

Assignment2

Submitted

by

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Level 2: Stashing and Resetting

You have been hired by the client ABC Systems as a Developer, where in you are required to manage the source in a Git Repository. Client would like to assess your hands on knowledge and skills. Thus, Client has requested you to demonstrate the following actions using Git and GitHub.

You are requested to execute following task :

- Initialize any folder as Git Repository
- Create a file as file1.java and file2.java
- Add to the staging area and do a commit.
- Now add file3.java
- Create a Stash for file3.java
- Verify the stash list that changes have been stored temporarily as Stash.
- Apply the stash back to the branch
- Clear the Stash
- Add file3.java to the staging area
- Commit file3.java to the repository
- Do a soft reset to 1st commit.
- Revert the reset by doing a commit.
- Do a mixed reset to 1st commit.
- Revert the reset by adding the files to staging area and commit.
- Do a hard reset.
- Verify that changes have been removed from the system.

Step1: Initialize any folder as Git Repository.

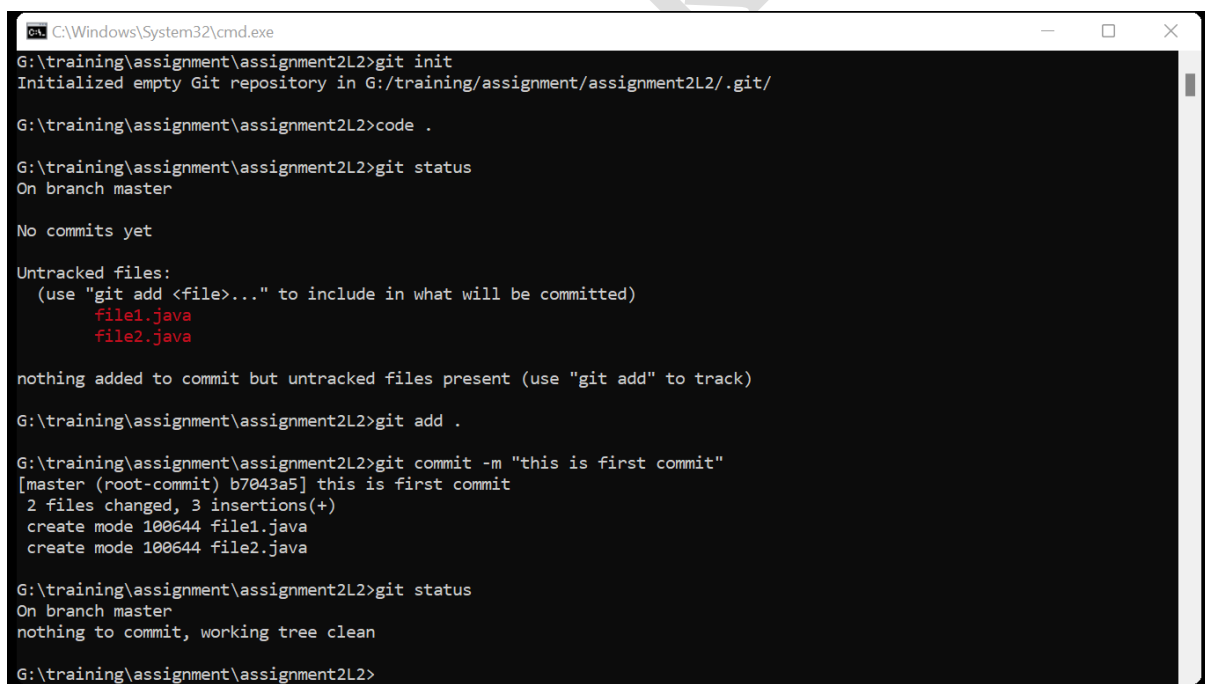
- To create a folder as Git repo.
- **\$git init**

Step2: - Create a file as file1.java and file2.java.

- To create a file need to open VScode editor with help of “**\$code .**”
- Once open VScode create both file named with **file1.java** and **file2.java**.

Step3: - Add to the staging area and do a commit.

