

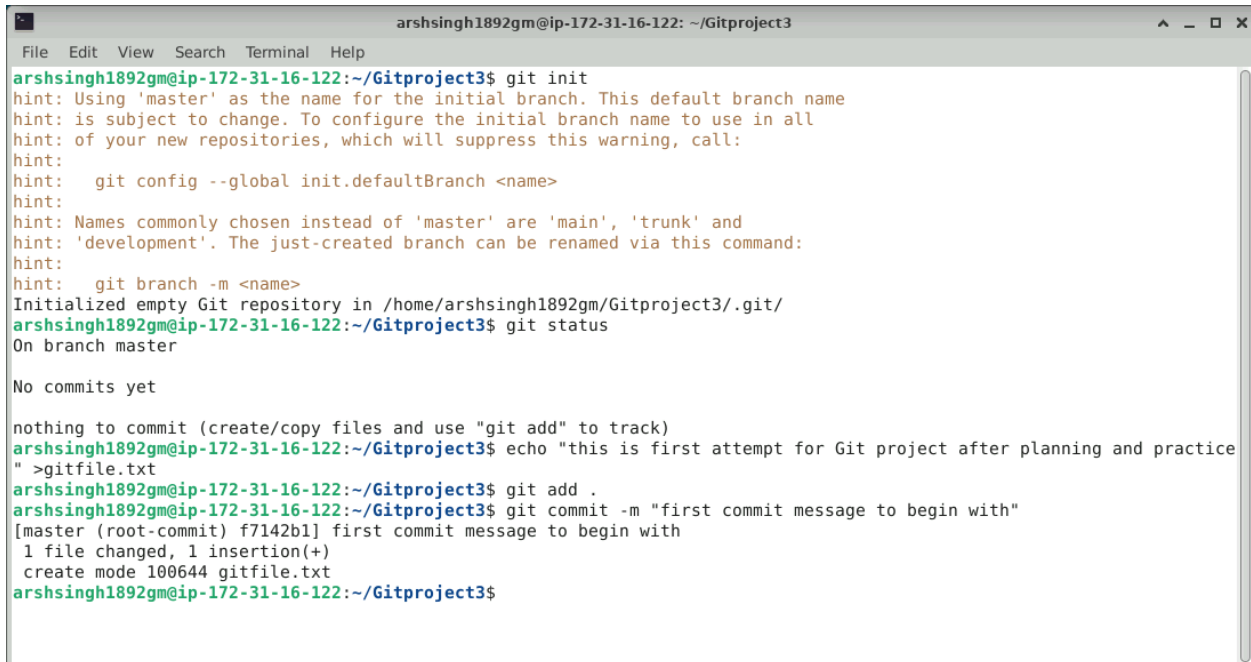
## Screenshot file

This file contains the step by step approach of accomplishing the task.

I have purposefully not renamed the master branch to production for my convenience.

*Note: after every 2 to 3 steps keep reviewing the status with Git Status and Git log --oneline to make sure we are moving in the right direction.*

