1. Clone the repository for the class: https://github.com/BI-DS/GRA-4152

```
cd C:/Users/calle/Desktop/OOP/github
git clone https://github.com/BI-DS/GRA-4152.git
```

a. Explore the version history by visualizing it as a graph.

```
cd ./GRA-4152
git log —graph
calle@LAPTOP-RPLGQ6HD MINGW64 ~/Desktop/OOP/github/GRA-4152 (master)
$ git log --graph
* commit 71f261f8dbb09c828dfd2belad664a14b1fbc498 (HEAD -> master, origin/master, origin/HEAD)
| Author: rogelioandrade <rogelio.a.mancisidor@bi.no>
| Date: Wed Aug 31 09:59:14 2022 +0200
| added honor code

* commit a610fc6f9cdf3dd3e84e42e8e6ac168a73ab3a28
| Author: rogelioandrade <rogelio.a.mancisidor@bi.no>
| Date: Mon Aug 29 09:33:29 2022 +0200
| adding 1 asnyc exercise from lecture 1
```

b. When was the last time README.md was modified? (Hint: use git log with an argument).

```
git log README.md

calle@LAPTOP-RPLGQ6HD MINGW64 ~/Desktop/OOP/github/GRA-4152 (master)

$ git log README.md
commit 71f261f8dbb09c828dfd2belad664a14b1fbc498 (HEAD -> master, origin/master, origin/HEAD)
Author: rogelioandrade <rogelio.a.mancisidor@bi.no>
Date: Wed Aug 31 09:59:14 2022 +0200

added honor code
```

Aug 31<sup>st</sup>.

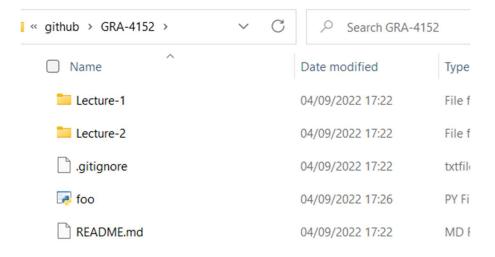
c. What was the commit message associated with the last modification to the README.md? (Hint: use git blame and git show).

```
git blame README.md
git show 71f261f8
```

"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. One common mistake when learning Git is to commit large files that should not be managed by Git or adding sensitive information. Add a .gitignore file to your portfolio code repository (https://github.com/ SXXXXXXX/GRA4152) and exclude files and/or folders. You might need to create a foo.py file to be excluded.

```
echo "# GRA4152" >> foo.py
git add .gitignore
```



3. Clone some repository from GitHub and modify one of its existing files. What happens when you type git stash? What do you see when running git log --all -- oneline? Run git stash pop to undo what you did with git stash. In what scenario might this be useful? List your current stashes and delete them with git stash drop <stash id>

```
git clone https://github.com/bitcoin/bitcoin.git
(modify .gitignore)
cd ./bitcoin
git stash
                                                                                /Desktop/OOP/github/GRA-4152/bitcoin (maste
                table of Relations with the state wi
git log --all – oneline
 (nothing)
git stash pop
                                                                 LGQ6HD MINGW64 ~/Desktop/OOP/github/GRA-4152/bitcoin (master)
  $ git log --all -- oneline
    calle@LAPTOP-RPLGQ6HD MINGW64 ~/Desktop/00P/github/GRA-4152/bitcoin (master)
  $ git stash pop
  On branch master
   Your branch is up to date with 'origin/master'.
  Changes not staged for commit:

(use "git add <file>..." to update what will be committed)

(use "git restore <file>..." to discard changes in working directory)
no changes added to commit (use "git add" and/or "git commit -a")
Dropped refs/stash@{0} (4a21c628a5df2c3f52e88d31e6bf7a46876e5a4e)
(useful if don't want to commit local changes)
git stash list
git stash drop
```

Now, modify a file and stash changes. Make a new modification to the same file, but this time commit those changes. What happens if you type git stash pop and open the file that you have modified? What do you see in the file?

```
git stash
git add .gitignore
git commit
(file changed even if git stash pop)
```

4. Create a new branch in your class repository (https://github.com/ SXXXXXXX/GRA4152) and call it my\_test\_branch. Explore both branches, by switching back and forth.

```
git branch my_test_branch
git checkout my_test_branch
calle@LAPTOP-RPLGQ6HD MINGW64 ~/Desktop/OOP/GRA4152 (main)
$ git checkout my_test_branch
Switched to branch 'my_test_branch'
echo «# GRA4152» >> foo.py
(add line of text to foo)
git add foo.py
git commit -m "nline"
git checkout master
git merge my_test_branch
```

```
calle@LAPTOP-RPLGQ6HD MINGW64 ~/Desktop/OOP/GRA4152 (master)
$ git merge my_test_branch
Updating 08debe7..1649865
Fast-forward
foo.py | 2 ++
1 file changed, 2 insertions(+)
create mode 100644 foo.py
```

5. Fork the class repository (https://github.com/BI-DS/GRA-4152) and clone it, so you can contribute to its development. Send me a pull request to add a text file with your student id, i.e. SXXXXXXXX.txt

```
S2114328 / GRA-4152 Public forked from BI-DS/GRA-4152
```

git clone <a href="https://github.com/S2114328/GRA-4152.git">https://github.com/S2114328/GRA-4152.git</a>

