MINGW64:/c/Users/ADMIN/GitDemo

```
ADMIN@DESKTOP-OUB4RGS MINGW64 ~/GitDemo (main)
$ git checkout main
Already on 'main'
Your branch is ahead of 'origin/main' by 1 commit.
  (use "git push" to publish your local commits)

ADMIN@DESKTOP-OUB4RGS MINGW64 ~/GitDemo (main)
$ git status
On branch main
Your branch is ahead of 'origin/main' by 1 commit.
  (use "git push" to publish your local commits)

nothing to commit, working tree clean

ADMIN@DESKTOP-OUB4RGS MINGW64 ~/GitDemo (main)
$ git switch -c GitWork
Switched to a new branch 'GitWork'

ADMIN@DESKTOP-OUB4RGS MINGW64 ~/GitDemo (GitWork)
$ printf "<?xml version=\"1.0\"?>\n<message>Hello from GitWork branch</message>\
n" > hello.xml

ADMIN@DESKTOP-OUB4RGS MINGW64 ~/GitDemo (GitWork)
$ git status
On branch GitWork
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        hello.xml

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

ADMIN@DESKTOP-OUB4RGS MINGW64 ~/GitDemo (GitWork)
$ git add hello.xml
warning: in the working copy of 'hello.xml', LF will be replaced by CRLF the nex
t time Git touches it

ADMIN@DESKTOP-OUB4RGS MINGW64 ~/GitDemo (GitWork)
$ git commit -m "Add hello.xml on GitWork (branch version)"
[GitWork 21be39d] Add hello.xml on GitWork (branch version)
 1 file changed, 2 insertions(+)
 create mode 100644 hello.xml

ADMIN@DESKTOP-OUB4RGS MINGW64 ~/GitDemo (GitWork)
$ git status
On branch GitWork
nothing to commit, working tree clean

ADMIN@DESKTOP-OUB4RGS MINGW64 ~/GitDemo (GitWork)
$ git log --oneline --graph --decorate -n 5
* 21be39d (HEAD -> GitWork) Add hello.xml on GitWork (branch version)
* 66b5f5c (main) Add branchfile.txt in GitNewBranch
* bc79df2 (origin/main) Add .gitignore to ignore *.log files and log folder
```

```
ADMIN@DESKTOP-OUB4RGS MINGW64 ~/GitDemo (GitWork)
$ git switch main
Switched to branch 'main'
Your branch is ahead of 'origin/main' by 1 commit.
  (use "git push" to publish your local commits)

ADMIN@DESKTOP-OUB4RGS MINGW64 ~/GitDemo (main)
$ printf "<?xml version=\"1.0\"?>\n<message>Hello from main branch</message>\n"
> hello.xml

ADMIN@DESKTOP-OUB4RGS MINGW64 ~/GitDemo (main)
$ git add hello.xml
warning: in the working copy of 'hello.xml', LF will be replaced by CRLF the nex
t time Git touches it

ADMIN@DESKTOP-OUB4RGS MINGW64 ~/GitDemo (main)
$ git commit -m "Add/modify hello.xml on main (master version) to cause conflict
"
[main f29db13] Add/modify hello.xml on main (master version) to cause conflict
 1 file changed, 2 insertions(+)
 create mode 100644 hello.xml

ADMIN@DESKTOP-OUB4RGS MINGW64 ~/GitDemo (main)
$ git log --oneline --graph --decorate --all
* f29db13 (HEAD -> main) Add/modify hello.xml on main (master version) to cause
conflict
| * 21be39d (GitWork) Add hello.xml on GitWork (branch version)
|/
* 66b5f5c Add branchfile.txt in GitNewBranch
* bc79df2 (origin/main) Add .gitignore to ignore *.log files and log folder
```

```
mo
|\
| * 4907001 Initial commit
* 7b4f7fe Initial commit: add welcome.txt

ADMIN@DESKTOP-OUB4RGS MINGW64 ~/GitDemo (main)
$ git diff --name-only main..GitWork
hello.xml

ADMIN@DESKTOP-OUB4RGS MINGW64 ~/GitDemo (main)
$ git diff main..GitWork
diff --git a/hello.xml b/hello.xml
index 26637e0..78a8252 100644
--- a/hello.xml
+++ b/hello.xml
@@ -1,2 +1,2 @@
 <?xml version="1.0"?>
-<message>Hello from main branch</message>
+<message>Hello from GitWork branch</message>

ADMIN@DESKTOP-OUB4RGS MINGW64 ~/GitDemo (main)
$ git difftool main..GitWork

Viewing (1/1): 'hello.xml'
Launch 'p4merge' [Y/n]? Y
```

```
MINGW64:/c/Users/ADMIN/GitDemo

ADMIN@DESKTOP-OUB4RGS MINGW64 ~/GitDemo (main)
$ git merge GitWork
Auto-merging hello.xml
CONFLICT (add/add): Merge conflict in hello.xml
Automatic merge failed; fix conflicts and then commit the result.

ADMIN@DESKTOP-OUB4RGS MINGW64 ~/GitDemo (main|MERGING)
$ git status
On branch main
Your branch is ahead of 'origin/main' by 2 commits.
  (use "git push" to publish your local commits)

You have unmerged paths.
  (fix conflicts and run "git commit")
  (use "git merge --abort" to abort the merge)

Unmerged paths:
  (use "git add <file>..." to mark resolution)
        both added:      hello.xml

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

ADMIN@DESKTOP-OUB4RGS MINGW64 ~/GitDemo (main|MERGING)
$ cat hello.xml
<?xml version="1.0"?>
<<<<<<< HEAD
<message>Hello from main branch</message>
=======
<message>Hello from GitWork branch</message>
>>>>>>> GitWork

ADMIN@DESKTOP-OUB4RGS MINGW64 ~/GitDemo (main|MERGING)
$ git config --global merge.tool p4merge

ADMIN@DESKTOP-OUB4RGS MINGW64 ~/GitDemo (main|MERGING)
$ git config --global mergetool.p4merge.cmd "\"C:\\Program Files\\Perforce\\p4me
rge.exe\" \"$LOCAL\" \"$BASE\" \"$REMOTE\" \"$MERGED\""

ADMIN@DESKTOP-OUB4RGS MINGW64 ~/GitDemo (main|MERGING)
$ git config --global mergetool.p4merge.trustExitCode true

ADMIN@DESKTOP-OUB4RGS MINGW64 ~/GitDemo (main|MERGING)
$ git mergetool
Merging:
hello.xml

Normal merge conflict for 'hello.xml':
  {local}: created file
  {remote}: created file

ADMIN@DESKTOP-OUB4RGS MINGW64 ~/GitDemo (main|MERGING)
$ git add hello.xml

ADMIN@DESKTOP-OUB4RGS MINGW64 ~/GitDemo (main|MERGING)
$ git commit -m "Resolve merge conflict for hello.xml (merged GitWork into main)
"
[main 06f0058] Resolve merge conflict for hello.xml (merged GitWork into main)
```

```
ADMIN@DESKTOP-OUB4RGS MINGW64 ~/GitDemo (main|MERGING)
$ git config --global merge.tool p4merge

ADMIN@DESKTOP-OUB4RGS MINGW64 ~/GitDemo (main|MERGING)
$ git config --global mergetool.p4merge.cmd "\"C:\\Program Files\\Perforce\\p4me
rge.exe\" \"$LOCAL\" \"$BASE\" \"$REMOTE\" \"$MERGED\""

ADMIN@DESKTOP-OUB4RGS MINGW64 ~/GitDemo (main|MERGING)
$ git config --global mergetool.p4merge.trustExitCode true

ADMIN@DESKTOP-OUB4RGS MINGW64 ~/GitDemo (main|MERGING)
$ git mergetool
Merging:
hello.xml

Normal merge conflict for 'hello.xml':
  {local}: created file
  {remote}: created file
```

```
ADMIN@DESKTOP-OUB4RGS MINGW64 ~/GitDemo (main|MERGING)
$ git add hello.xml

ADMIN@DESKTOP-OUB4RGS MINGW64 ~/GitDemo (main|MERGING)
$ git commit -m "Resolve merge conflict for hello.xml (merged GitWork into main)
"
[main 06f0058] Resolve merge conflict for hello.xml (merged GitWork into main)
```

```
ADMIN@DESKTOP-OUB4RGS MINGW64 ~/GitDemo (main)
$ git status
On branch main
Your branch is ahead of 'origin/main' by 4 commits.
  (use "git push" to publish your local commits)

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        hello.xml.orig

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

