

## WEEK - 3

Use Git to perform the following tasks

- d) Manage remote repositories(push,pull etc.)
- e) Branching and Merging(branch, merge,checkout etc.)
- f) Recovery management(restore,reset, revert etc.)

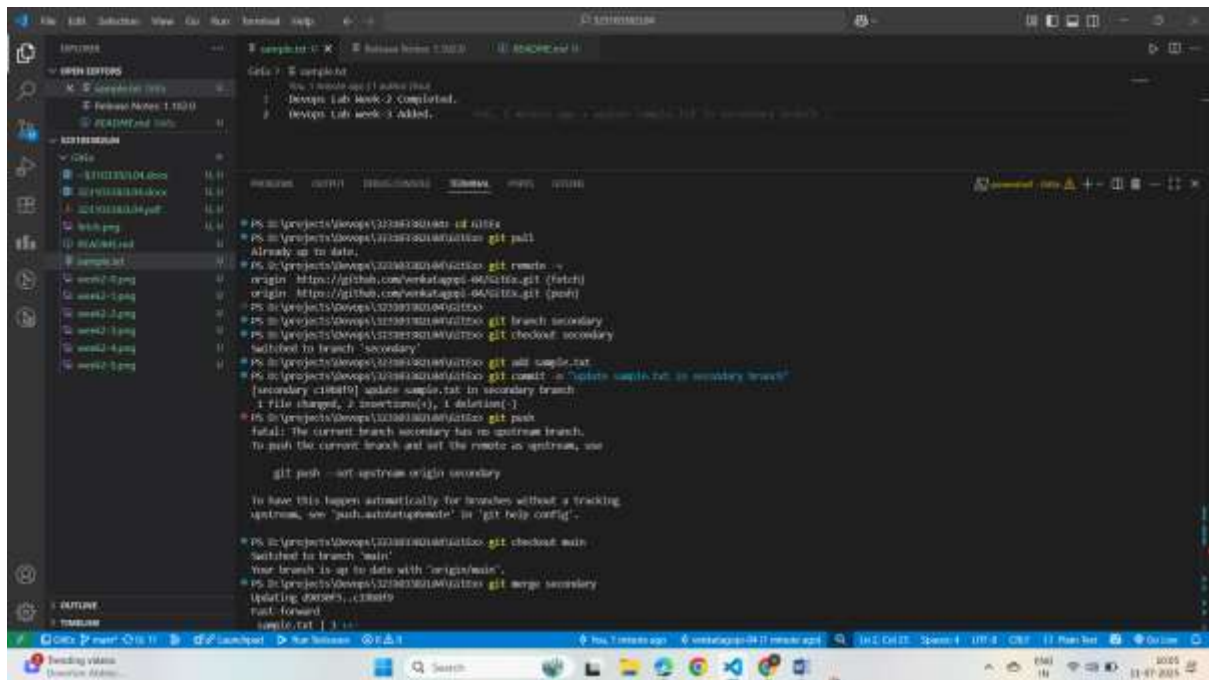
```
PS D:\projects\Devops\323103382L04> cd GitEx
PS D:\projects\Devops\323103382L04\GitEx> git pull
Already up to date.
PS D:\projects\Devops\323103382L04\GitEx> git remote -v
origin https://github.com/venkatagopi-04/GitEx.git (fetch)
origin https://github.com/venkatagopi-04/GitEx.git (push)
PS D:\projects\Devops\323103382L04\GitEx>
```

```
PS D:\projects\Devops\323103382L04\GitEx>
PS D:\projects\Devops\323103382L04\GitEx> git branch secondary
PS D:\projects\Devops\323103382L04\GitEx> git checkout secondary
Switched to branch 'secondary'
PS D:\projects\Devops\323103382L04\GitEx> git add sample.txt
PS D:\projects\Devops\323103382L04\GitEx> git commit -m "update sample.txt in secondary branch"
[secondary c19b8f9] update sample.txt in secondary branch
1 file changed, 2 insertions(+), 1 deletion(-)
PS D:\projects\Devops\323103382L04\GitEx> git push
fatal: The current branch secondary has no upstream branch.
To push the current branch and set the remote as upstream, use

    git push --set-upstream origin secondary

To have this happen automatically for branches without a tracking
upstream, see 'push.autoSetupRemote' in 'git help config'.
```

