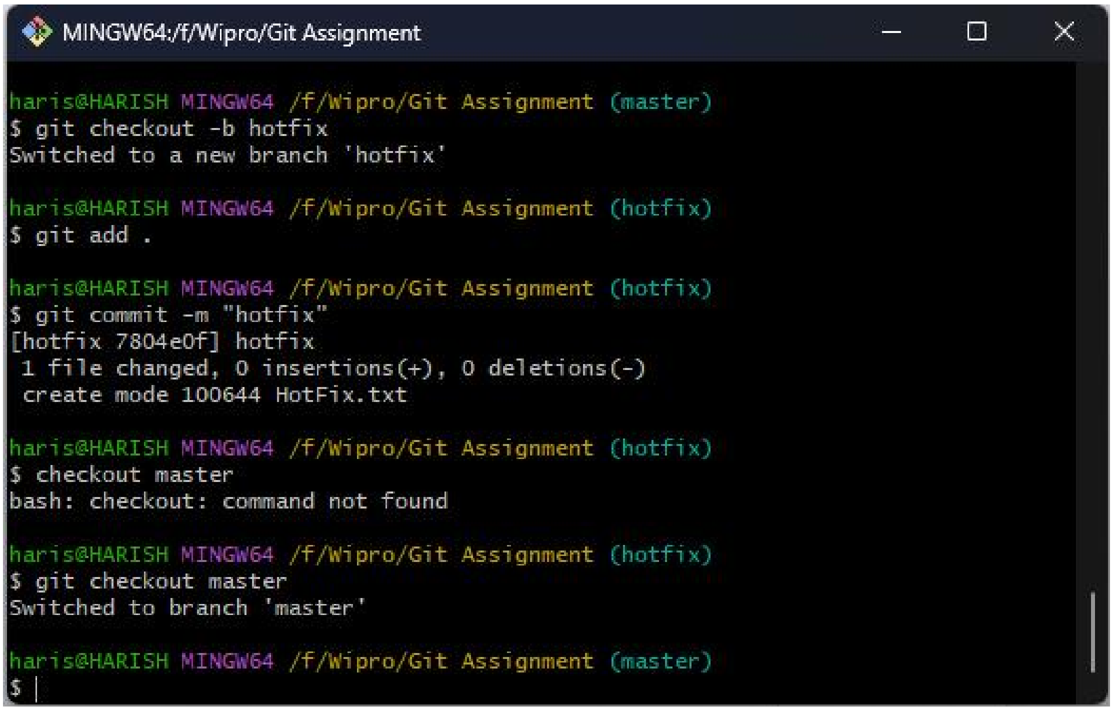
Assignment 3: Feature Branches and Hotfixes
Create a 'hotfix' branch to fix an issue in the main code. Merge the 'hotfix' branch into 'main' ensuring that the issue is resolved.

Step 1:
Create a new branch **"hotfix"** using "**git checkout -b hotfix**" and add file.