### 1. Create a file, add the file and commit with a message

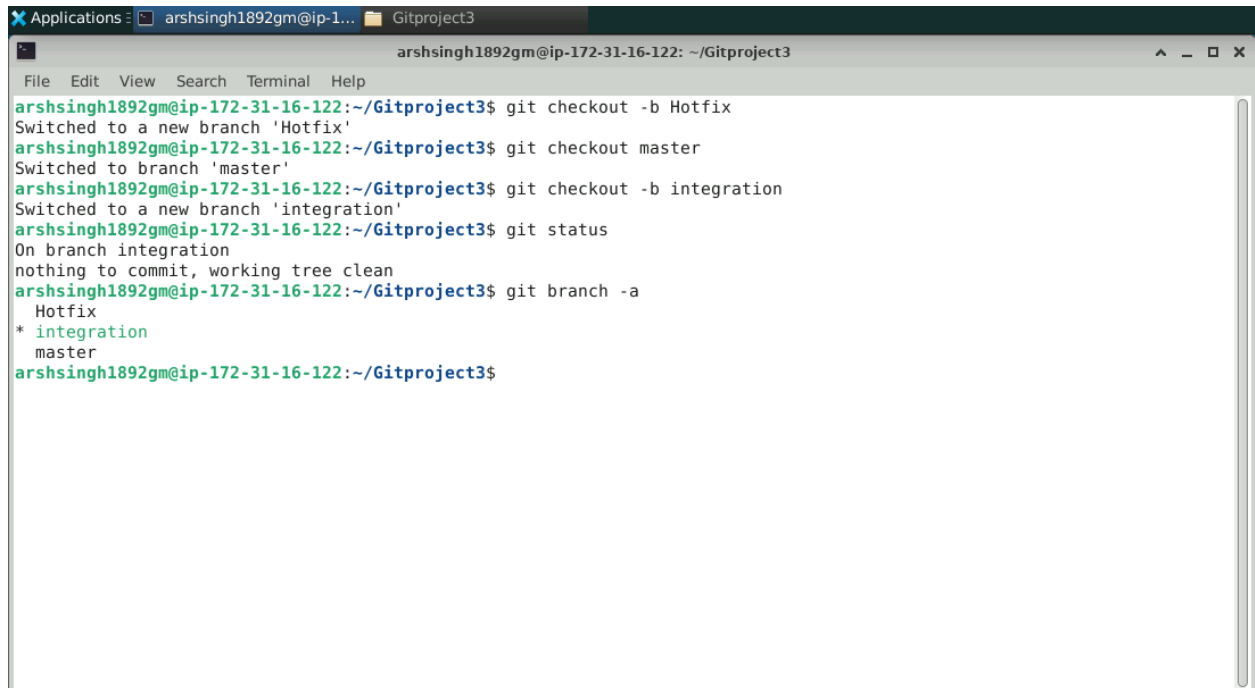
A screenshot of a terminal window titled 'arshsingh1892gm@ip-172-31-16-122: ~/Gitproject3'. The terminal shows the following commands and output:

```
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git init
hint: Using 'master' as the name for the initial branch. This default branch name
hint: is subject to change. To configure the initial branch name to use in all
hint: of your new repositories, which will suppress this warning, call:
hint:
hint:   git config --global init.defaultBranch <name>
hint:
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint:
hint:   git branch -m <name>
Initialized empty Git repository in /home/arshsingh1892gm/Gitproject3/.git/
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git status
On branch master

No commits yet

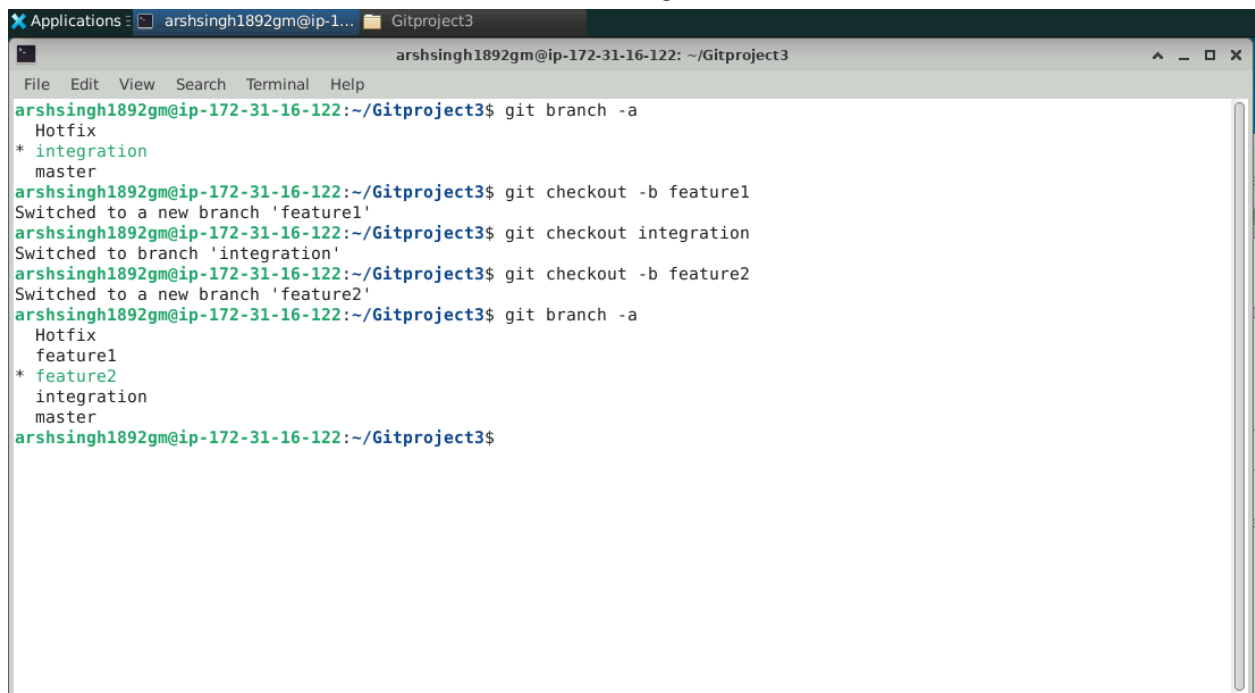
nothing to commit (create/copy files and use "git add" to track)
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ echo "this is first attempt for Git project after planning and practice" >gitfile.txt
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git add .
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git commit -m "first commit message to begin with"
[master (root-commit) f7142b1] first commit message to begin with
 1 file changed, 1 insertion(+)
 create mode 100644 gitfile.txt
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$
```