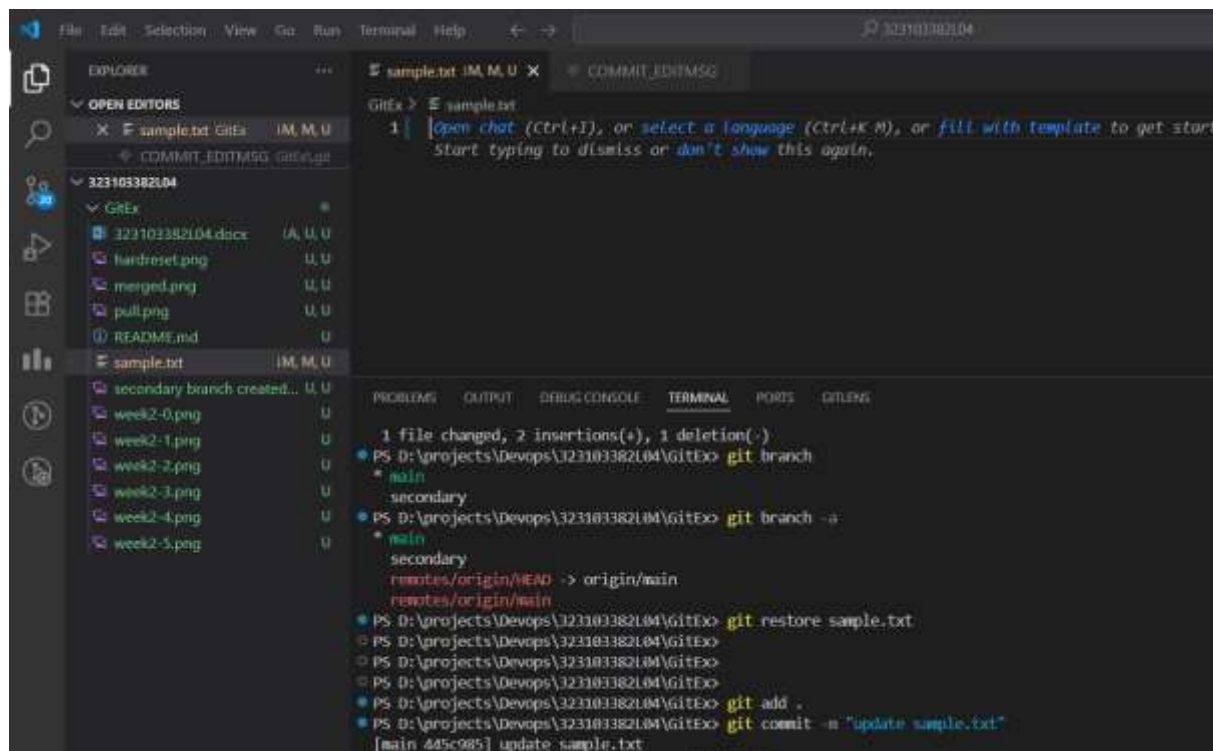
### Created new Branch “Secondary”



**Update an existing file “sample.txt” and added into the secondary branch.**

- PS D:\projects\Devops\323103382L04\GitEx> **git checkout main**  
Switched to branch 'main'  
Your branch is up to date with 'origin/main'.
- PS D:\projects\Devops\323103382L04\GitEx> **git merge secondary**  
Updating d9030f5..c19b8f9  
Fast-forward  
sample.txt | 3 ++-  
1 file changed, 2 insertions(+), 1 deletion(-)
- PS D:\projects\Devops\323103382L04\GitEx> **git branch**  
\* main  
secondary
- PS D:\projects\Devops\323103382L04\GitEx> **git branch -a**  
\* main  
secondary  
remotes/origin/HEAD -> origin/main  
remotes/origin/main