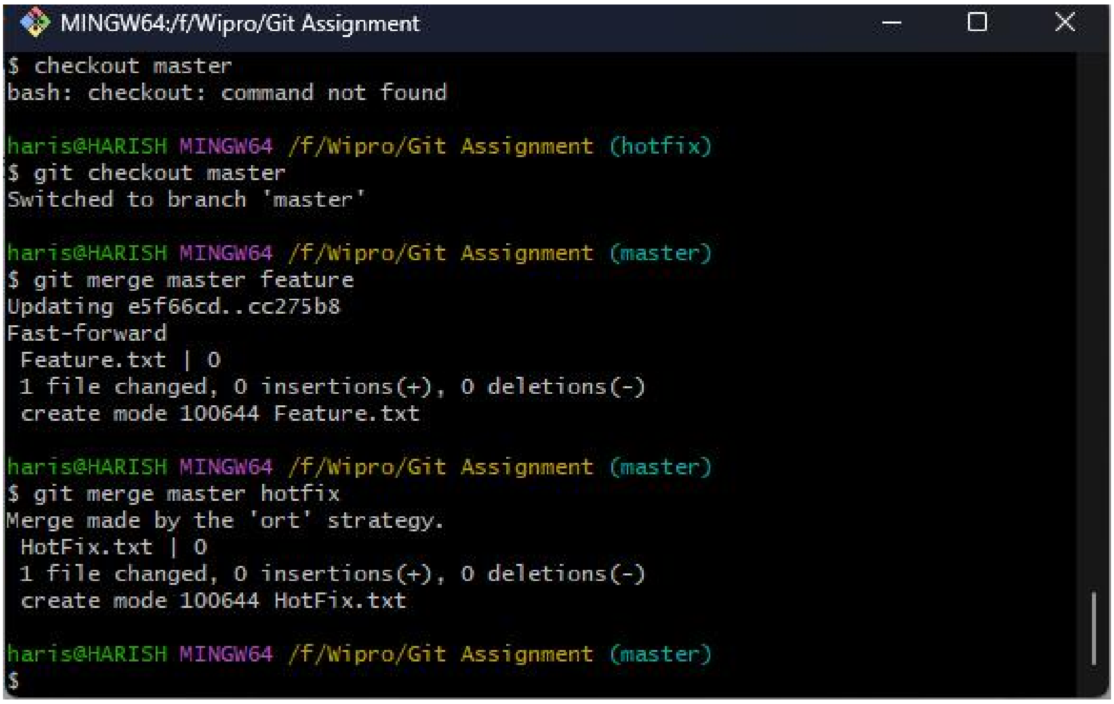
```
haris@HARISH MINGW64 /f/Wipro/Git Assignment (master)
$

haris@HARISH MINGW64 /f/Wipro/Git Assignment (master)
$

haris@HARISH MINGW64 /f/Wipro/Git Assignment (master)
$

haris@HARISH MINGW64 /f/Wipro/Git Assignment (master)
$ git checkout -b hotfix
Switched to a new branch 'hotfix'

haris@HARISH MINGW64 /f/Wipro/Git Assignment (hotfix)
$ git add .

haris@HARISH MINGW64 /f/Wipro/Git Assignment (hotfix)
$ git commit -m "hotfix"
[hotfix 7804e0f] hotfix
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 HotFix.txt

haris@HARISH MINGW64 /f/Wipro/Git Assignment (hotfix)
$ |
```

Step 2:
Switch from hotfix branch to master branch using "git checkout master" command.



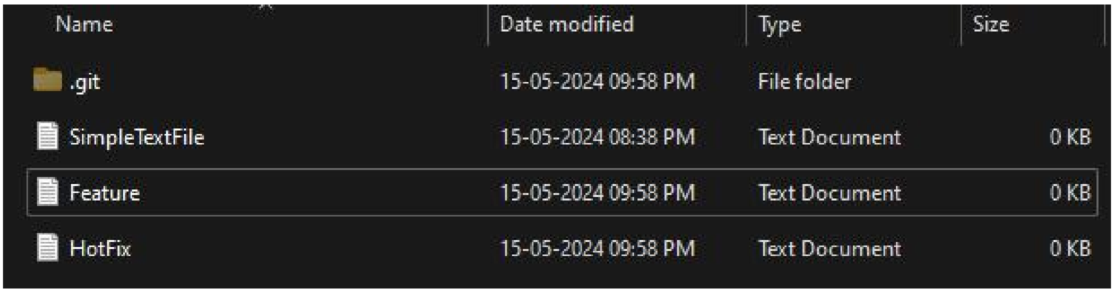
```
haris@HARISH MINGW64 /f/Wipro/Git Assignment (master)
$ git checkout -b hotfix
Switched to a new branch 'hotfix'

haris@HARISH MINGW64 /f/Wipro/Git Assignment (hotfix)
$ git add .

haris@HARISH MINGW64 /f/Wipro/Git Assignment (hotfix)
$ git commit -m "hotfix"
[hotfix 7804e0f] hotfix
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 HotFix.txt

haris@HARISH MINGW64 /f/Wipro/Git Assignment (hotfix)
$ checkout master
bash: checkout: command not found

haris@HARISH MINGW64 /f/Wipro/Git Assignment (hotfix)
$ git checkout master
Switched to branch 'master'

haris@HARISH MINGW64 /f/Wipro/Git Assignment (master)
$ |
```

Step 3:
Merge the master and all the branches using **"git merge master feature"** after that **"git merge master hotfix".**



