WEEK 8

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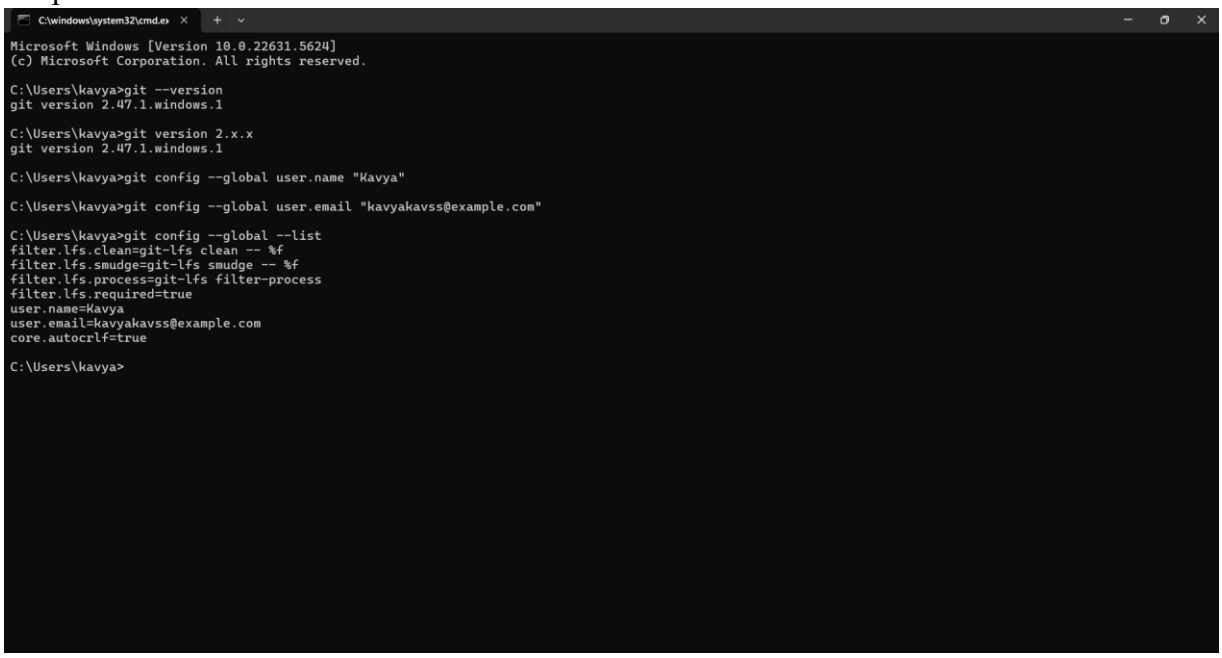
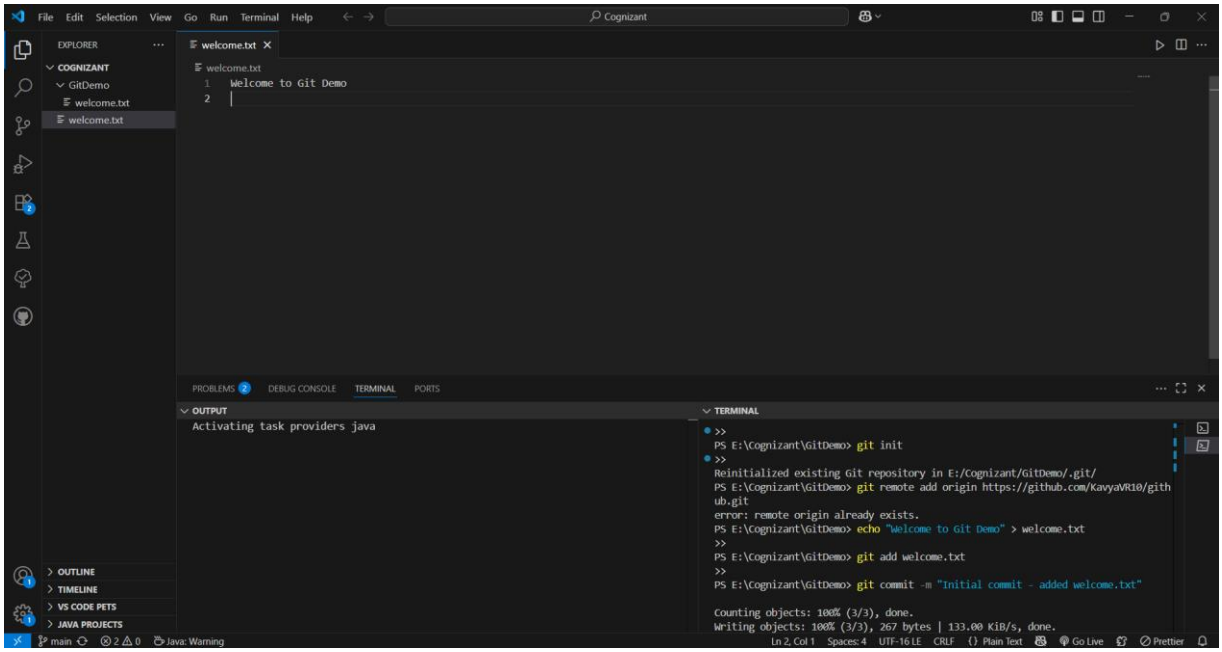
Exercise 1:

git –version

git version 2.x.x
git config --global user.name "Naren"
git config --global user.email Naren@example.com
git config --global –list
git config --global core.editor "code --wait"
git config --global -e
mkdir GitDemo
cd GitDemo
git init
ls -a
echo "Welcome to Git Demo" > welcome.txt
cat welcome.txt
git status
git add welcome.txt
git commit
Added welcome.txt
git status
git remote add origin https://github.com/Naren/GitDemo.git
Output:

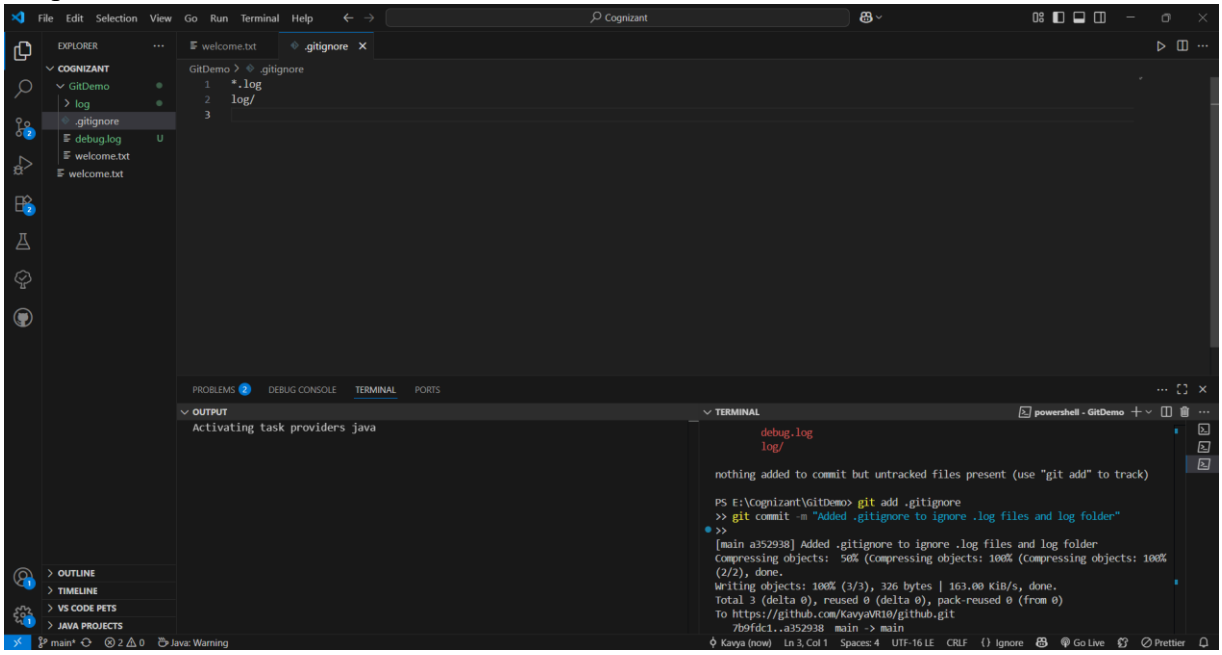




Exercise 2:

```
echo "This is a log file" > debug.log
mkdir log
echo "Log data" > log/output.txt
echo "*.log" > .gitignore
echo "log/" >> .gitignore
git status
git add .gitignore
git commit -m "Added .gitignore to ignore .log files and log folder"
git push
```

Output:



Exercise 3:Branching

git branch GitNewBranch

git branch

git branch -r

git checkout GitNewBranch

echo "This is a new file" > newfile.txt

git add newfile.txt

git commit -m "Added newfile.txt in GitNewBranch"

git status

Merging:

git checkout master

git diff master GitNewBranch

git difftool master GitNewBranch

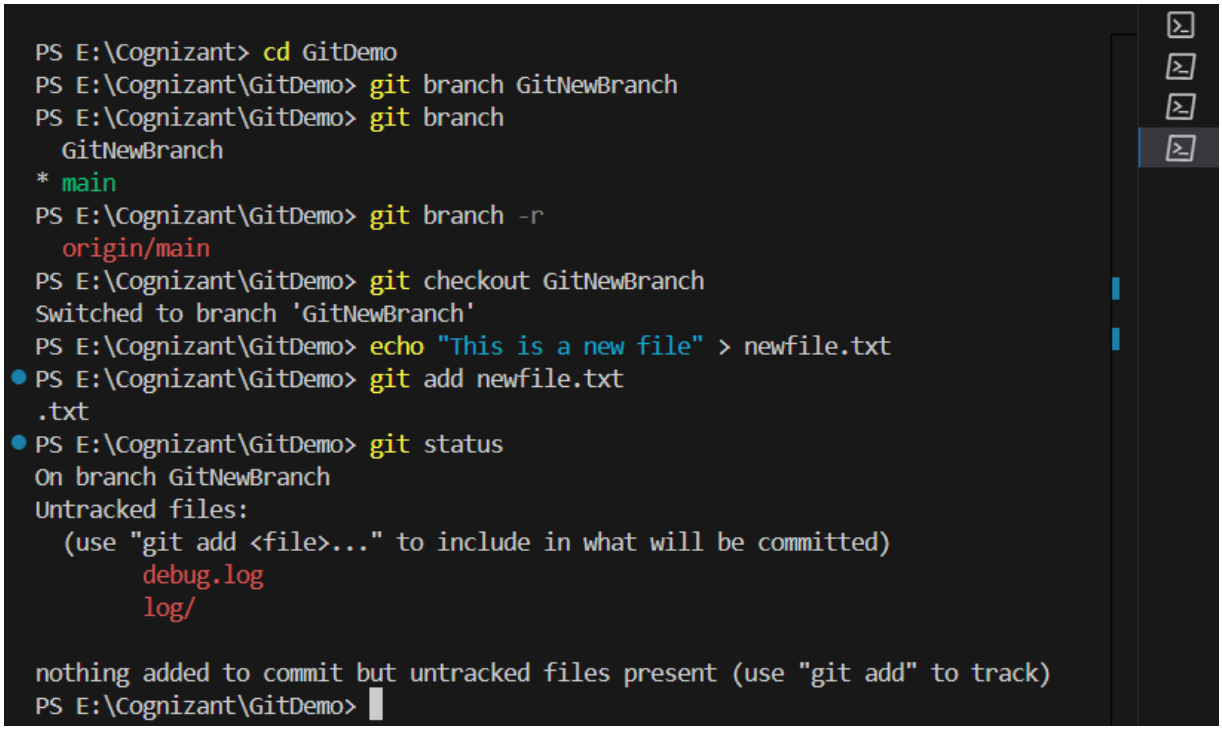
git merge GitNewBranch