- Pass the command **\$git add .**
- After that give commit command **\$git commit -m “this is first commit”**



```
C:\Windows\System32\cmd.exe
G:\training\assignment\assignment2L2>git init
Initialized empty Git repository in G:/training/assignment/assignment2L2/.git/

G:\training\assignment\assignment2L2>code .

G:\training\assignment\assignment2L2>git status
On branch master

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        file1.java
        file2.java

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

G:\training\assignment\assignment2L2>git add .

G:\training\assignment\assignment2L2>git commit -m "this is first commit"
[master (root-commit) b7043a5] this is first commit
 2 files changed, 3 insertions(+)
 create mode 100644 file1.java
 create mode 100644 file2.java

G:\training\assignment\assignment2L2>git status
On branch master
nothing to commit, working tree clean

G:\training\assignment\assignment2L2>
```

Step4: - Now add file3.java.

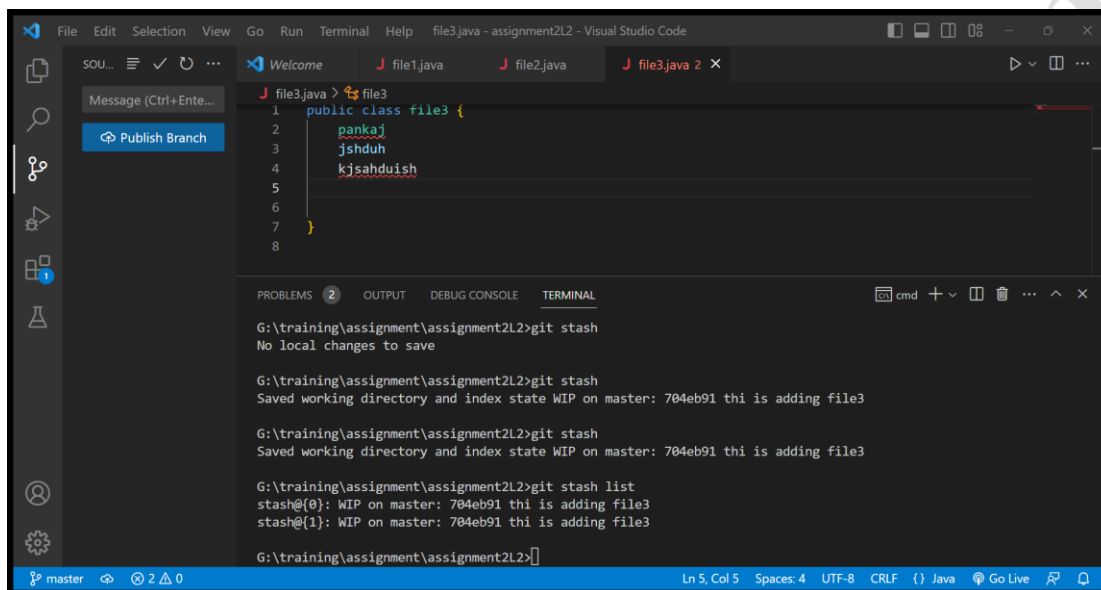
- Open the VScode editor and create the new folder.
- **\$code .**
- Create a new file3.java.

Step5: - Create a Stash for file3.java.

- Run the command **\$git stash**, This will create a stash with the changes made to file3.java.

Step 6: Verify the stash list that changes have been stored temporarily as Stash.