2. Check the status of the master branch.
3. Create a Hotfix branch and switch back to the master branch.
4. Create an Integration branch and stay with the Integration branch. Verify with git Status.



```
Applications: arshsingh1892gm@ip-1... Gitproject3
arshsingh1892gm@ip-172-31-16-122: ~/Gitproject3
File Edit View Search Terminal Help
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git checkout -b Hotfix
Switched to a new branch 'Hotfix'
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git checkout master
Switched to branch 'master'
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git checkout -b integration
Switched to a new branch 'integration'
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git status
On branch integration
nothing to commit, working tree clean
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git branch -a
  Hotfix
* integration
  master
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$
```

5. Create Feature1 branch, checkout to Integration branch and create Feature2 branch.



```
Applications: arshsingh1892gm@ip-1... Gitproject3
arshsingh1892gm@ip-172-31-16-122: ~/Gitproject3
File Edit View Search Terminal Help
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git branch -a
  Hotfix
* integration
  master
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git checkout -b feature1
Switched to a new branch 'feature1'
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git checkout integration
Switched to branch 'integration'
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git checkout -b feature2
Switched to a new branch 'feature2'
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git branch -a
  Hotfix
  feature1
* feature2
  integration
  master
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$
```

6. Checkout to Feature2 Branch and commit 2 changes

```
Applications: gitfile.txt (~/.Gitproject3...) arshsingh1892gm@ip-172-31-16-122: ~/Gitproject3
arshsingh1892gm@ip-172-31-16-122: ~/Gitproject3
File Edit View Search Terminal Help

arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git status
On branch feature2
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:   gitfile.txt

no changes added to commit (use "git add" and/or "git commit -a")
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git add .
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git commit -m "feature2 message1"
[feature2 019f0eb] feature2 message1
 1 file changed, 1 insertion(+)
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git status
On branch feature2
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:   gitfile.txt

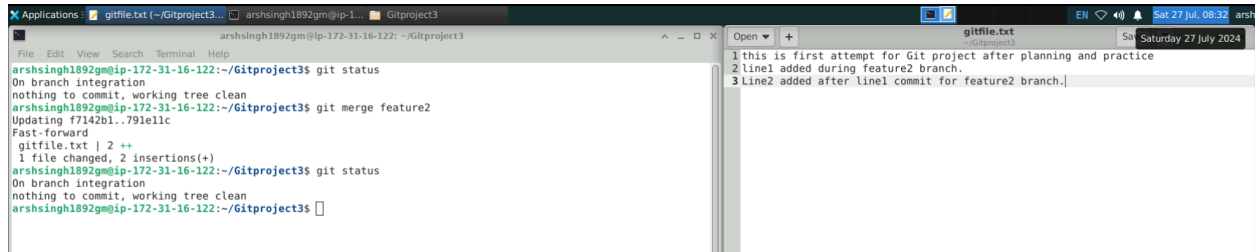
no changes added to commit (use "git add" and/or "git commit -a")
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git add .
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git commit -m "feature2 message2"
[feature2 791e11c] feature2 message2
 1 file changed, 1 insertion(+)
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git status
On branch feature2
nothing to commit, working tree clean
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$
```

```
Open + gitfile.txt ~/Gitproject3 Save - + x
1 this is first attempt for Git project after planning and practice
2 line1 added during feature2 branch.
3 Line2 added after line1 commit for feature2 branch.
```

## 7. Checkout to Integration branch and Merge Feature2 branch to Integration Branch

```
Applications: gitfile.txt (~/.Gitproject3...) arshsingh1892gm@ip-172-31-16-122: ~/Gitproject3
arshsingh1892gm@ip-172-31-16-122: ~/Gitproject3
File Edit View Search Terminal Help

arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git status
On branch integration
nothing to commit, working tree clean
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$
```