**Merged Secondary branch and Main Branch**



## Deleted content of sample .txt

```

PS D:\projects\Devops\323103382L04\GitEx> git restore sample.txt
PS D:\projects\Devops\323103382L04\GitEx>
PS D:\projects\Devops\323103382L04\GitEx>
PS D:\projects\Devops\323103382L04\GitEx>
PS D:\projects\Devops\323103382L04\GitEx> git add .
PS D:\projects\Devops\323103382L04\GitEx> git commit -m "update sample.txt"
[main 445c985] update sample.txt
9 files changed, 1 insertion(+), 1 deletion(-)
create mode 100644 323103382L04.docx
create mode 100644 323103382L04.pdf
create mode 100644 branch created.png
create mode 100644 empty sample.txt.png
create mode 100644 fetch.png
create mode 100644 merge into main.png
create mode 100644 restored.png

```

## Restored the contents of sample.txt using

“git restore sample.txt”

```

PS D:\projects\Devops\323103382L04\GitEx>
PS D:\projects\Devops\323103382L04\GitEx>
PS D:\projects\Devops\323103382L04\GitEx>
PS D:\projects\Devops\323103382L04\GitEx>
PS D:\projects\Devops\323103382L04\GitEx>
PS D:\projects\Devops\323103382L04\GitEx>
PS D:\projects\Devops\323103382L04\GitEx> git reset --hard HEAD~1
• >> D:\projects\Devops\323103382L04\GitEx>
HEAD is now at d9030f5 add week2-0
• PS D:\projects\Devops\323103382L04\GitEx> git add .
• PS D:\projects\Devops\323103382L04\GitEx> git commit -m "update sample.txt"
[main 7eaf69d] update sample.txt
 2 files changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 323103382L04.docx
 create mode 100644 push.all.png

```

**Performed the Hard Resetting of Staging area.**

```

• PS D:\projects\Devops\323103382L04\GitEx> git add .
• PS D:\projects\Devops\323103382L04\GitEx> git commit -m "add week3 images"
[main c509be1] add week3 images
 8 files changed, 1 deletion(-)
 create mode 100644 323103382L04.docx
 create mode 100644 empty.sample.txt.png
 create mode 100644 hardreset.png
 create mode 100644 merged.png
 create mode 100644 pull.png
 create mode 100644 restore.png
 create mode 100644 secondary branch created.png
• PS D:\projects\Devops\323103382L04\GitEx> git push
To https://github.com/venkatagopi-04/GitEx.git
 ! [rejected]        main -> main (non-fast-forward)
error: failed to push some refs to 'https://github.com/venkatagopi-04/GitEx.git'
hint: Updates were rejected because the tip of your current branch is behind
hint: its remote counterpart. If you want to integrate the remote changes,
hint: use 'git pull' before pushing again.
hint: See the 'Note about fast-forwards' in 'git push --help' for details.
• PS D:\projects\Devops\323103382L04\GitEx> git pull
warning: Cannot merge binary files: empty.sample.txt.png (HEAD vs. 445c985a9975a74b9f9ec62bafid5578d726159c9)
Auto-merging empty.sample.txt.png
CONFLICT (add/add): Merge conflict in empty.sample.txt.png
Auto-merging sample.txt
CONFLICT (content): Merge conflict in sample.txt
Automatic merge failed; fix conflicts and then commit the result.
• PS D:\projects\Devops\323103382L04\GitEx> git add .
• PS D:\projects\Devops\323103382L04\GitEx> git commit -m "add week3 images"
[main 0208c76] add week3 images
• PS D:\projects\Devops\323103382L04\GitEx> git push
Enumerating objects: 21, done.
Counting objects: 100% (21/21), done.
Delta compression using up to 8 threads
Compressing objects: 100% (15/15), done.
Writing objects: 100% (16/16), 293.16 KiB | 12.21 MiB/s, done.
Total 16 (delta 3), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (3/3), completed with 1 local object.
To https://github.com/venkatagopi-04/GitEx.git
 445c985..0208c76 main -> main
• PS D:\projects\Devops\323103382L04\GitEx> █

```

**Solved the Merge Conflict by Pull the remote repo back again and the performed Push operation.**