- **\$git stash list**



The screenshot shows the Visual Studio Code interface with a Java file named file3.java open. The file contains a public class file3 with variables pankaj, jshduh, and kjsahduish. The terminal window at the bottom shows the following commands and output:

```
G:\training\assignment\assignment2L2>git stash
No local changes to save

G:\training\assignment\assignment2L2>git stash
Saved working directory and index state WIP on master: 704eb91 thi is adding file3

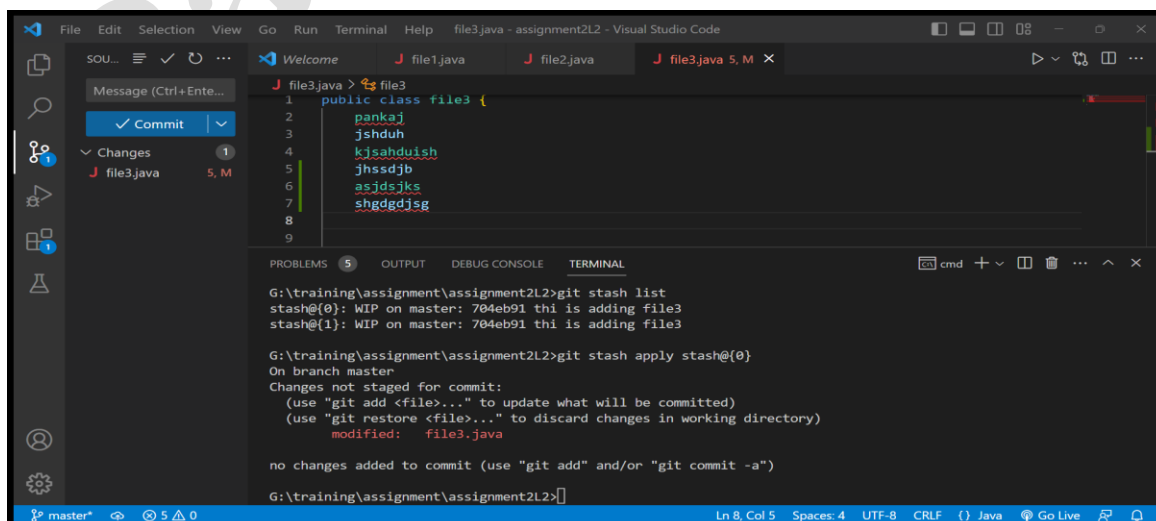
G:\training\assignment\assignment2L2>git stash
Saved working directory and index state WIP on master: 704eb91 thi is adding file3

G:\training\assignment\assignment2L2>git stash list
stash@{0}: WIP on master: 704eb91 thi is adding file3
stash@{1}: WIP on master: 704eb91 thi is adding file3

G:\training\assignment\assignment2L2>
```

Step 7: Apply the stash back to the branch

- Run the command **\$git stash apply stash@{0}**. This will apply the changes stored in the first stash to the current branch.



The screenshot shows the Visual Studio Code interface with the file3.java file open. The file now contains additional variables: jhssdjb, asjdsjks, and shgdgdjsg. The terminal window shows the following commands and output:

```
G:\training\assignment\assignment2L2>git stash list
stash@{0}: WIP on master: 704eb91 thi is adding file3
stash@{1}: WIP on master: 704eb91 thi is adding file3

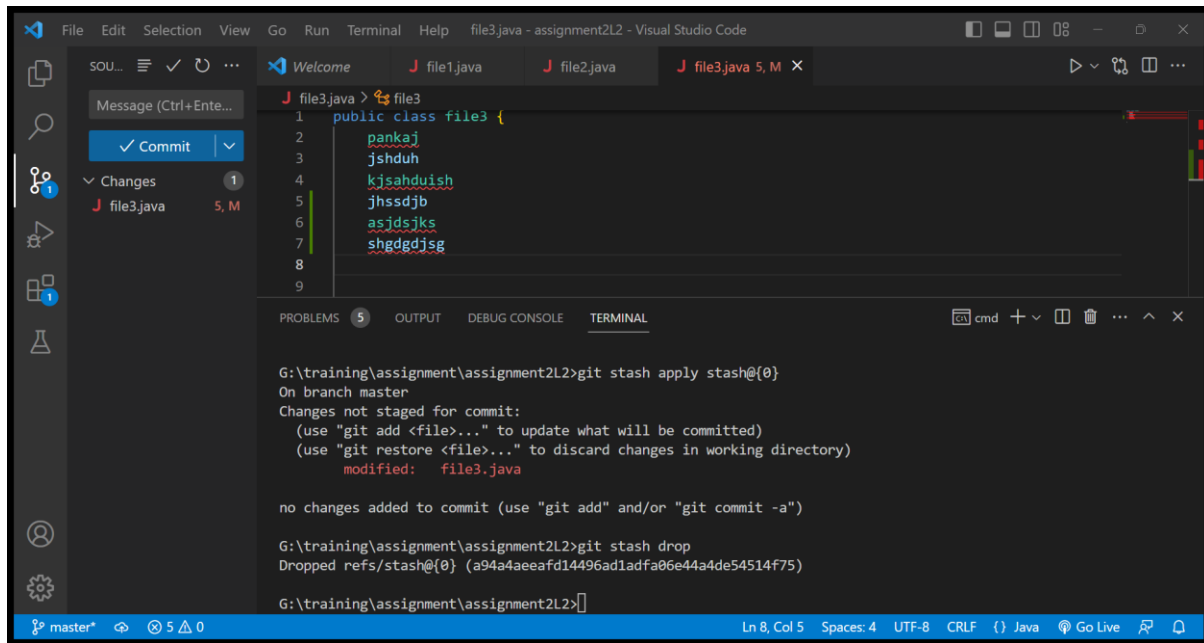
G:\training\assignment\assignment2L2>git stash apply stash@{0}
On branch master
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   file3.java

no changes added to commit (use "git add" and/or "git commit -a")

G:\training\assignment\assignment2L2>
```

