

GIT - Exercises 181209**Exercises on gitkatas, should be finished before 190210**

- configure-git > DONE
- basic-commits > DONE
- basic-staging > DONE
- basic-branching
- basic-cleaning
- ignore
- commit-on-wrong-branch
- commit-on-wrong-branch-2

BASIC-BRANCHING

Setup:

Run `. setup.sh` (or `. \setup.ps1` in PowerShell)

Answer

```
$ . setup.sh
Initialized empty Git repository in ../gitkatas/basic-branching/exercise/.git/
warning: LF will be replaced by CRLF in dummy.txt.
The file will have its original line endings in your working directory
[master (root-commit) 37ea7bd] dummy commit
1 file changed, 1 insertion(+)
create mode 100644 dummy.txt
Switched to a new branch 'second-branch'
Switched to branch 'master'
```

The Task:

You again live in your own branch, this time we will be doing a bit of juggling with branches, to show how lightweight branches are in git. Hint: git checkout will make you switch from one branch to another.

1. Use `git branch` to see the two branches that are relevant for this exercise

Answer

```
$ git branch
* master
second-branch
```

2. What branch are you on?

Answer

```
// the sign * shows that I am on the master branch
```

3. Use `git branch mybranch` to create a new branch called mybranch

Answer

```
$ git branch mybranch
```

4. Use `git branch` again to see the new branch created.

Answer

```
$ git branch
* master
mybranch
second-branch
```

5. Use `git checkout mybranch` to switch to your new branch.

Answer

```
$ git checkout mybranch
Switched to branch 'mybranch'
```

6. How does the output from `git status` change when you switch between the master and the new branch that you have created?

Answer

```
$ git status
On branch mybranch
nothing to commit, working tree clean

$ git checkout master
Switched to branch 'master'
$ git status
On branch master
nothing to commit, working tree clean
```

7. How does the workspace change when you change between the two branches?

Answer
// ??

8. Make sure you are on your mybranch branch before you continue.

Answer

9. Create a file called file1.txt with your name.

Answer
\$ touch file1.txt

\$ echo Kiki > file1.txt

10. Add the file and commit with this change.

Answer
\$ git add file1.txt
warning: LF will be replaced by CRLF in file1.txt.
The file will have its original line endings in your working directory

\$ git commit file1.txt
warning: LF will be replaced by CRLF in file1.txt.
The file will have its original line endings in your working directory
hint: Waiting for your editor to close the file... unix2dos: converting
file ../gitkatas/basic-branching/exercise/.git/COMMIT_EDITMSG to DOS
format...
dos2unix: converting file ../gitkatas/basic-branching/exercise
/.git/COMMIT_EDITMSG to Unix format...
[mybranch 41d98c5] Create new file file1.txt and write content Kiki
1 file changed, 1 insertion(+)
create mode 100644 file1.txt

11. Use git log --oneline --graph to see your branch pointing to the new commit.

Answer
\$ git log --oneline --graph
* 41d98c5 (HEAD -> mybranch) Create new file file1.txt and write content
Kiki
* 37ea7bd (second-branch, master) dummy commit

12. Switch back to the branch called master.

Answer
\$ git checkout master
Switched to branch 'master'

13. Use git log --oneline --graph and notice how the commit you made on the mybranch branch is missing on the master branch.

Answer
\$ git log --oneline --graph
* 37ea7bd (HEAD -> master, second-branch) dummy commit

14. Make a new file called file2.txt and commit that file.

Answer
\$ touch file2.txt
\$ git add file2.txt

```
$ git commit file2.txt
hint: Waiting for your editor to close the file... unix2dos: converting
file ../gitkatas/basic-branching/exercise/.git/COMMIT_EDITMSG to DOS
format...
dos2unix: converting file ../gitkatas/basic-branching/exercise
../git/COMMIT_EDITMSG to Unix format...
[master 0a5c878] Create new file file2.txt
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 file2.txt
```

15. Use `git log --oneline --graph --all` to see your branch pointing to the new commit, and that the two branches now have different commits on them.

Answer

```
$ git log --oneline --graph
* 0a5c878 (HEAD -> master) Create new file file2.txt
* 37ea7bd (second-branch) dummy commit
```

16. Switch to your branch `mybranch`.

Answer

17. What happened to your working directory? Can you see your `file2.txt`?

Answer

```
$ git checkout mybranch
Switched to branch 'mybranch'
```

18. Use `git diff mybranch master` to see the difference between the two branches.

Answer

```
$ git diff mybranch master
diff --git a/file1.txt b/file1.txt
deleted file mode 100644
index cfb65ad..0000000
--- a/file1.txt
+++ /dev/null
@@ -1 +0,0 @@
-Kiki // red
diff --git a/file2.txt b/file2.txt
new file mode 100644
index 0000000..e69de29
```