

Git exercises:

1a,

Code: git clone <https://github.com/BI-DS/GRA-4152.git>

Git log --graph

Output:

```
Author: A1910329 <rogelio.mancisidor@gmail.com>
Date:   Wed Oct 26 12:48:02 2022 +0200

    adding colab notebooks

* commit e6c1c97fa8aaeb1f3c377a1ecb403d16140212d5
Author: rogelioandrade <rogelio.a.mancisidor@bi.no>
Date:   Wed Oct 26 11:54:47 2022 +0200

    adding material lec 10

* commit ff60de77f3c18f8d0a8ee3b6918cd4db24bdf721
Author: rogelioandrade <rogelio.a.mancisidor@bi.no>
Date:   Wed Oct 19 11:19:43 2022 +0200

    adding material lecture 9

* commit e6ac53804aaa4bdca8561c891e3013a8868de3c
Author: rogelioandrade <rogelio.a.mancisidor@bi.no>
Date:   Wed Oct 5 11:32:15 2022 +0200

    material lecture 7

* commit b412adb63d22c9f1129f195db9cddbbc63f945fe3
Author: rogelioandrade <rogelio.a.mancisidor@bi.no>
Date:   Wed Sep 28 11:49:30 2022 +0200

    adding material lecture 6

* commit 7e0089cd9e1ab59478521d31b15867377b54008f
Author: rogelioandrade <rogelio.a.mancisidor@bi.no>
Date:   Wed Sep 28 11:06:03 2022 +0200

    adding material for lecture 6

* commit c26010d5096e570018e4328672c45e7d54cddc69
Author: rogelioandrade <rogelio.a.mancisidor@bi.no>
Date:   Wed Sep 21 11:10:38 2022 +0200

    adding material for lec 5

* commit 1a4a2672f3ec0b08042a76cc54654619254a0204
Author: rogelioandrade <rogelio.a.mancisidor@bi.no>
Date:   Wed Sep 14 11:34:12 2022 +0200

    adding material lecture 4

* commit 9222545035a3bad8ec2c70774d6fad07066e113
Author: rogelioandrade <rogelio.a.mancisidor@bi.no>
Date:   Tue Sep 6 14:08:22 2022 +0200

    adding material for lecture 3

* commit 8b4efee0f04d5b3e7a4cc29269168556a9a28ad
Author: rogelioandrade <rogelio.a.mancisidor@bi.no>
Date:   Tue Sep 6 11:02:01 2022 +0200

    adding material for lecture 3

* commit 71f261f8dbb09c828dfd2be1ad664a14b1fbc498
Author: rogelioandrade <rogelio.a.mancisidor@bi.no>
```

1b,

Code: git log -n 1 -- README.md

The date is: Date: Wed Aug 31 09:59:14 2022 +0200

1c,

Code: git show 71f261f8dbb09c828dfd2be1ad664a14b1fbc498

The commit message is:

+++ Honor Code

+You are free to form study groups and may discuss homework in groups. However, each student must write down the solutions and code from scratch independently and must understand the solution well enough. It is a honor code violation to copy, refer to, or look at written or code solutions from a previous year or solutions posted online (inspired by the Stanford Honor Code).

2,

Code: touch .gitignore

I created a foo.py line inside gitignore. Than a foo.py file in my local folder. After the git add .. git commit, git push origin master commands the foo.py is not in my github repo and that was the goal.

3,

a,

Code: git clone repo.git

Git stash

Output: Saved working directory and index state WIP on main: 738cb26 Update legal name from Dong-hee Na to Donghee Na (#1165)

Comment:

The modification on the file disappears. The original version is visible in the folder.