Step 8: Clear the Stash

- Run the command **"git stash drop"**. This will delete the top stash from the stash list



The screenshot shows the Visual Studio Code interface with the file3.java editor open. The terminal at the bottom displays the following commands and output:

```
G:\training\assignment\assignment2L2>git stash apply stash@{0}
On branch master
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   file3.java

no changes added to commit (use "git add" and/or "git commit -a")

G:\training\assignment\assignment2L2>git stash drop
Dropped refs/stash@{0} (a94a4aeefad14496ad1adfa06e44a4de54514f75)

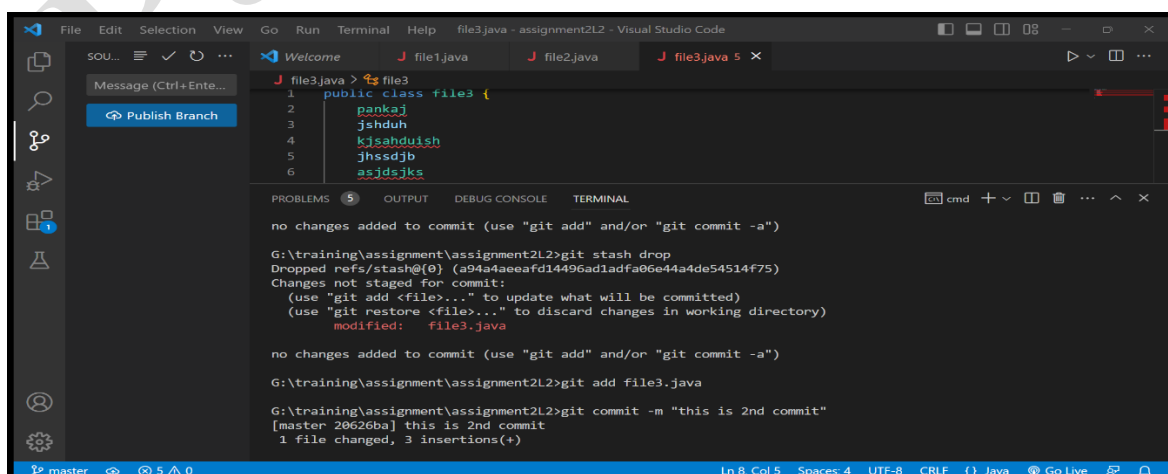
G:\training\assignment\assignment2L2>
```

Step 9: Add file3.java to the staging area

- Run the command **git add file3.java**. This will add file3.java to the staging area.

Step 10: Commit file3.java to the repository.

- Run the command **git commit -m "Add file3.java"**. This will commit the changes made to file3.java to the repository.



The screenshot shows the Visual Studio Code interface with the file3.java editor open. The terminal at the bottom displays the following commands and output:

```
no changes added to commit (use "git add" and/or "git commit -a")

G:\training\assignment\assignment2L2>git stash drop
Dropped refs/stash@{0} (a94a4aeefad14496ad1adfa06e44a4de54514f75)
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   file3.java

no changes added to commit (use "git add" and/or "git commit -a")

G:\training\assignment\assignment2L2>git add file3.java

G:\training\assignment\assignment2L2>git commit -m "this is 2nd commit"
[master 20626ba] this is 2nd commit
1 file changed, 3 insertions(+)
```

Step 11: Do a soft reset to 1st commit.

