step-1: master branch as production branch doing 1st commit

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model
$ git init

Initialized empty Git repository in C:/Users/BALA/Desktop/branching_model/.git/

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (master)

$ touch log.txt

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (master)

$ echo "1st commit- production" >> log.txt

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (master)

$ git add .

warning: in the working copy of 'log.txt', LF will be replaced by CRLF the next time Git touches it

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (master)

$ git commit -m "1st commit"

[master (root-commit) cf59642] 1st commit

 1 file changed, 1 insertion(+)

 create mode 100644 log.txt

step-2: creating integration and hot fix branch in master branch

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (master)

$ git branch integration

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (master)

$ git branch hot_fix

step-3: creating 2nd commit in master branch

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (master)
$ vi log.txt

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (master)

$ git add .

warning: in the working copy of 'log.txt', LF will be replaced by CRLF the next time Git touches it

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (master)

$ git commit -m "2nd commit"

[master 6ac4391] 2nd commit

 1 file changed, 1 insertion(+)

step-4: creating 1st commit in hotfix branch

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (master)

$ git checkout hot_fix

Switched to branch 'hot_fix'

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (hot_fix)

$ vi log.txt

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (hot_fix)

$ git add .

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (hot_fix)

$ git commit -m "hf 1st commit"

[hot_fix 7e16c06] hf 1st commit

 1 file changed, 1 insertion(+)

step-5: creating branches in integration branch which are feature1 and feature2

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (hot_fix)

$ git checkout integration

Switched to branch 'integration'

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (integration)

$ git branch feature1

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (integration)

$ git branch feature2

step-6: creating 3 commits in feature2 branch

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (integration)

$ git checkout feature2

Switched to branch 'feature2'

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (feature2)

$ vi log.txt

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (feature2)

$ git add .

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (feature2)

$ git commit -m "f2 1st commit"

[feature2 03a5dfa] f2 1st commit

 1 file changed, 1 insertion(+)

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (feature2)

$ vi log.txt

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (feature2)

$ git add .

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (feature2)

$ git commit -m "f2 2nd commit"

[feature2 c12f693] f2 2nd commit

 1 file changed, 1 insertion(+)

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (feature2)

$ vi log.txt

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (feature2)

$ git add .

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (feature2)

$ git commit -m "f2 3rd commit"

[feature2 d47c13e] f2 3rd commit

 1 file changed, 1 insertion(+)

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (feature2)

$ git log --oneline

d47c13e (HEAD -> feature2) f2 3rd commit

c12f693 f2 2nd commit

03a5dfa f2 1st commit

cf59642 (integration, feature1) 1st commit

step-7: merge feature2 branch in integration creating commit 2

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (feature2)

$ git checkout integration

Switched to branch 'integration'

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (integration)

$ git merge feature2

Updating cf59642..d47c13e

Fast-forward

 log.txt | 3 +++

 1 file changed, 3 insertions(+)

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (integration)

$ cat log.txt

1st commit- production

1st commit- feature2

2nd commit- feature2

3rd commit- feature2

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (integration)

$ git log --oneline

d47c13e (HEAD -> integration, feature2) f2 3rd commit

c12f693 f2 2nd commit

03a5dfa f2 1st commit

cf59642 (feature1) 1st commit

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (integration)

$ git status

On branch integration

nothing to commit, working tree clean

step-8: have 3 commits in feature1 branch and rebase it from integration branch

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (feature1)

$ git rebase integration

Successfully rebased and updated refs/heads/feature1.

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (feature1)

$ git log --oneline

d47c13e (HEAD -> feature1, integration, feature2) f2 3rd commit

c12f693 f2 2nd commit

03a5dfa f2 1st commit

cf59642 1st commit

step-9: merge integration branch into hot fix banch and production (master) branch

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (feature1)

$ git rebase integration

Successfully rebased and updated refs/heads/feature1.

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (feature1)

$ git log --oneline

d47c13e (HEAD -> feature1, integration, feature2) f2 3rd commit

c12f693 f2 2nd commit

03a5dfa f2 1st commit

cf59642 1st commit

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (feature1)

$ git checkout hot_fix

Switched to branch 'hot_fix'

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (hot_fix)
$ git merge integration

Auto-merging log.txt

CONFLICT (content): Merge conflict in log.txt

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

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (hot_fix|MERGING)

$ vi log.txt

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (hot_fix|MERGING)

$ git add .