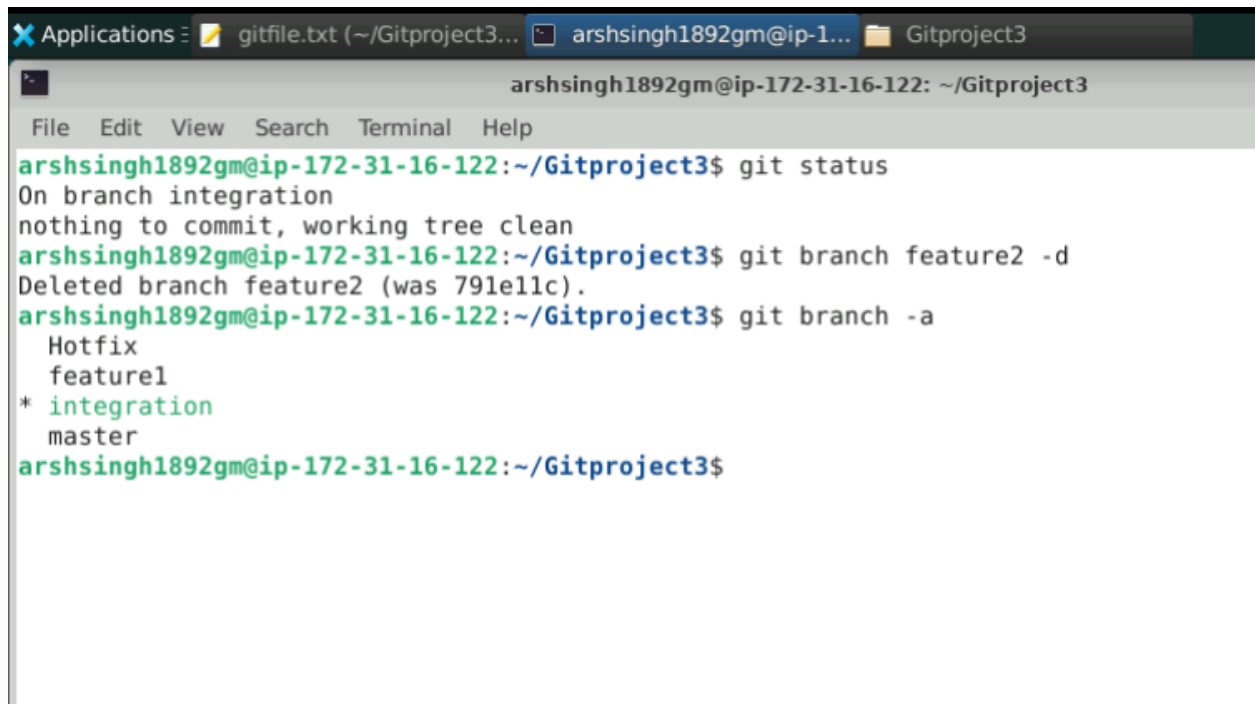
The screenshot shows a terminal window with the following commands and output:

```
arshsingh1892gm@ip-172-31-16-122: ~/Gitproject3
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git status
On branch integration
nothing to commit, working tree clean
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git merge feature2
Updating f7142b1..791e11c
Fast-forward
 gitfile.txt | 2 ++
 1 file changed, 2 insertions(+)
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git status
On branch integration
nothing to commit, working tree clean
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$
```

Overlaid on the terminal is a file editor window showing the content of `gitfile.txt`:

```
1 this is first attempt for Git project after planning and practice
2 line1 added during feature2 branch.
3 Line2 added after line1 commit for feature2 branch.
```

8. Delete Feature2 branch.



The screenshot shows a terminal window with the following commands and output:

```
arshsingh1892gm@ip-172-31-16-122: ~/Gitproject3
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git status
On branch integration
nothing to commit, working tree clean
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git branch feature2 -d
Deleted branch feature2 (was 791e11c).
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git branch -a
  Hotfix
  feature1
* integration
  master
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$
```

9. Checkout Feature1, Check Status and Commit message.

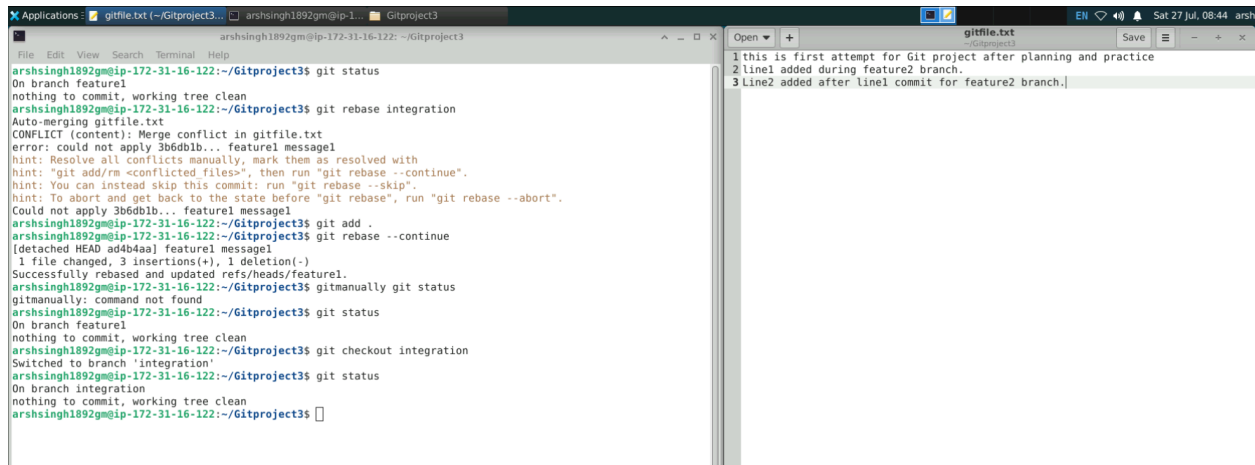
```
Applications: arshsingh1892gm@ip-1... Gitproject3
arshsingh1892gm@ip-172-31-16-122: ~/Gitproject3
File Edit View Search Terminal Help
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git status
On branch integration
nothing to commit, working tree clean
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git branch feature2 -d
Deleted branch feature2 (was 791e11c).
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git branch -a
  Hotfix
  feature1
* integration
  master
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git checkout feature1
Switched to branch 'feature1'
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git status
On branch feature1
nothing to commit, working tree clean
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git status
On branch feature1
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:   gitfile.txt

no changes added to commit (use "git add" and/or "git commit -a")
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git add .
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git commit -m "feature1 message1"
[feature1 3b6db1b] feature1 message1
 1 file changed, 2 insertions(+), 1 deletion(-)
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git status
On branch feature1
nothing to commit, working tree clean
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$
```