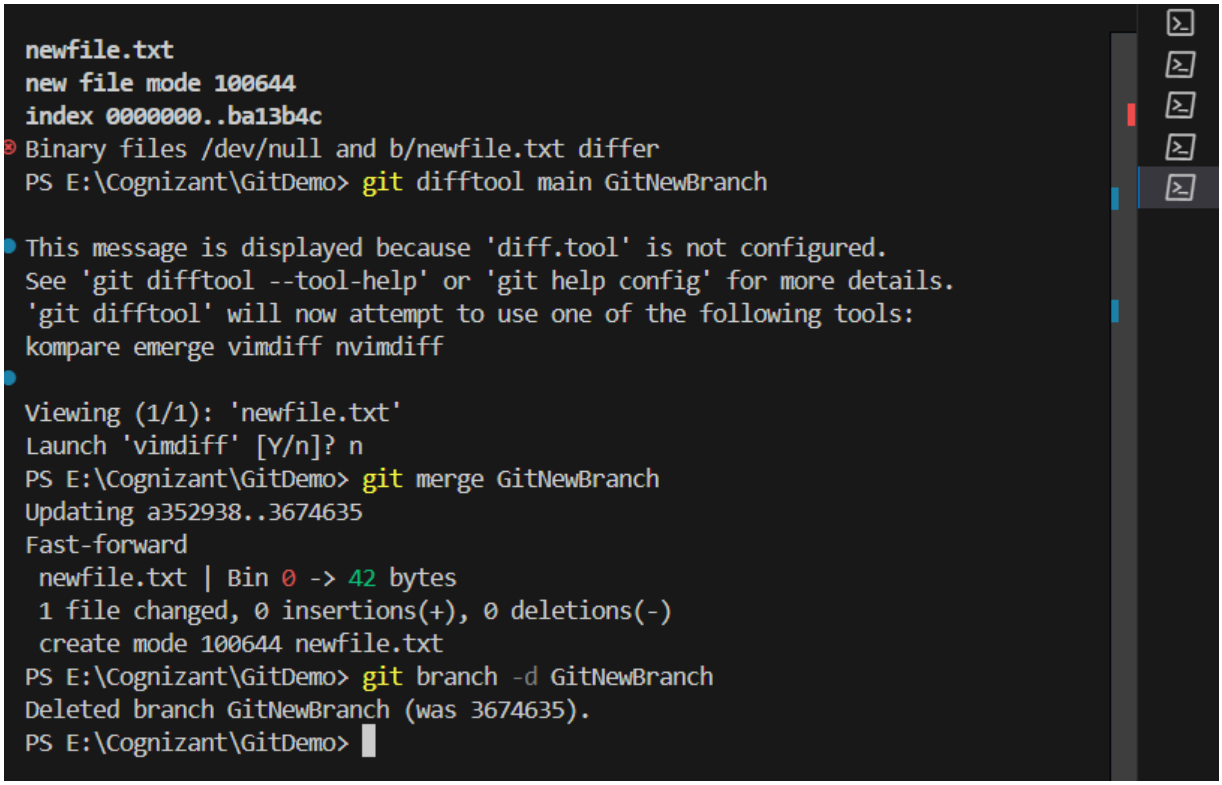
git log --oneline --graph --decorate

git branch -d GitNewBranch

git status

Output:

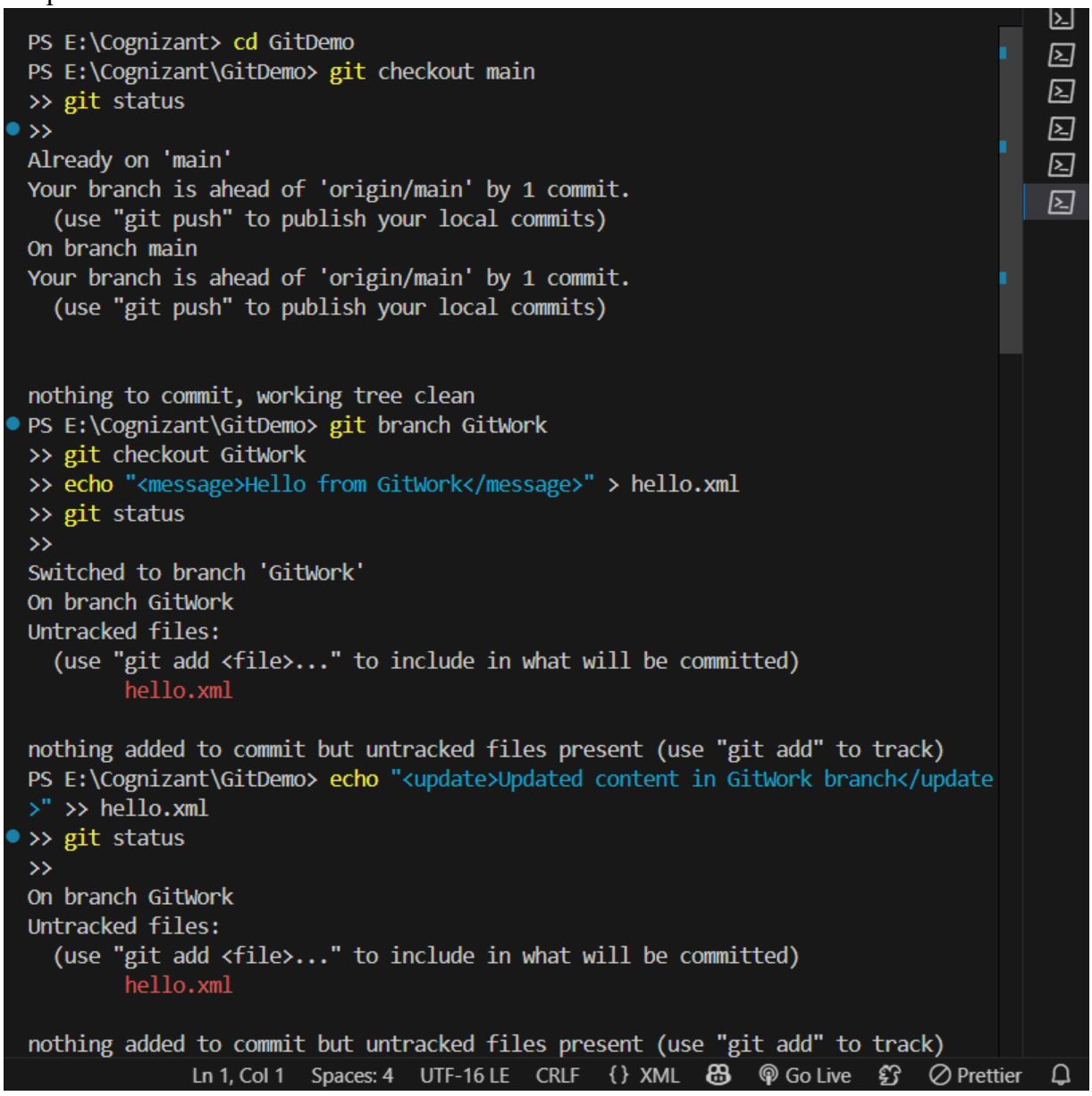


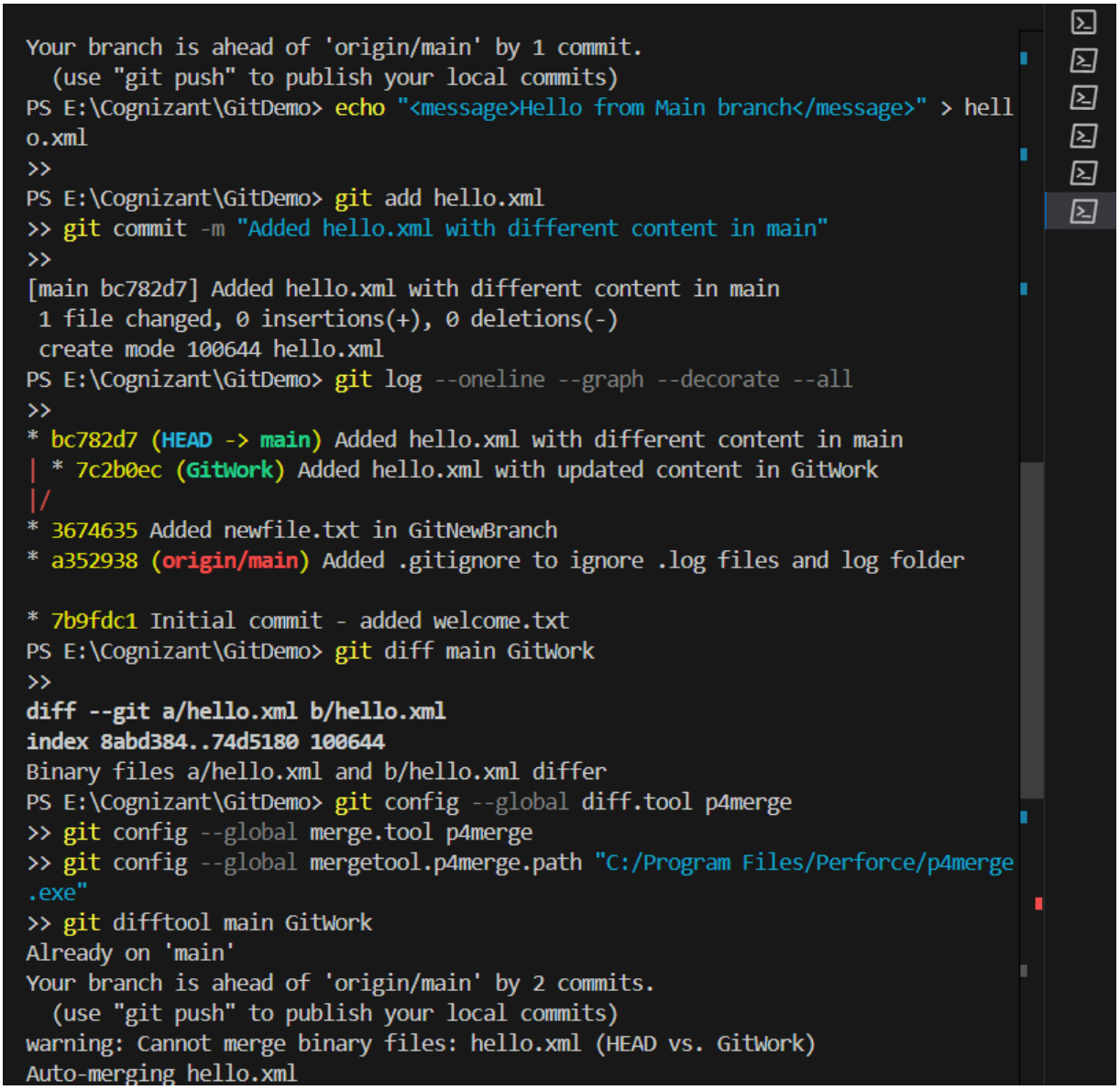


Exercise 4:
git checkout main
git status
git branch GitWork
git checkout GitWork
echo "<message>Hello from GitWork</message>" > hello.xml
git status
git add hello.xml
git commit -m "Added hello.xml with updated content in GitWork"
git checkout main
echo "<message>Hello from Main branch</message>" > hello.xml
git add hello.xml
git commit -m "Added hello.xml with different content in main"
git log --oneline --graph --decorate –all
git diff main GitWork
git config --global diff.tool p4merge
git config --global merge.tool p4merge
git config --global mergetool.p4merge.path "C:/Program Files/Perforce/p4merge.exe"
git difftool main GitWork
git checkout main
git merge GitWork
git mergetool
git add hello.xml
git commit -m "Merged GitWork into main with conflict resolved"
echo "*.orig" >> .gitignore