- Run the command **git reset --soft HEAD~1**. This will reset the current branch to the previous commit, keeping the changes made in the latest commit in the staging area.

The screenshot shows the Visual Studio Code interface with a terminal window open. The terminal displays the following commands and output:

```
file3.java > file3
1 public class file3 {
2     pankaj
3     jshduh
4     kjsahduish
5     jhssdjb
6     asjdsjks

Changes not staged for commit:
(use "git add <file>..." to update what will be committed)
(use "git restore <file>..." to discard changes in working directory)
modified:   file3.java

no changes added to commit (use "git add" and/or "git commit -a")

G:\training\assignment\assignment2L2>git add file3.java

G:\training\assignment\assignment2L2>git commit -m "this is 2nd commit"
[master 20626ba] this is 2nd commit
1 file changed, 3 insertions(+)

G:\training\assignment\assignment2L2>git reset --soft HEAD~1
G:\training\assignment\assignment2L2>
```

The left sidebar shows the 'Staged Changes' section with 'file3.java' listed. The status bar at the bottom indicates 'master+' and '5 Δ 0'.

Step 12: Revert the reset by doing a commit.

- Run the command **git commit -m "Revert reset"**. This will create a new commit that reverts the previous reset.

The screenshot shows the Visual Studio Code interface with a terminal window open. The terminal displays the following commands and output:

```
file3.java > file3
1 public class file3 {
2     pankaj
3     jshduh
4     kjsahduish
5     jhssdjb
6     asjdsjks

modified:   file3.java

no changes added to commit (use "git add" and/or "git commit -a")

G:\training\assignment\assignment2L2>git add file3.java

G:\training\assignment\assignment2L2>git commit -m "this is 2nd commit"
[master 20626ba] this is 2nd commit
1 file changed, 3 insertions(+)

G:\training\assignment\assignment2L2>git reset --soft HEAD~1

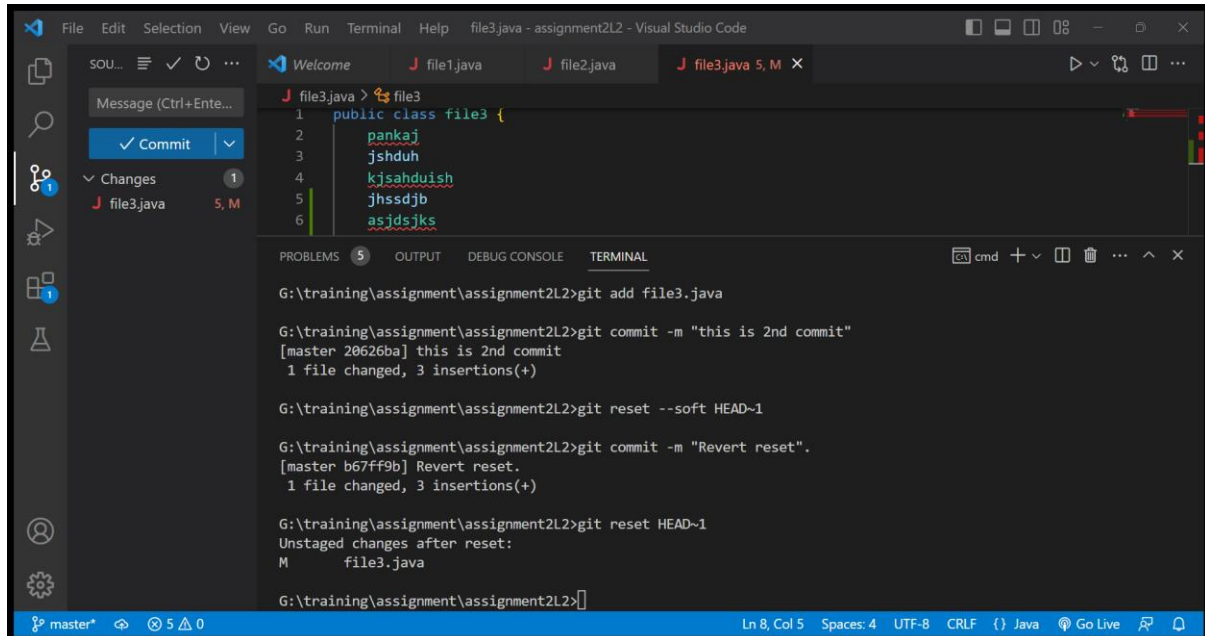
G:\training\assignment\assignment2L2>git commit -m "Revert reset".
[master b67ff9b] Revert reset.
1 file changed, 3 insertions(+)

G:\training\assignment\assignment2L2>
```

