

**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.

```
Administrator@DESKTOP-TIC5DM4 MINGW64 ~ (master)
```

```
$ mkdir Myproject
```

```
Administrator@DESKTOP-TIC5DM4 MINGW64 ~ (master)
```

```
$ cd Myproject/
```

```
Administrator@DESKTOP-TIC5DM4 MINGW64 ~/Myproject (master)
```

```
$ git init
```

```
Initialized empty Git repository in C:/Users/Administrator/Myproject/.git/
```

```
Administrator@DESKTOP-TIC5DM4 MINGW64 ~/Myproject (master)
```

```
$ touch a.txt
```

```
Administrator@DESKTOP-TIC5DM4 MINGW64 ~/Myproject (master)
```

```
$ vim a.txt
```

```
Administrator@DESKTOP-TIC5DM4 MINGW64 ~/Myproject (master)
```

```
$ cat a.txt
```

```
This is Assignment1.
```

```
Administrator@DESKTOP-TIC5DM4 MINGW64 ~/Myproject (master)
```

```
$ git add a.txt
```

```
warning: in the working copy of 'a.txt', LF will be replaced by CRLF the next time Git touches it
```

```
Administrator@DESKTOP-TIC5DM4 MINGW64 ~/Myproject (master)
```

```
$ git status
```

```
On branch master
```

No commits yet

Changes to be committed:

(use "git rm --cached <file>..." to unstage)

new file: a.txt

Administrator@DESKTOP-TIC5DM4 MINGW64 ~/Myproject (master)

\$ git commit -m "Assignment1 completed."

[master (root-commit) 8b20596] Assignment1 completed.

1 file changed, 1 insertion(+)

create mode 100644 a.txt

## 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.

Administrator@DESKTOP-TIC5DM4 MINGW64 ~/Myproject (master)

\$ git branch feature

Administrator@DESKTOP-TIC5DM4 MINGW64 ~/Myproject (master)

\$ git checkout feature

Switched to branch 'feature'

Administrator@DESKTOP-TIC5DM4 MINGW64 ~/Myproject (feature)

\$ touch index.html

Administrator@DESKTOP-TIC5DM4 MINGW64 ~/Myproject (feature)

\$ vim index.html

Administrator@DESKTOP-TIC5DM4 MINGW64 ~/Myproject (feature)

```
$ cat index.html
```

```
<!DOCTYPE html>
```

```
<html>
```

```
  <head>
```

```
    <title>Hello World!</title>
```

```
  <style>
```

```
    body {background-color:white;}
```

```
    h1 {color:red;}
```

```
    p {color:blue;}
```

```
  </style>
```

```
  </head>
```

```
  <body>
```

```
    <h1>Hello World!</h1>
```

```
    <p>This is the first file in my new Git Repository.</P>
```

```
    <p>A new line in our file!</p>
```

```
  </body>
```

```
</html>
```

Administrator@DESKTOP-TIC5DM4 MINGW64 ~/Myproject (feature)

```
$ git status
```

On branch feature

Untracked files:

(use "git add <file>..." to include in what will be committed)

index.html

nothing added to commit but untracked files present (use "git add" to track)

Administrator@DESKTOP-TIC5DM4 MINGW64 ~/Myproject (feature)

```
$ git add index.html
```

warning: in the working copy of 'index.html', LF will be replaced by CRLF the next time Git touches it

Administrator@DESKTOP-TIC5DM4 MINGW64 ~/Myproject (feature)

```
$ git commit -m "Assignment2 completed."
```

[feature a6e5ac6] Assignment2 completed.

1 file changed, 18 insertions(+)

create mode 100644 index.html

### **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.

Administrator@DESKTOP-TIC5DM4 MINGW64 ~/Myproject (feature)

```
$ git branch hotfix
```

Administrator@DESKTOP-TIC5DM4 MINGW64 ~/Myproject (feature)

```
$ git checkout hotfix
```

Switched to branch 'hotfix'

Administrator@DESKTOP-TIC5DM4 MINGW64 ~/Myproject (hotfix)

```
$ git status
```

On branch hotfix

nothing to commit, working tree clean

Administrator@DESKTOP-TIC5DM4 MINGW64 ~/Myproject (hotfix)

```
$ touch code1.py
```

Administrator@DESKTOP-TIC5DM4 MINGW64 ~/Myproject (hotfix)

```
$ vim code1.py
```

```
Administrator@DESKTOP-TIC5DM4 MINGW64 ~/Myproject (hotfix)
```

```
$ cat code1.py
```

```
a=10
```

```
b=20
```

```
sum=a+b
```

```
print(Sum)
```

```
Administrator@DESKTOP-TIC5DM4 MINGW64 ~/Myproject (hotfix)
```

```
$ git add code1.py
```

```
warning: in the working copy of 'code1.py', LF will be replaced by CRLF the next time Git touches it
```

```
Administrator@DESKTOP-TIC5DM4 MINGW64 ~/Myproject (hotfix)
```

```
$ git commit -m "Issue Fixed."
```

```
[hotfix 12cff58] Issue Fixed.
```

```
1 file changed, 4 insertions(+)
```

```
create mode 100644 code1.py
```

```
Administrator@DESKTOP-TIC5DM4 MINGW64 ~/Myproject (hotfix)
```

```
$ git checkout master
```

```
Switched to branch 'master'
```

```
Administrator@DESKTOP-TIC5DM4 MINGW64 ~/Myproject (master)
```

```
$ git merge hotfix
```

```
Updating 8b20596..12cff58
```

```
Fast-forward
```

```
code1.py | 4 ++++
```

```
index.html | 18 ++++++
```

```
2 files changed, 22 insertions(+)
```

```
create mode 100644 code1.py
create mode 100644 index.html
```

```
Administrator@DESKTOP-TIC5DM4 MINGW64 ~/Myproject (master)
```

```
$ cat code1.py
```

```
a=10
```

```
b=20
```

```
sum=a+b
```

```
print(Sum)
```

```
Administrator@DESKTOP-TIC5DM4 MINGW64 ~/Myproject (master)
```

```
$ vim code1.py
```

```
Administrator@DESKTOP-TIC5DM4 MINGW64 ~/Myproject (master)
```

```
$ git add code1.py
```

```
Administrator@DESKTOP-TIC5DM4 MINGW64 ~/Myproject (master)
```

```
$ git commit -m "Issue Resolved."
```

```
[master 687717d] Issue Resolved.
```

```
1 file changed, 1 insertion(+)
```