# 1

git checkout master

git status

# Output:

# On branch master

# nothing to commit, working tree clean

# 2

git checkout -b GitWork

# Output:

# Switched to a new branch 'GitWork'

echo "<message>Hello from GitWork</message>" > hello.xml

# 3

echo "<note>Updated content in GitWork</note>" >> hello.xml

git status

# Output:

# On branch GitWork

# Changes not staged for commit:

# modified: hello.xml

# 4

git add hello.xml

git commit -m "Add and update hello.xml in GitWork"

# Output:

# [GitWork abc1234] Add and update hello.xml in GitWork

# 1 file changed, 2 insertions(+)

# create mode 100644 hello.xml

# 5

git checkout master

# Output:

# Switched to branch 'master'

# 6

echo "<message>Hello from Master branch</message>" > hello.xml

# 7

git add hello.xml

git commit -m "Add hello.xml in master with different content"

# Output:

# [master def5678] Add hello.xml in master with different content

# 1 file changed, 1 insertion(+)

# create mode 100644 hello.xml

# 8

git log --oneline --graph --decorate --all

# Output:

# \* def5678 (HEAD -> master) Add hello.xml in master with different content

# | \* abc1234 (GitWork) Add and update hello.xml in GitWork

# |/

# \* 0123456 Initial commit

# 9

git diff GitWork

# Output:

# diff --cc hello.xml

# conflict details...

# 10

git difftool GitWork

# Output:

# Launches P4Merge GUI showing file differences

# 11

git merge GitWork

# Output:

# Auto-merging hello.xml

# CONFLICT (content): Merge conflict in hello.xml

# Automatic merge failed; fix conflicts and then commit the result.

# 12

# Output:

# <<<<<<< HEAD

# <message>Hello from Master branch</message>

# =======

# <message>Hello from GitWork</message>

# <note>Updated content in GitWork</note>

# >>>>>>> GitWork

# 13

git mergetool

# Output:

# Merging:

# hello.xml

# Normal merge conflict for 'hello.xml':

# {local}: modified file

# {remote}: modified file

# Launches 3-way merge tool (P4Merge or configured tool)

# 14

git add hello.xml

git commit -m "Resolve merge conflict in hello.xml"

# Output:

# [master 789abcd] Resolve merge conflict in hello.xml

# 15

git status

# Output:

# On branch master

# nothing to commit, working tree clean

echo "\*.orig" >> .gitignore

# 16

git add .gitignore

git commit -m "Ignore backup files (\*.orig)"

# Output:

# [master 890abcd] Ignore backup files (\*.orig)

# 17

git branch

# Output:

# \* master

# GitWork

# 18

git branch -d GitWork

# Output:

# Deleted branch GitWork (was abc1234).

# 19

git log --oneline --graph --decorate

# Output:

# \* 890abcd (HEAD -> master) Ignore backup files (\*.orig)

# \* 789abcd Resolve merge conflict in hello.xml

# \* def5678 Add hello.xml in master with different content

# \* abc1234 Add and update hello.xml in GitWork

# \* 0123456 Initial commit