The left sidebar shows the 'Publish Branch' button. The status bar at the bottom indicates 'master' and '5 Δ 0'.

Step13: Do a mixed reset to 1st commit.

- Run the command **\$git reset HEAD~1**. This will reset the current branch to the previous commit, removing the changes made in the latest commit from the staging area.



The screenshot shows the Visual Studio Code interface with a terminal window open. The terminal displays the following commands and output:

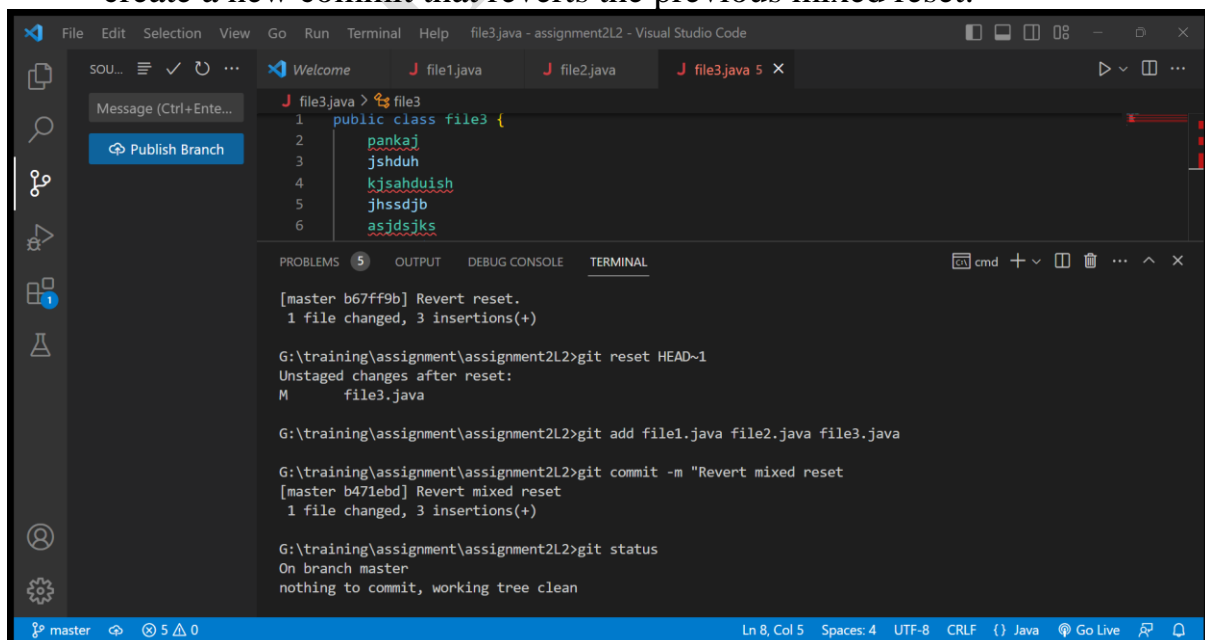
```
G:\training\assignment\assignment2L2>git add file3.java
G:\training\assignment\assignment2L2>git commit -m "this is 2nd commit"
[master 20626ba] this is 2nd commit
1 file changed, 3 insertions(+)
G:\training\assignment\assignment2L2>git reset --soft HEAD~1
G:\training\assignment\assignment2L2>git commit -m "Revert reset".
[master b67ff9b] Revert reset.
1 file changed, 3 insertions(+)
G:\training\assignment\assignment2L2>git reset HEAD~1
Unstaged changes after reset:
M   file3.java
G:\training\assignment\assignment2L2>
```

The editor shows the file3.java file with the following content:

```
1 public class file3 {
2     pankaj
3     jshduh
4     kjsahduish
5     jhssdjb
6     asjdsjks
```

Step14: Revert the reset by adding the files to staging area and commit.