## 10. Rebase it to the Integration branch and resolve conflicts manually.

```
Applications: gitfile.txt (~/Gitproject3...) arshsingh1892gm@ip-1... Gitproject3
arshsingh1892gm@ip-172-31-16-122: ~/Gitproject3
File Edit View Search Terminal Help
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git status
On branch feature1
nothing to commit, working tree clean
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git rebase integration
Auto-merging gitfile.txt
CONFLICT (content): Merge conflict in gitfile.txt
error: could not apply 3b6db1b... feature1 message1
hint: Resolve all conflicts manually, mark them as resolved with
hint: "git add/rm <conflicted files>", then run "git rebase --continue".
hint: You can instead skip this commit: run "git rebase --skip".
hint: To abort and get back to the state before "git rebase", run "git rebase --abort".
Could not apply 3b6db1b... feature1 message1
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git add .
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git rebase --continue
[detached HEAD ad4b49a] feature1 message1
 1 file changed, 3 insertions(+), 1 deletion(-)
Successfully rebased and updated refs/heads/feature1.
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ gitmanually git status
gitmanually: command not found
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git status
On branch feature1
nothing to commit, working tree clean
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$
```

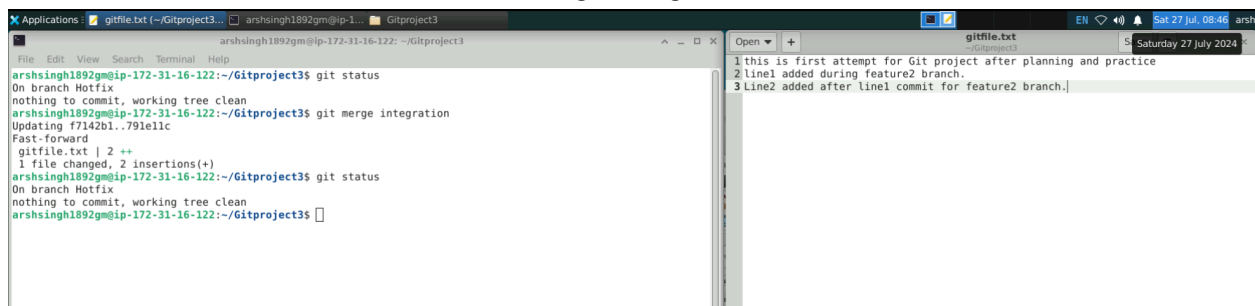
gitfile.txt  
~/.gitproject3  
1 This is first attempt for Git project after planning and practice  
2 line1 added during feature2 branch.  
3 Line2 added after line1 commit for feature2 branch.  
4 This should be the 1st line added via feature1 branch.  
5



```
arshsingh1892gm@ip-172-31-16-122: ~/Gitproject3
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git status
On branch feature1
nothing to commit, working tree clean
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git rebase integration
Auto-merging gitfile.txt
CONFLICT (content): Merge conflict in gitfile.txt
error: could not apply 3b6dbb...: feature1 message1
hint: Resolve all conflicts manually, mark them as resolved with
hint: "git add/rm <conflicted files>", then run "git rebase --continue".
hint: You can instead skip this commit: run "git rebase --skip".
hint: To abort and get back to the state before "git rebase", run "git rebase --abort".
Could not apply 3b6dbb...: feature1 message1
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git add .
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git rebase --continue
[detached HEAD ad4b4aa] feature1 message1
1 file changed, 3 insertions(+), 1 deletion(-)
Successfully rebased and updated refs/heads/feature1.
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ gitmanually git status
gitmanually: command not found
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git status
On branch feature1
nothing to commit, working tree clean
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git checkout integration
Switched to branch 'integration'
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git status
On branch integration
nothing to commit, working tree clean
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$
```

gitfile.txt  
1 this is first attempt for Git project after planning and practice  
2 line1 added during feature2 branch.  
3 Line2 added after line1 commit for feature2 branch.]

