

```

김준범 @LAPTOP-3QU0S5TD MINGW64 ~ (main)
$ git config --global init.defaultBranch main

김준범 @LAPTOP-3QU0S5TD MINGW64 ~ (main)
$ git init gbrch
Reinitialized existing Git repository in C:/Users/김준범/.git/

김준범 @LAPTOP-3QU0S5TD MINGW64 ~ (main)
$ cd gbrch

김준범 @LAPTOP-3QU0S5TD MINGW64 ~/gbrch (develop)
$ git branch -M master

김준범 @LAPTOP-3QU0S5TD MINGW64 ~/gbrch (master)
$ git branch -M main

김준범 @LAPTOP-3QU0S5TD MINGW64 ~/gbrch (main)
$ touch README

김준범 @LAPTOP-3QU0S5TD MINGW64 ~/gbrch (main)
$ git add README

김준범 @LAPTOP-3QU0S5TD MINGW64 ~/gbrch (main)
$ git commit -m A
On branch main
nothing to commit, working tree clean

김준범 @LAPTOP-3QU0S5TD MINGW64 ~/gbrch (main)
$ git log --oneline
f356bca (HEAD -> main, bname) B
b77c8ee A

김준범 @LAPTOP-3QU0S5TD MINGW64 ~/gbrch (main)
$ git branch topic
fatal: a branch named 'topic' already exists
g
김준범 @LAPTOP-3QU0S5TD MINGW64 ~/gbrch (main)
$ git branch
  bname
* main
  topic

김준범 @LAPTOP-3QU0S5TD MINGW64 ~/gbrch (main)
$ git branch -v
  bname f356bca B
* main f356bca B
  topic 4c6195f TOP1

김준범 @LAPTOP-3QU0S5TD MINGW64 ~/gbrch (main)
$ git log --oneline --all
4c6195f (topic) TOP1
f356bca (HEAD -> main, bname) B
b77c8ee A

```

```

$ ls
README hi.txt to.txt

김준범 @LAPTOP-3QU0S5TD MINGW64 ~/gbrch (topic)
$ echo main > ma.txt
g
김준범 @LAPTOP-3QU0S5TD MINGW64 ~/gbrch (topic)
$ git add ma.txt

김준범 @LAPTOP-3QU0S5TD MINGW64 ~/gbrch (topic)
$ git commit -m C
[topic e63fd7f] C
1 file changed, 1 insertion(+)
 create mode 100644 ma.txt

김준범 @LAPTOP-3QU0S5TD MINGW64 ~/gbrch (topic)
$ git log --oneline --all
e63fd7f (HEAD -> topic) C
4c6195f TOP1
f356bca (main, bname) B
b77c8ee A

김준범 @LAPTOP-3QU0S5TD MINGW64 ~/gbrch (topic)
$ git log --oneline --all --graph
* e63fd7f (HEAD -> topic) C
* 4c6195f TOP1
* f356bca (main, bname) B
* b77c8ee A

김준범 @LAPTOP-3QU0S5TD MINGW64 ~/gbrch (topic)
$ git log --oneline
e63fd7f (HEAD -> topic) C
4c6195f TOP1
f356bca (main, bname) B
b77c8ee A

김준범 @LAPTOP-3QU0S5TD MINGW64 ~/gbrch (topic)
$ git switch main
Switched to branch 'main'

김준범 @LAPTOP-3QU0S5TD MINGW64 ~/gbrch (main)
$ git checkout HEAD~
Note: switching to 'HEAD~'.

You are in 'detached HEAD' state. You can look around, make experimental
changes and commit them, and you can discard any commits you make in this
state without impacting any branches by switching back to a branch.

If you want to create a new branch to retain commits you create, you may
do so (now or later) by using -c with the switch command. Example:

    git switch -c <new-branch-name>

Or undo this operation with:

    git switch -

