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Java Pre-Skilling Training Session

Assignment -3.1

Module-3

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## 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.

### SOLUTION:

To initialize a new Git repository, add a simple text file, and make the first commit, follow these steps:

1. **Opened my terminal.**
2. **Navigated to my desired directory** where I want to initialize the repository.
3. **We can use the cd command to change directories.**

For example:

```
DELL@DESKTOP-SQSM8HO MINGW64 ~  
$ cd d:
```

```
DELL@DESKTOP-SQSM8HO MINGW64 /d  
$ cd MyGit_Swarnali_wipro/
```

```
DELL@DESKTOP-SQSM8HO MINGW64 /d/MyGit_Swarnali_wipro (master)  
$ cd wipro_Swarnali/
```

```
DELL@DESKTOP-SQSM8HO MINGW64 /d/MyGit_Swarnali_wipro/wipro_Swarnali  
(main)
```

#### **4. Initialize the Git repository(It was already initialized, as I have created other files as well):**

```
$ git init
Reinitialized existing Git repository in
D:/MyGit_Swarnali_wipro/Wipro_Swarnali/.git/
```

#### **5. To Create a new text file: We can use any text editor, or create it directly from the terminal. Here, we'll create a file called swar1.txt:**

```
DELL@DESKTOP-SQSM8HO MINGW64 /d/MyGit_Swarnali_wipro/Wipro_Swarnali
(main)
$ echo "Wipro-Training" > swar1.txt
```

#### **6. Through 'cat', I am checking what I wrote in my file , whether my file content is proper or not.**

```
DELL@DESKTOP-SQSM8HO MINGW64 /d/MyGit_Swarnali_wipro/Wipro_Swarnali
(main)
$ cat swar1.txt
Wipro-Training
```

#### **7. Checking status: -**

```
DELL@DESKTOP-SQSM8HO MINGW64 /d/MyGit_Swarnali_wipro/Wipro_Swarnali
(main)
$ git status
On branch main
Your branch is up to date with 'origin/main'.
```

```
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    modified:   second.txt
```

```
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    swar1.txt
```

#### **8. Add the text file to the staging area:**

```
DELL@DESKTOP-SQSM8HO MINGW64 /d/MyGit_Swarnali_wipro/Wipro_Swarnali
(main)
$ git add swar1.txt
```

warning: in the working copy of 'swar1.txt', LF will be replaced by CRLF the next time Git touches it

## 9. Commit the File:

```
DELL@DESKTOP-SQSM8HO MINGW64 /d/MyGit_Swarnali_wipro/wipro_Swarnali
(main)
$ git commit -m "Initial commit in swar1.txt"
[main 36c2c70] Initial commit in swar1.txt
2 files changed, 4 insertions(+)
create mode 100644 swar1.txt
```

## 10. Checking the status again to see whether working tree is clean or not:

```
DELL@DESKTOP-SQSM8HO MINGW64 /d/MyGit_Swarnali_wipro/wipro_Swarnali
(main)
$ git status
On branch main
Your branch is ahead of 'origin/main' by 1 commit.
  (use "git push" to publish your local commits)

nothing to commit, working tree clean
```

```
DELL@DESKTOP-SQSM8HO MINGW64 /d/MyGit_Swarnali_wipro/wipro_Swarnali
(main)
```

# 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.

## SOLUTION: -

### 1. First checking the list of branches present in this repository:

```
DELL@DESKTOP-SQSM8HO MINGW64
/d/MyGit_Swarnali_wipro/wipro_Swarnali (main)
$ git branch -l
* main
```

priya\_branch  
swar\_branch

## 2. Creating Branch feature:

```
DELL@DESKTOP-SQSM8HO MINGW64
/d/MyGit_Swarnali_wipro/wipro_Swarnali (main)
$ git branch feature
```

## 3. Checking again whether branch is successfully created or not:

```
DELL@DESKTOP-SQSM8HO MINGW64
/d/MyGit_Swarnali_wipro/wipro_Swarnali (main)
$ git branch -l
feature
* main
  priya_branch
  swar_branch
```

## 4. Switching to feature branch from main branch:

```
DELL@DESKTOP-SQSM8HO MINGW64
/d/MyGit_Swarnali_wipro/wipro_Swarnali (main)
$ git checkout feature
Switched to branch 'feature'
```

WE COULD OBSERVE THE CHANGES, MAIN BRANCH HAS BEEN SWITCHED TO FEATURE BRANCH.

## 5. Creating a file named 'swar2.txt':

```
DELL@DESKTOP-SQSM8HO MINGW64
/d/MyGit_Swarnali_wipro/wipro_Swarnali (feature)
$ echo "Hello, welcome to wipro!!" > swar2.txt
echo "Hello, welcome to wiprogit checkout feature" > swar2.txt
```

## 6. Adding all the files here in Branch feature:

```
DELL@DESKTOP-SQSM8HO MINGW64
/d/MyGit_Swarnali_wipro/wipro_Swarnali (feature)
$ git add .
warning: in the working copy of 'swar2.txt', LF will be replaced
by CRLF the next time Git touches it
```

## 7. Doing commit:

```
DELL@DESKTOP-SQSM8HO MINGW64
/d/MyGit_Swarnali_wipro/wipro_Swarnali (feature)
$ git commit -m "Initial commit in feature branch file
swar2.txt"
[feature 5e2756f] Initial commit in feature branch file
swar2.txt
1 file changed, 1 insertion(+)
create mode 100644 swar2.txt
```

## 8. Checking status:

```
DELL@DESKTOP-SQSM8HO MINGW64
/d/MyGit_Swarnali_wipro/wipro_Swarnali (feature)
$ git status
On branch feature
nothing to commit, working tree clean
```