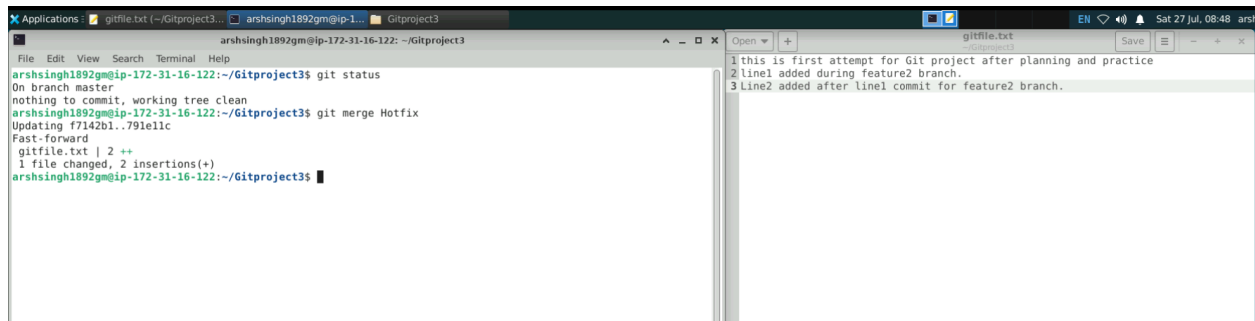
## 11. Checkout to Hotfix branch and Merge Integration to Hotfix.



```
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git status
On branch hotfix
nothing to commit, working tree clean
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git merge integration
Updating f7142b1..791e11c
Fast-forward
 gitfile.txt | 2 ++
 1 file changed, 2 insertions(+)
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git status
On branch hotfix
nothing to commit, working tree clean
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$
```

gitfile.txt  
1 this is first attempt for Git project after planning and practice  
2 line1 added during feature2 branch.  
3 Line2 added after line1 commit for feature2 branch.]

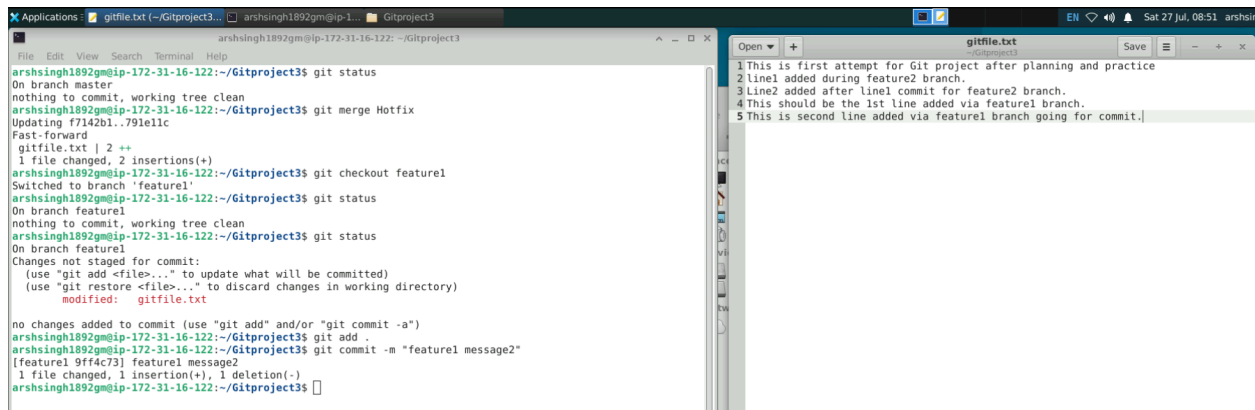
## 12. Checkout to the Master branch and merge Hotfix to Master.



```
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git status
On branch master
nothing to commit, working tree clean
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git merge hotfix
Updating f7142b1..791e11c
Fast-forward
 gitfile.txt | 2 ++
 1 file changed, 2 insertions(+)
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$
```

gitfile.txt  
1 this is first attempt for Git project after planning and practice  
2 line1 added during feature2 branch.  
3 Line2 added after line1 commit for feature2 branch.]

## 13. Checkout to Feature1 and make commits and then Checkout to Integration branch



```
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git status
On branch master
nothing to commit, working tree clean
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git merge hotfix
Updating f7142b1..791e11c
Fast-forward
 gitfile.txt | 2 ++
 1 file changed, 2 insertions(+)
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git checkout feature1
Switched to branch 'feature1'
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git status
On branch feature1
nothing to commit, working tree clean
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git status
On branch feature1
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:   gitfile.txt

no changes added to commit (use "git add" and/or "git commit -a")
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git add .
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git commit -m "feature1 message2"
[feature1 9ff4c73] feature1 message2
1 file changed, 1 insertion(+), 1 deletion(-)
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$
```

gitfile.txt  
1 This is first attempt for Git project after planning and practice  
2 line1 added during feature2 branch.  
3 Line2 added after line1 commit for feature2 branch.  
4 This should be the 1st line added via feature1 branch.  
5 This is second line added via feature1 branch going for commit.]