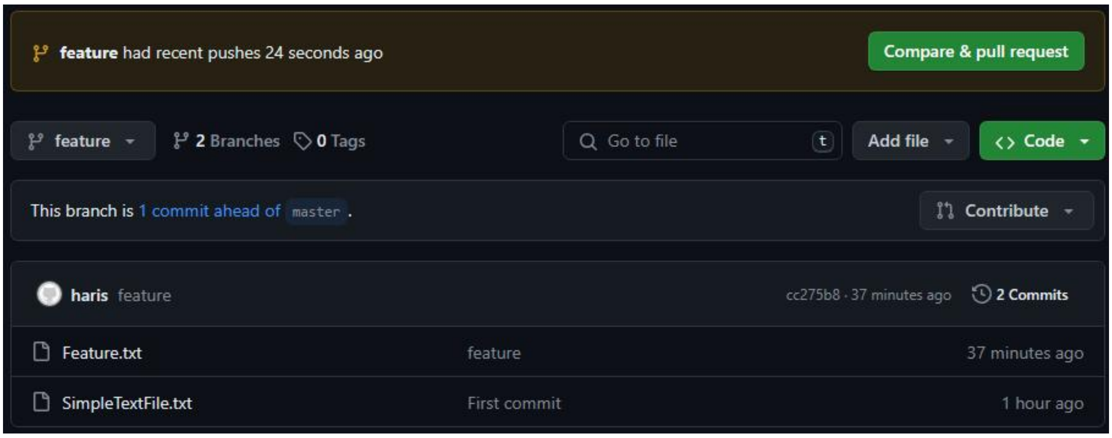
```
$ checkout master
bash: checkout: command not found

haris@HARISH MINGW64 /f/Wipro/Git Assignment (hotfix)
$ git checkout master
Switched to branch 'master'

haris@HARISH MINGW64 /f/Wipro/Git Assignment (master)
$ git merge master feature
Updating e5f66cd..cc275b8
Fast-forward
 Feature.txt | 0
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 Feature.txt

haris@HARISH MINGW64 /f/Wipro/Git Assignment (master)
$ git merge master hotfix
Merge made by the 'ort' strategy.
 HotFix.txt | 0
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 HotFix.txt

haris@HARISH MINGW64 /f/Wipro/Git Assignment (master)
$
```

Step 4:
Check the files add from hotfix and feature to master



Name	Date modified	Type	Size
.git	15-05-2024 09:58 PM	File folder	
SimpleTextFile	15-05-2024 08:38 PM	Text Document	0 KB
Feature	15-05-2024 09:58 PM	Text Document	0 KB
HotFix	15-05-2024 09:58 PM	Text Document	0 KB

Step 5:
But in the github the files are not added to do so we need to pull request.



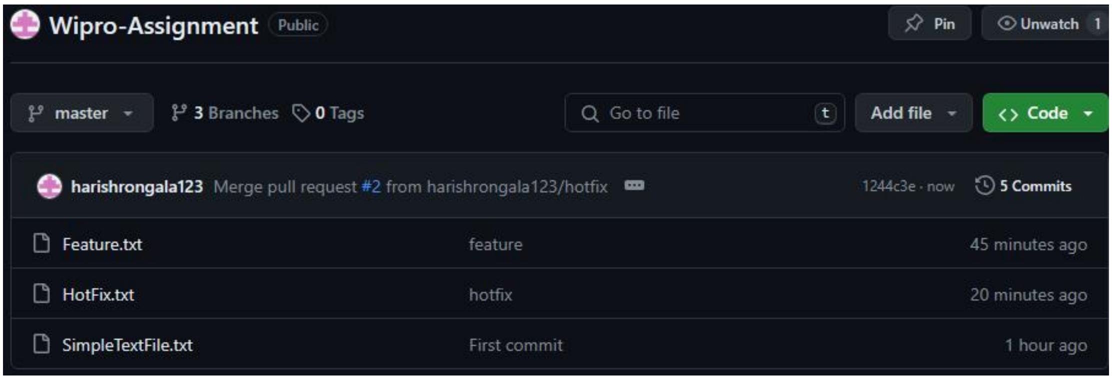
feature had recent pushes 24 seconds ago

This branch is 1 commit ahead of `master`.

haris feature cc275b8 · 37 minutes ago 2 Commits

Feature.txt	feature	37 minutes ago
SimpleTextFile.txt	First commit	1 hour ago

Step 6:
After pull request and approved by the github owner the files get added.



Wipro-Assignment Public

harishrongala123 Merge pull request #2 from harishrongala123/hotfix 1244c3e · now 5 Commits

Feature.txt	feature	45 minutes ago
HotFix.txt	hotfix	20 minutes ago
SimpleTextFile.txt	First commit	1 hour ago