## 9. Now we could see our swar2.txt file is successfully present in feature branch.

```
DELL@DESKTOP-SQSM8HO MINGW64
/d/MyGit_Swarnali_wipro/wipro_Swarnali (feature)
$ git ls-files
.gitignore
File1.java
README.md
f1.txt
f2.txt
first.txt
mylogfile.txt
second.txt
swar1.txt
swar2.txt
```

```
DELL@DESKTOP-SQSM8HO MINGW64
/d/MyGit_Swarnali_wipro/wipro_Swarnali (feature)
$ ^C
```

## 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.

### SOLUTION: -

#### 1. Creating a branch named 'hotfix' from main branch:

```
DELL@DESKTOP-SQSM8HO MINGW64
/d/MyGit_Swarnali_wipro/wipro_Swarnali (main)
$ git branch hotfix
```

#### 2. Checking the list of branches:

```
DELL@DESKTOP-SQSM8HO MINGW64
/d/MyGit_Swarnali_wipro/wipro_Swarnali (main)
$ git branch -l
feature
hotfix
* main
priya_branch
swar_branch
```

#### 3. Switching to hotfix branch:

```
DELL@DESKTOP-SQSM8HO MINGW64
/d/MyGit_Swarnali_wipro/wipro_Swarnali (main)
$ git checkout hotfix
Switched to branch 'hotfix'
```

#### 4. Checking all the files present:

```
DELL@DESKTOP-SQSM8HO MINGW64
/d/MyGit_Swarnali_wipro/wipro_Swarnali (hotfix)
$ git ls-files
.gitignore
```

File1.java  
README.md  
f1.txt  
f2.txt  
first.txt  
mylogfile.txt  
second.txt  
swar1.txt

## 5. Observing the contents present in swar1.txt file so that I could perform the modification:

```
DELL@DESKTOP-SQSM8HO MINGW64  
/d/MyGit_Swarnali_wipro/wipro_Swarnali (hotfix)  
$ cat swar1.txt  
wipro-Training
```

My name is SWARNALI GHOSH

## 6. Performing modification:

```
DELL@DESKTOP-SQSM8HO MINGW64  
/d/MyGit_Swarnali_wipro/wipro_Swarnali (hotfix)  
$ vi swar1.txt
```

```
DELL@DESKTOP-SQSM8HO MINGW64  
/d/MyGit_Swarnali_wipro/wipro_Swarnali (hotfix)  
$ cat swar1.txt  
wipro-Training
```

My name is SWARNALI GHOSH

I stay in Kolkata, WB.

-----Changes done-----

## 7. Adding and Committing:

```
DELL@DESKTOP-SQSM8HO MINGW64  
/d/MyGit_Swarnali_wipro/wipro_Swarnali (hotfix)  
$ git add .  
warning: in the working copy of 'swar1.txt', LF will be replaced  
by CRLF the next time Git touches it
```

```
DELL@DESKTOP-SQSM8HO MINGW64  
/d/MyGit_Swarnali_wipro/wipro_Swarnali (hotfix)  
$ git commit -m "Modification done in swar1.txt"  
[hotfix 43cd107] Modification done in swar1.txt  
1 file changed, 2 insertions(+)
```

8. We could see changes have been successfully committed in hotfix branch but what about main branch???:

```
DELL@DESKTOP-SQSM8HO MINGW64
/d/MyGit_Swarnali_wipro/wipro_Swarnali (hotfix)
$ git status
On branch hotfix
nothing to commit, working tree clean
```

9. Switching to main branch:

```
DELL@DESKTOP-SQSM8HO MINGW64
/d/MyGit_Swarnali_wipro/wipro_Swarnali (hotfix)
$ git checkout main
Switched to branch 'main'
Your branch is ahead of 'origin/main' by 2 commits.
(use "git push" to publish your local commits)
```

```
DELL@DESKTOP-SQSM8HO MINGW64
/d/MyGit_Swarnali_wipro/wipro_Swarnali (main)
$ git ls-files
.gitignore
File1.java
README.md
f1.txt
f2.txt
first.txt
mylogfile.txt
second.txt
swar1.txt
```

10. But we could see no changes is present on main branch:  
So, for that we have to merge both branches-

```
DELL@DESKTOP-SQSM8HO MINGW64
/d/MyGit_Swarnali_wipro/wipro_Swarnali (main)
$ cat swar1.txt
wipro-Training
```

My name is SWARNALI GHOSH

```
DELL@DESKTOP-SQSM8HO MINGW64
/d/MyGit_Swarnali_wipro/wipro_Swarnali (main)
$ git merge hotfix
Updating fe71238..43cd107
Fast-forward
 swar1.txt | 2 ++
```



1 file changed, 2 insertions(+)

## 11. Checking status after merging:

```
DELL@DESKTOP-SQSM8HO MINGW64
/d/MyGit_Swarnali_wipro/wipro_Swarnali (main)
$ git status
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
```

```
DELL@DESKTOP-SQSM8HO MINGW64
/d/MyGit_Swarnali_wipro/wipro_Swarnali (main)
$ git ls-files
.gitignore
File1.java
README.md
f1.txt
f2.txt
first.txt
mylogfile.txt
second.txt
swar1.txt
```

## 12. Yes, the issues are solved, modified file is merged among the branches.

```
DELL@DESKTOP-SQSM8HO MINGW64
/d/MyGit_Swarnali_wipro/wipro_Swarnali (main)
$ cat swar1.txt
wipro-Training
```

My name is SWARNALI GHOSH

I stay in Kolkata, WB.

```
DELL@DESKTOP-SQSM8HO MINGW64
/d/MyGit_Swarnali_wipro/wipro_Swarnali (main)
$
```