```
mo
|\
| * 4907001 Initial commit
* 7b4f7fe Initial commit: add welcome.txt

ADMIN@DESKTOP-OUB4RGS MINGW64 ~/GitDemo (main)
$ printf "*.orig\n*.bak\n" >> .gitignore

ADMIN@DESKTOP-OUB4RGS MINGW64 ~/GitDemo (main)
$ git add .gitignore
warning: in the working copy of '.gitignore', LF will be replaced by CRLF the ne
xt time Git touches it
```

```
ADMIN@DESKTOP-OUB4RGS MINGW64 ~/GitDemo (main)
$ git log --oneline --graph --decorate -n 10
*    06f0058 (HEAD -> main) Resolve merge conflict for hello.xml (merged GitWork
into main)
|\
| * 21be39d (GitWork) Add hello.xml on GitWork (branch version)
* | f29db13 Add/modify hello.xml on main (master version) to cause conflict
|/
* 66b5f5c Add branchfile.txt in GitNewBranch
* bc79df2 (origin/main) Add .gitignore to ignore *.log files and log folder
```

```
ADMIN@DESKTOP-OUB4RGS MINGW64 ~/GitDemo (main)
$ git branch -d GitWork
Deleted branch GitWork (was 21be39d).

ADMIN@DESKTOP-OUB4RGS MINGW64 ~/GitDemo (main)
$ git log --oneline --graph --decorate -n 20
* 258d086 (HEAD -> main) Ignore merge backup files (*.orig, *.bak)
*    06f0058 Resolve merge conflict for hello.xml (merged GitWork into main)
|\
| * 21be39d Add hello.xml on GitWork (branch version)
* | f29db13 Add/modify hello.xml on main (master version) to cause conflict
|/
* 66b5f5c Add branchfile.txt in GitNewBranch
* bc79df2 (origin/main) Add .gitignore to ignore *.log files and log folder
```

```
mo
|\
| * 4907001 Initial commit
* 7b4f7fe Initial commit: add welcome.txt

ADMIN@DESKTOP-OUB4RGS MINGW64 ~/GitDemo (main)
$ git status
On branch main
Your branch is ahead of 'origin/main' by 5 commits.
  (use "git push" to publish your local commits)

nothing to commit, working tree clean
```