git status
git add .gitignore
git commit -m "Added .gitignore for backup files"
git branch
git branch -d GitWork
git log --oneline --graph --decorate

Output:




Your branch is ahead of 'origin/main' by 1 commit.
(use "git push" to publish your local commits)
PS E:\Cognizant\GitDemo> echo "<message>Hello from Main branch</message>" > hell
o.xml
>>
PS E:\Cognizant\GitDemo> git add hello.xml
>> git commit -m "Added hello.xml with different content in main"
>>
[main bc782d7] Added hello.xml with different content in main
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 hello.xml
PS E:\Cognizant\GitDemo> git log --oneline --graph --decorate --all
>>
* bc782d7 (HEAD -> main) Added hello.xml with different content in main
| * 7c2b0ec (GitWork) Added hello.xml with updated content in GitWork
|/
* 3674635 Added newfile.txt in GitNewBranch
* a352938 (origin/main) Added .gitignore to ignore .log files and log folder
* 7b9fdc1 Initial commit - added welcome.txt
PS E:\Cognizant\GitDemo> git diff main GitWork
>>
diff --git a/hello.xml b/hello.xml
index 8abd384..74d5180 100644
Binary files a/hello.xml and b/hello.xml differ
PS E:\Cognizant\GitDemo> git config --global diff.tool p4merge
>> git config --global merge.tool p4merge
>> git config --global mergetool.p4merge.path "C:/Program Files/Perforce/p4merge
.exe"
>> git difftool main GitWork
Already on 'main'
Your branch is ahead of 'origin/main' by 2 commits.
(use "git push" to publish your local commits)
warning: Cannot merge binary files: hello.xml (HEAD vs. GitWork)
Auto-merging hello.xml

```
>> E:\Cognizant\GitDemo>
[main 661524e] Merged GitWork into main with conflict resolved
PS E:\Cognizant\GitDemo> echo "*.orig" >> .gitignore
>> git status
>>
On branch main
t branch
>>
  GitWork
* main
PS E:\Cognizant\GitDemo> git branch -d GitWork
>>
Deleted branch GitWork (was 7c2b0ec).
PS E:\Cognizant\GitDemo> git log --oneline --graph --decorate
>>
* 0a896f5 (HEAD -> main) Added .gitignore for backup files
*   661524e Merged GitWork into main with conflict resolved
|\
| * 7c2b0ec Added hello.xml with updated content in GitWork
* | bc782d7 Added hello.xml with different content in main
|/
* 3674635 Added newfile.txt in GitNewBranch
* a352938 (origin/main) Added .gitignore to ignore .log files and log folder
* 7b9fdc1 Initial commit - added welcome.txt
PS E:\Cognizant\GitDemo>
```

Exercise 5:
git branch -a
git fetch origin
git checkout -b Git-T03-HOL_002 origin/Git-T03-HOL_002
git push origin main
git checkout -b Git-T03-HOL_002
git push origin Git-T03-HOL_002
Output:

```
>> git checkout Git-T03-HOL_002
>>
>> # Check if there are commits not pushed yet
>> git status
>> git log origin/Git-T03-HOL_002..HEAD --oneline
>>
>> # Push to remote
>> git push origin Git-T03-HOL_002
>>
Already on 'Git-T03-HOL_002'
On branch Git-T03-HOL_002
nothing to commit, working tree clean
Everything up-to-date
PS E:\Cognizant\GitDemo>
```