b,

Code:

git log --all --oneline

```
738cb26 (HEAD -> main, origin/main, origin/HEAD) Update legal name from Dong-hee Na to Donghee Na (#1165)
cb39eca Use sentence case for titles (#1162)
5d27e91 Fix typos to follow style guide (#1163)
dbccd83 Add "Helping with the Developer's Guide" to documentarians column (#1164)
b70b763 Bump Sphinx to 7.2.5 (#1155)
f88487f Fix buildbot config issue URL
99fe52a Point to buildbot config repo rather than mailing list for adding a worker (#1156)
b66af5a Update dev guide with recent compiler and bytecode simplifications (#1154)
d994dff Document PGO builds (#1153)
689528c Rename Advanced Tools to Development Tools (#1149)
0eba99f Add a new coordinator for zh_CN (#1150)
dc0be4d Adding Codespaces Documentation (#1144)
d61215d Bump sphinx-lint from 0.6.7 to 0.6.8 (#1146)
ee22ad7 Bump sphinx from 7.0.1 to 7.1.1 (#1147)
1cb3c18 Add linting to CI via pre-commit (#987)
65ae4a8 Reviewing PRs: On GitHub the nosy list is called subscribers (#1143)
d6edccf Strip space from pasted text (#1142)
a5defb4 Update link to blurb documentation (#1137)
93c3ee7 Update planned 3.13.0 release date: 2024-10-01 (#1132)
:...skipping...
738cb26 (HEAD -> main, origin/main, origin/HEAD) Update legal name from Dong-hee Na to Donghee Na (#1165)
cb39eca Use sentence case for titles (#1162)
5d27e91 Fix typos to follow style guide (#1163)
dbccd83 Add "Helping with the Developer's Guide" to documentarians column (#1164)
b70b763 Bump Sphinx to 7.2.5 (#1155)
f88487f Fix buildbot config issue URL
```

Comment:

Gives back the commit history for the repo.

c,

Code: git stash pop

Output:

```

On branch main
Your branch is up to date with 'origin/main'.

Changes not staged for commit:
  (use "git add/rm <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        deleted:    LICENSE

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

no changes added to commit (use "git add" and/or "git commit -a")
Dropped refs/stash@{0} (5fa9a71e26b66e272977ced60feb056d53c707bb)

```

Comment:

Git stash pop can be useful if you do not want to work with the stashed modifications. For instance the original version of the project is more efficient than the modified one.

D,

Code: git stash drop stash@{0}

Response:

Dropped stash@{0} (9447780161b210e557eb7a39f717a0650c9c7e16)

A,

Code: modify

Git stash

modify

git commit

```

Auto-merging requirements.txt
CONFLICT (content): Merge conflict in requirements.txt
On branch main
Your branch is ahead of 'origin/main' by 1 commit.
  (use "git push" to publish your local commits)

Unmerged paths:
  (use "git restore --staged <file>..." to unstage)
  (use "git add <file>..." to mark resolution)
        both modified:    requirements.txt

no changes added to commit (use "git add" and/or "git commit -a")
The stash entry is kept in case you need it again.

```

The file is the same as after the 2nd modification before git commit.

```
requirements.txt ! x
requirements.txt
1 Sphinx~=7.2.5
2 furo>=2022.6.4
3 jinja2
4 sphinx-lint==0.6.8
5 sphinx-notfound-page>=1.0.0
6 sphinx-copybutton>=0.3.3
7 sphinxext-opengraph>=0.7.1
8 sphinxext-rediraffe
9 New line
10
```

4A,

Code: git branch my_test_branch

Git checkout my_test_branch

Git checkout master

```
M git_exercise.docx
Switched to branch 'my_test_branch'
```

B,

Code: touch 4c.txt

Echo echo "Comment" >> 4c.txt

Git add 4c.txt

Git commit -m

C,

Code: git checkout master

Git merge my_test_branch

```
Updating 5adb19e..e476f15
Fast-forward
 4c.txt | 1 +
git_exercise.docx | Bin 716006 -> 1831602 bytes
2 files changed, 1 insertion(+)
create mode 100644 4c.txt
```

5,

A,

Code:

Git clone repo.git

touch S1086781.txt

git add .

git commit -m "student id text"

git push origin master

Comment:

After forking the repo to my own account I cloned the repo to the local folders. Then I created the txt file and pushed into the forked repo. Finally I submitted a pull request to the original repo.