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (hot_fix|MERGING)

$ git commit -m "manually merged"

[hot_fix 31e1bd0] manually merged

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (hot_fix)

$ git checkout production

error: pathspec 'production' did not match any file(s) known to git

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (hot_fix)

$ git checkout master

Switched to branch 'master'

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (master)

$ git merge integration

Auto-merging log.txt

CONFLICT (content): Merge conflict in log.txt

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

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (master|MERGING)

$ vi log.txt

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (master|MERGING)

$ git add .

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (master|MERGING)

$ git commit -m "manually merged"

[master 93d6669] manually merged

step-10: make a commit in feature1 branch and merge that into integration hotfix and production (master) branch

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (master)

$ git checkout feature1

Switched to branch 'feature1'

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (feature1)

$ vi log.txt

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (feature1)

$ git add .

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (feature1)

$ git commit -m "f1 last commit"

[feature1 e2df1a9] f1 last commit

 1 file changed, 1 insertion(+)

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (feature1)

$ git checkout integration

Switched to branch 'integration'

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (integration)

$ git merge feature1

Updating d47c13e..e2df1a9

Fast-forward
 log.txt | 1 +

 1 file changed, 1 insertion(+)

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (integration)

$ git checkout hot_fix

Switched to branch 'hot_fix'

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (hot_fix)

$ git merge feature1

Auto-merging log.txt

hint: Waiting for your editor to close the file... 'C:\Program Files\Sublime Text 3\Sublime_Text.exe' -w:
C:\Program Files\Sublime Text 3\Sublime_Text.exe: No such file or directory

error: There was a problem with the editor ''C:\Program Files\Sublime Text 3\Sublime_Text.exe' -w'.

Not committing merge; use 'git commit' to complete the merge.

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (hot_fix|MERGING)

$ cat log.txt

1st commit- production

1st commit- hotfix

1st commit- feature2

2nd commit- feature2

3rd commit- feature2

last commit- feature1

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (hot_fix|MERGING)

$ git add .

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (hot_fix|MERGING)

$ git commit -m "merged"

[hot_fix 6409c53] merged

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (hot_fix)

$ git checkout master

Switched to branch 'master'

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (master)

$ git merge feature1

Auto-merging log.txt

hint: Waiting for your editor to close the file... 'C:\Program Files\Sublime Text 3\Sublime_Text.exe' -w:
C:\Program Files\Sublime Text 3\Sublime_Text.exe: No such file or directory

error: There was a problem with the editor ''C:\Program Files\Sublime Text 3\Sublime_Text.exe' -w'.

Not committing merge; use 'git commit' to complete the merge.

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (master|MERGING)

$ cat log.txt

1st commit- production

2nd commit production

1st commit- feature2

2nd commit- feature2

3rd commit- feature2

last commit- feature1

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (master|MERGING)

$ git commit -m "merged"

[master 16f335a] merged

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (master)

$ git log --oneline

16f335a (HEAD -> master) merged

e2df1a9 (integration, feature1) f1 last commit

93d6669 manually merged

d47c13e (feature2) f2 3rd commit

c12f693 f2 2nd commit

03a5dfa f2 1st commit

6ac4391 2nd commit

cf59642 1st commit

step-11: create a commit in hot fix branch and merge it into integration branch and production(master) branch

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (master)

$ git checkout hot_fix

Switched to branch 'hot_fix'

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (hot_fix)

$ vi log.txt

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (hot_fix)

$ git add .

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (hot_fix)

$ git commit -m "hf lastcommit"

[hot_fix 2a7cf92] hf lastcommit

 1 file changed, 1 insertion(+)

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (hot_fix)

$ git checkout integration
Switched to branch 'integration'

BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (integration)

```
$ git merge hot_fix

Updating e2df1a9..2a7cf92

Fast-forward

 log.txt | 2 ++

 1 file changed, 2 insertions(+)


BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (integration)
$ git checkout master

Switched to branch 'master'


BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (master)
$ git merge hot_fix

Auto-merging log.txt

CONFLICT (content): Merge conflict in log.txt

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


BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (master|MERGING)
$ vi log.txt


BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (master|MERGING)
$ git add .


BALA@COMMERCIAL-LAP MINGW64 ~/Desktop/branching_model (master|MERGING)
$ git commit -m "manually merged"

[master 38d1b89] manually merged
```