## 14. Merge Feature1 to Integration Branch,Checkout to Hotfix branch and Merge Integration to Hotfix.

```
arshsingh1892gm@ip-172-31-16-122: ~/Gitproject3
File Edit View Search Terminal Help
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git status
On branch master
nothing to commit, working tree clean
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git merge Hotfix
Updating f7142b1..791e11c
Fast-forward
 gitfile.txt | 2 ++
 1 file changed, 2 insertions(+)
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git checkout feature1
Switched to branch 'feature1'
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git status
On branch feature1
nothing to commit, working tree clean
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git status
On branch feature1
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:   gitfile.txt

no changes added to commit (use "git add" and/or "git commit -a")
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git add .
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git commit -m "feature1 message2"
[feature1 9ff4c73] feature1 message2
 1 file changed, 1 insertion(+), 1 deletion(-)
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git checkout integration
Switched to branch 'integration'
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$
```

```
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3
File Edit View Search Terminal Help
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git status
On branch master
nothing to commit, working tree clean
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git merge Hotfix
Updating f7142b1..791e11c
Fast-forward
 gitfile.txt | 2 ++
 1 file changed, 2 insertions(+)
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git checkout feature1
Switched to branch 'feature1'
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git status
On branch feature1
nothing to commit, working tree clean
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git status
On branch feature1
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:   gitfile.txt

no changes added to commit (use "git add" and/or "git commit -a")
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git add .
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git commit -m "feature1 message2"
[feature1 9ff4c73] feature1 message2
 1 file changed, 1 insertion(+), 1 deletion(-)
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git checkout integration
Switched to branch 'integration'
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git merge feature1
Updating 791e11c..9ff4c73
Fast-forward
 gitfile.txt | 4 +++
 1 file changed, 3 insertions(+), 1 deletion(-)
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$
```

```
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3
File Edit View Search Terminal Help
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git checkout Hotfix
Switched to branch 'Hotfix'
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$
```

The terminal window shows the following commands and output:

```
arshsingh1892gm@ip-172-31-16-122: ~/Gitproject3
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git checkout Hotfix
Switched to branch 'Hotfix'
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git merge integration
Updating 791e11c..9ff4c73
Fast-forward
 gitfile.txt | 4 +++
 1 file changed, 3 insertions(+), 1 deletion(-)
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$
```

The gitfile.txt editor window shows the following content:

```
1 This is first attempt for Git project after planning and practice
2 line1 added during feature2 branch.
3 Line2 added after line1 commit for feature2 branch.
4 This should be the 1st line added via feature1 branch.
5 This is second line added via feature1 branch going for commit.
```

## 15. Checkout to Master branch and merge Hotfix to master branch

The terminal window shows the following commands and output:

```
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git checkout Hotfix
Switched to branch 'Hotfix'
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git merge integration
Updating 791e11c..9ff4c73
Fast-forward
 gitfile.txt | 4 +++
 1 file changed, 3 insertions(+), 1 deletion(-)
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git checkout master
Switched to branch 'master'
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$
```

The gitfile.txt editor window shows the following content:

```
1 this is first attempt for Git project after planning and practice
2 line1 added during feature2 branch.
3 Line2 added after line1 commit for feature2 branch.
```

The terminal window shows the following commands and output:

```
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git checkout Hotfix
Switched to branch 'Hotfix'
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git merge integration
Updating 791e11c..9ff4c73
Fast-forward
 gitfile.txt | 4 +++
 1 file changed, 3 insertions(+), 1 deletion(-)
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git checkout master
Switched to branch 'master'
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git merge Hotfix
Updating 791e11c..9ff4c73
Fast-forward
 gitfile.txt | 4 +++
 1 file changed, 3 insertions(+), 1 deletion(-)
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$
```

The gitfile.txt editor window shows the following content:

```
1 This is first attempt for Git project after planning and practice
2 line1 added during feature2 branch.
3 Line2 added after line1 commit for feature2 branch.
4 This should be the 1st line added via feature1 branch.
5 This is second line added via feature1 branch going for commit.
```

## 16. Delete Feature1

## 17. Checkout to Hotfix Branch and commit changes



```
Applications: arshsingh1892gm@ip-1... Gitproject3
arshsingh1892gm@ip-172-31-16-122: ~/Gitproject3
File Edit View Search Terminal Help
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git checkout Hotfix
Switched to branch 'Hotfix'
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git merge integration
Updating 791e11c..9ff4c73
Fast-forward
 gitfile.txt | 4 +++-
 1 file changed, 3 insertions(+), 1 deletion(-)
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git checkout master
Switched to branch 'master'
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git merge Hotfix
Updating 791e11c..9ff4c73
Fast-forward
 gitfile.txt | 4 +++-
 1 file changed, 3 insertions(+), 1 deletion(-)
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git branch feature1 -d
Deleted branch feature1 (was 9ff4c73).
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git checkout Hotfix
Switched to branch 'Hotfix'
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git status
On branch Hotfix
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:   gitfile.txt

no changes added to commit (use "git add" and/or "git commit -a")
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git add .
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git commit -m "Hotfix branch message1"
[Hotfix 992b090] Hotfix branch message1
 1 file changed, 1 insertion(+)
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git status
On branch Hotfix
nothing to commit, working tree clean
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$
```