- Run the command **\$git add file1.java file2.java file3.java**. This will add the three files to the staging area.
- Run the command **\$git commit -m "Revert mixed reset"**. This will create a new commit that reverts the previous mixed reset.



The screenshot shows the Visual Studio Code interface with a terminal window open. The terminal displays the following commands and output:

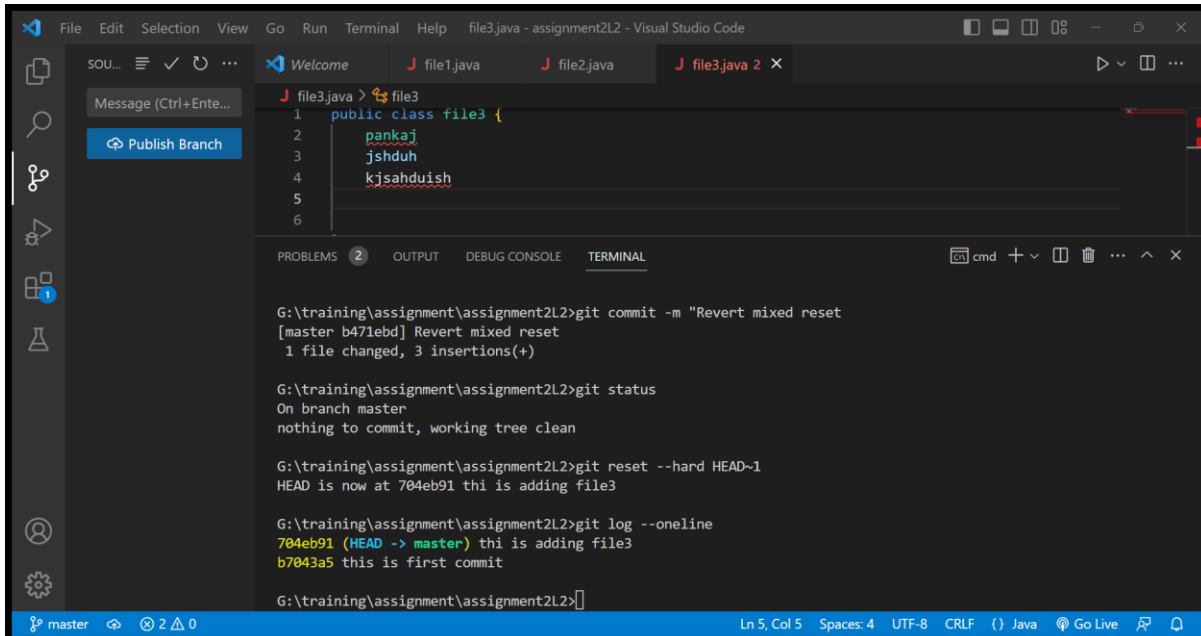
```
[master b67ff9b] Revert reset.
1 file changed, 3 insertions(+)
G:\training\assignment\assignment2L2>git reset HEAD~1
Unstaged changes after reset:
M   file3.java
G:\training\assignment\assignment2L2>git add file1.java file2.java file3.java
G:\training\assignment\assignment2L2>git commit -m "Revert mixed reset"
[master b471ebd] Revert mixed reset
1 file changed, 3 insertions(+)
G:\training\assignment\assignment2L2>git status
On branch master
nothing to commit, working tree clean
```

The editor shows the file3.java file with the following content:

```
1 public class file3 {
2     pankaj
3     jshduh
4     kjsahduish
5     jhssdjb
6     asjdsjks
```

Step15: Do a hard reset.

- Run the command **\$git reset --hard HEAD~1**. This will reset the current branch to the previous commit, discarding all changes made in the latest commit.



