

MODULE -1

Managing Source Code – Git and GitHub

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L2 - Create Local git repository and demonstrate git merge and Merge Conflicts with the steps to resolve merge conflicts

Step 1: initialize the Git by using git init command

```
sree@DESKTOP-URR5HER MINGW64 ~/Desktop/Start/Git assiessment (main)
$ git init
Reinitialized existing Git repository in C:/Users/sree/Desktop/Start/Git assiessment/.git/
sree@DESKTOP-URR5HER MINGW64 ~/Desktop/Start/Git assiessment (main)
$ |
```

Step 2: Check the Branches using the Git branch command

```
sree@DESKTOP-URR5HER MINGW64 ~/Desktop/Start/Git assiessment (main|MERGING)
$ git branch
* main
  new
```

Step 3: Now create a file in branch 1, by using vi or touch command

```
sree@DESKTOP-URR5HER MINGW64 ~/Desktop/Start/Git assiessment (main|MERGING)
$ vi b1.txt
```

Step 4: Write some content in that file

the is branch one's file

Step 5: Now create a new branch, by explicitly all the files from main branch will be copied to new branch. the branch will be created using git checkout -b <new branch name>

```
sree@DESKTOP-URR5HER MINGW64 ~/Desktop/Start/Git assiessment (main|MERGING)
$ git checkout -b new
```

Step 6: now edit the file which is created in main branch and save it and add it and commit it.



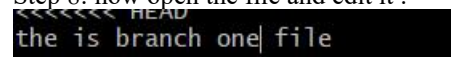
Step 7: Switch to main branch

```
sree@DESKTOP-URR5HER MINGW64 ~/Desktop/Start/Git assiessment (new)
$ git checkout main
Switched to branch 'main'
Your branch and 'origin/main' have diverged,
and have 5 and 1 different commits each, respectively.
(use "git pull" if you want to integrate the remote branch with yours)

sree@DESKTOP-URR5HER MINGW64 ~/Desktop/Start/Git assiessment (main)
$ ls
a1.txt  b1.txt  git-01.pdf

sree@DESKTOP-URR5HER MINGW64 ~/Desktop/Start/Git assiessment (main)
$ |
```

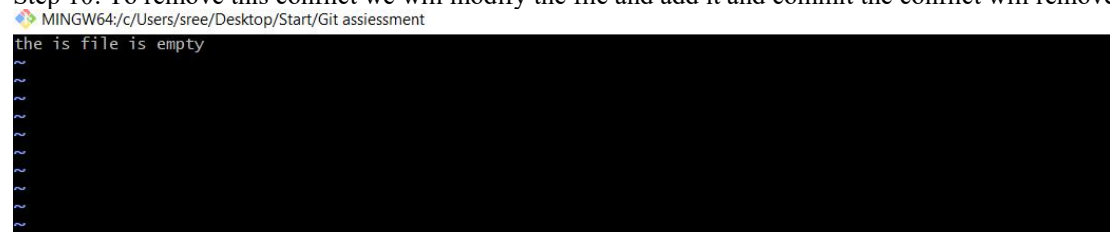
Step 8: now open the file and edit it .



Step 9: now merge it ,with new branch you will see the conflicts

```
gi
sree@DESKTOP-URR5HER MINGW64 ~/Desktop/Start/Git assiessment (main)
$ git merge new
Auto-merging b1.txt
CONFLICT (content): Merge conflict in b1.txt
Automatic merge failed; fix conflicts and then commit the result.
```

Step 10: To remove this conflict we will modify the file and add it and commit the conflict will remove.



```
sree@DESKTOP-URR5HER MINGW64 ~/Desktop/Start/Git assiessment (main)
$ git merge new
Already up to date.

sree@DESKTOP-URR5HER MINGW64 ~/Desktop/Start/Git assiessment (main)
$ |
```