## 18. Checkout to Integration branch and Merge Hotfix to Integration Branch

```
Applications: gitfile.txt (~/Gitproject3...) arshsingh1892gm@ip-1... Gitproject3
arshsingh1892gm@ip-172-31-16-122: ~/Gitproject3
File Edit View Search Terminal Help
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git checkout integration
Switched to branch 'integration'
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$
```

gitfile.txt (~/Gitproject3)

```
1 This is first attempt for Git project after planning and practice
2 line1 added during feature2 branch.
3 Line2 added after line1 commit for feature2 branch.
4 This should be the 1st line added via feature1 branch.
5 This is second line added via feature1 branch going for commit.
```

```
Applications: gitfile.txt (~/Gitproject3...) arshsingh1892gm@ip-1... Gitproject3
arshsingh1892gm@ip-172-31-16-122: ~/Gitproject3
File Edit View Search Terminal Help
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git checkout integration
Switched to branch 'integration'
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$ git merge Hotfix
Updating 9ff4c73..992b090
Fast-forward
 gitfile.txt | 1 +
 1 file changed, 1 insertion(+)
arshsingh1892gm@ip-172-31-16-122:~/Gitproject3$
```

gitfile.txt (~/Gitproject3)

```
1 This is first attempt for Git project after planning and practice
2 line1 added during feature2 branch.
3 Line2 added after line1 commit for feature2 branch.
4 This should be the 1st line added via feature1 branch.
5 This is second line added via feature1 branch going for commit.
6 This is change made via Hotfix branch, going for commit.
```

## 19. Checkout to Master Branch and merge Hotfix to Master Branch.

The screenshot shows a terminal window on the left and a text editor on the right. The terminal window has a title bar with 'Applications', 'gitfile.txt (~/.Gitproject3...', and 'arshsingh1892gm@ip-172-31-16-122: ~/.Gitproject3'. The terminal content shows the user switching to the 'master' branch and attempting to merge a branch named 'Hotfix'. The text editor on the right has a title bar with 'gitfile.txt' and 'arshsingh1892gm@ip-172-31-16-122: ~/.Gitproject3'. It contains five lines of text: '1 This is first attempt for Git project after planning and practice', '2 line1 added during feature2 branch.', '3 Line2 added after line1 commit for feature2 branch.', '4 This should be the 1st line added via feature1 branch.', and '5 This is second line added via feature1 branch going for commit.'

```
arshsingh1892gm@ip-172-31-16-122:~/.Gitproject3$ git checkout master
Switched to branch 'master'
arshsingh1892gm@ip-172-31-16-122:~/.Gitproject3$ git merge Hotfix
```

1 This is first attempt for Git project after planning and practice  
2 line1 added during feature2 branch.  
3 Line2 added after line1 commit for feature2 branch.  
4 This should be the 1st line added via feature1 branch.  
5 This is second line added via feature1 branch going for commit.

The screenshot shows a terminal window on the left and a text editor on the right. The terminal window has a title bar with 'Applications', 'gitfile.txt (~/.Gitproject3...', and 'arshsingh1892gm@ip-172-31-16-122: ~/.Gitproject3'. The terminal content shows the user switching to the 'master' branch, merging a branch named 'Hotfix', and checking the status. The text editor on the right has a title bar with 'gitfile.txt' and 'arshsingh1892gm@ip-172-31-16-122: ~/.Gitproject3'. It contains six lines of text: '1 This is first attempt for Git project after planning and practice', '2 line1 added during feature2 branch.', '3 Line2 added after line1 commit for feature2 branch.', '4 This should be the 1st line added via feature1 branch.', '5 This is second line added via feature1 branch going for commit.', and '6 This is change made via Hotfix branch, going for commit.'

```
arshsingh1892gm@ip-172-31-16-122:~/.Gitproject3$ git checkout master
Switched to branch 'master'
arshsingh1892gm@ip-172-31-16-122:~/.Gitproject3$ git merge Hotfix
Fast-forward
 gitfile.txt | 1 +
 1 file changed, 1 insertion(+)
arshsingh1892gm@ip-172-31-16-122:~/.Gitproject3$ git status
On branch master
nothing to commit, working tree clean
arshsingh1892gm@ip-172-31-16-122:~/.Gitproject3$
```

1 This is first attempt for Git project after planning and practice  
2 line1 added during feature2 branch.  
3 Line2 added after line1 commit for feature2 branch.  
4 This should be the 1st line added via feature1 branch.  
5 This is second line added via feature1 branch going for commit.  
6 This is change made via Hotfix branch, going for commit.