The screenshot shows the Visual Studio Code interface with a terminal window open. The terminal displays the following commands and output:

```
G:\training\assignment\assignment2L2>git commit -m "Revert mixed reset"
[master b471ebd] Revert mixed reset
1 file changed, 3 insertions(+)

G:\training\assignment\assignment2L2>git status
On branch master
nothing to commit, working tree clean

G:\training\assignment\assignment2L2>git reset --hard HEAD~1
HEAD is now at 704eb91 thi is adding file3

G:\training\assignment\assignment2L2>git log --oneline
704eb91 (HEAD -> master) thi is adding file3
b7043a5 this is first commit

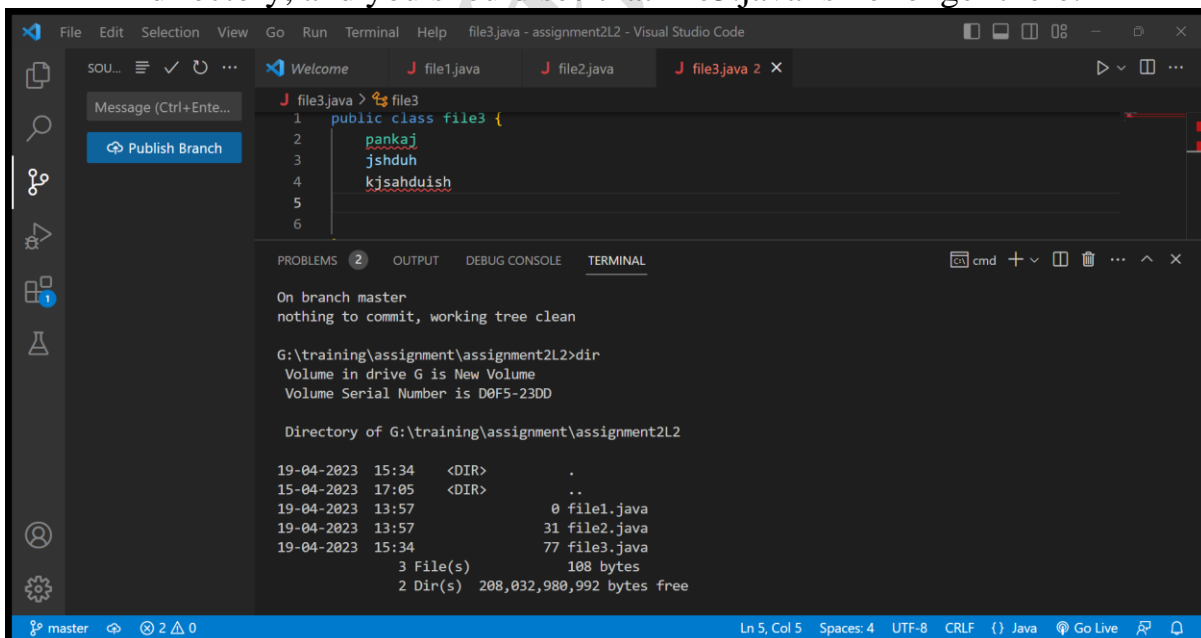
G:\training\assignment\assignment2L2>
```

The editor shows a file named `file3.java` with the following content:

```
1 public class file3 {
2     pankaj
3     jshduh
4     kjsahduish
5
6 }
```

Step16:- Verify that changes have been removed from the system.

- Run the command **\$dir**. This will list all the files in the current directory, and you should see that `file3.java` is no longer there.



The screenshot shows the Visual Studio Code interface with a terminal window open. The terminal displays the following commands and output:

```
On branch master
nothing to commit, working tree clean

G:\training\assignment\assignment2L2>dir
Volume in drive G is New Volume
Volume Serial Number is D0F5-23DD

Directory of G:\training\assignment\assignment2L2

19-04-2023  15:34    <DIR>        .
15-04-2023  17:05    <DIR>        ..
19-04-2023  13:57            0 file1.java
19-04-2023  13:57            31 file2.java
19-04-2023  15:34            77 file3.java
               3 File(s)          108 bytes
               2 Dir(s)  208,032,980,992 bytes free
```

The editor shows a file named `file3.java` with the following content:

```
1 public class file3 {
2     pankaj
3     jshduh
4     kjsahduish
5
6 }
```

Pankaj Kumar