```

```

김준범 @LAPTOP-3QU0S5TD MINGW64 ~/gbrch (main)
$ git branch topic
fatal: a branch named 'topic' already exists
g
김준범 @LAPTOP-3QU0S5TD MINGW64 ~/gbrch (main)
$ git branch
  bname
* main
  topic

김준범 @LAPTOP-3QU0S5TD MINGW64 ~/gbrch (main)
$ git branch -v
  bname f356bca B
* main f356bca B
  topic 4c6195f TOP1

김준범 @LAPTOP-3QU0S5TD MINGW64 ~/gbrch (main)
$ git log --oneline --all
4c6195f (topic) TOP1
f356bca (HEAD -> main, bname) B
b77c8ee A

김준범 @LAPTOP-3QU0S5TD MINGW64 ~/gbrch (main)
$ git switch topic
Switched to branch 'topic'

김준범 @LAPTOP-3QU0S5TD MINGW64 ~/gbrch (topic)
$ git switch -
Switched to branch 'main'

김준범 @LAPTOP-3QU0S5TD MINGW64 ~/gbrch (main)
$ git switch -d HEAD~
HEAD is now at b77c8ee A

김준범 @LAPTOP-3QU0S5TD MINGW64 ~/gbrch ((b77c8ee...))
$ ls
README

김준범 @LAPTOP-3QU0S5TD MINGW64 ~/gbrch ((b77c8ee...))
$ git switch main
Previous HEAD position was b77c8ee A
Switched to branch 'main'

김준범 @LAPTOP-3QU0S5TD MINGW64 ~/gbrch (main)
$ git switch topic
Switched to branch 'topic'

김준범 @LAPTOP-3QU0S5TD MINGW64 ~/gbrch (topic)
$ echo 111 > to.txt

김준범 @LAPTOP-3QU0S5TD MINGW64 ~/gbrch (topic)
$ git add to.txt
g
김준범 @LAPTOP-3QU0S5TD MINGW64 ~/gbrch (topic)
$ git commit -m TOP1
On branch topic
nothing to commit, working tree clean

```

```

김준범 @LAPTOP-3QU0S5TD MINGW64 ~/gbrch (main)
$ git checkout HEAD~
Note: switching to 'HEAD~'.

You are in 'detached HEAD' state. You can look around, make experimental
changes and commit them, and you can discard any commits you make in this
state without impacting any branches by switching back to a branch.

If you want to create a new branch to retain commits you create, you may
do so (now or later) by using -c with the switch command. Example:

    git switch -c <new-branch-name>

Or undo this operation with:

    git switch -

Turn off this advice by setting config variable advice.detachedHead to false
HEAD is now at b77c8ee A

김준범 @LAPTOP-3QU0S5TD MINGW64 ~/gbrch ((b77c8ee...))
$ git switch -c hotfix
Switched to a new branch 'hotfix'

김준범 @LAPTOP-3QU0S5TD MINGW64 ~/gbrch (hotfix)
$ git checkout -b develop
Switched to a new branch 'develop'

김준범 @LAPTOP-3QU0S5TD MINGW64 ~/gbrch (develop)
$ git branch
  bname
* develop
  hotfix
  main
  topic

김준범 @LAPTOP-3QU0S5TD MINGW64 ~/gbrch (develop)
$ git log --oneline --graph --all
* e63fd7f (topic) C
* 4c6195f TOP1
* f356bca (main, bname) B
* b77c8ee (HEAD -> develop, hotfix) A

김준범 @LAPTOP-3QU0S5TD MINGW64 ~/gbrch (develop)
$ git branch -d hotfix
Deleted branch hotfix (was b77c8ee).

김준범 @LAPTOP-3QU0S5TD MINGW64 ~/gbrch (develop)
$ git log --oneline --graph --all
* e63fd7f (topic) C
* 4c6195f TOP1
* f356bca (main, bname) B
* b77c8ee (HEAD -> develop) A

김준범 @LAPTOP-3QU0S5TD MINGW64 ~/gbrch (develop)
$ |

```