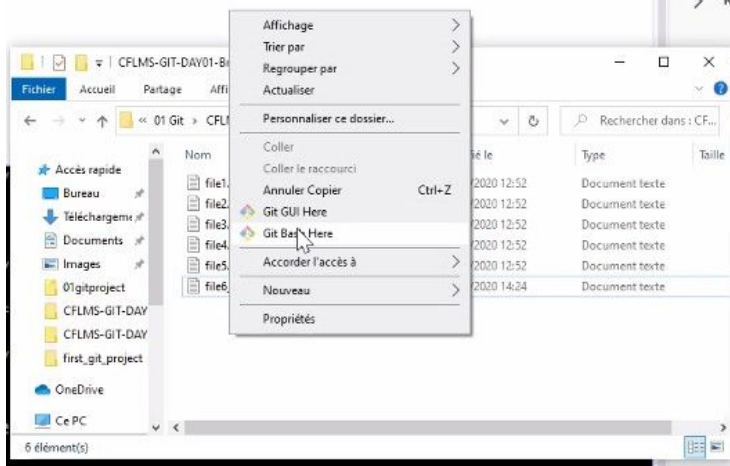




## How to go through the git learning experience

- **Basic Command**
- **Collaborate with your peer**
- **Manage conflict**

# To start with git



```
bruno@LAPTOP-0IU68HVD MINGW64 ~/Desktop/code factory/01 Git/CFLMS-GIT-DAY01-Bruno-Benjamin-challenge
$ git config --global user.name "brunomairey"

bruno@LAPTOP-0IU68HVD MINGW64 ~/Desktop/code factory/01 Git/CFLMS-GIT-DAY01-Bruno-Benjamin-challenge
$ git config --global user.email bruno.mairey@yahoo.fr

bruno@LAPTOP-0IU68HVD MINGW64 ~/Desktop/code factory/01 Git/CFLMS-GIT-DAY01-Bruno-Benjamin-challenge
$ git init
Initialized empty Git repository in C:/Users/bruno/Desktop/code factory/01 Git/CFLMS-GIT-DAY01-Bruno-Benjamin-challenge/.git/
```

# Add new files on git

```
bruno@LAPTOP-0IU68HVD MINGW64 ~/Desktop/code factory/01 Git/CFLMS-GIT-DAY01-Bruno-Benjamin-ch
ter)
$ git add .

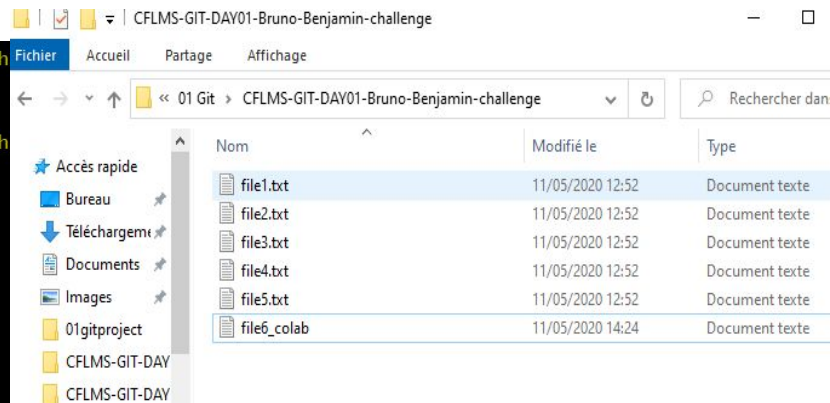
bruno@LAPTOP-0IU68HVD MINGW64 ~/Desktop/code factory/01 Git/CFLMS-GIT-DAY01-Bruno-Benjamin-ch
ter)
$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
        new file:   file1.txt.txt
        new file:   file2.txt.txt
        new file:   file3.txt.txt
        new file:   file4.txt.txt
        new file:   file5.txt.txt

bruno@LAPTOP-0IU68HVD MINGW64 ~/Desktop/code factory/01 Git/CFLMS-GIT-DAY01-Bruno-Benjamin-challenge (mas
ter)
$ git commit -m "adding five new files"
[master (root-commit) ca0a628] adding five new files
 5 files changed, 5 insertions(+)
 create mode 100644 file1.txt.txt
 create mode 100644 file2.txt.txt
 create mode 100644 file3.txt.txt
 create mode 100644 file4.txt.txt
 create mode 100644 file5.txt.txt

bruno@LAPTOP-0IU68HVD MINGW64 ~/Desktop/code factory/01 Git/CFLMS-GIT-DAY01-Bruno-Benjamin-challenge (master)
$ git status
On branch master
nothing to commit, working tree clean
```



# Create a repository on github

```
bruno@LAPTOP-0IU68HVD MINGW64 ~/Desktop/code factory/01 Git/CFLMS-GIT-DAY01-Bruno-Benjamin-challenge (master)
$ git remote add origin https://github.com/brunomairey/CFLMS-GIT-DAY01-Bruno-Benjamin-challenge.git

bruno@LAPTOP-0IU68HVD MINGW64 ~/Desktop/code factory/01 Git/CFLMS-GIT-DAY01-Bruno-Benjamin-challenge (master)
$ git push -u origin master
Enumerating objects: 7, done.
Counting objects: 100% (7/7), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (7/7), 437 bytes | 218.00 KiB/s, done.
Total 7 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/brunomairey/CFLMS-GIT-DAY01-Bruno-Benjamin-challenge.git
 * [new branch]      master -> master
Branch 'master' set up to track remote branch 'master' from 'origin'.

bruno@LAPTOP-0IU68HVD MINGW64 ~/Desktop/code factory/01 Git/CFLMS-GIT-DAY01-Bruno-Benjamin-challenge (master)
$ git status
On branch master
Your branch is up to date with 'origin/master'.

nothing to commit, working tree clean
```

brunomairey / CFLMS-GIT-DAY01-Bruno-Benjamin-challenge

Unwatch 1 Star 0 Fork 0

Code Issues 0 Pull requests 0 Actions Projects 0 Wiki Security 0 Insights Settings

No description, website, or topics provided. Edit

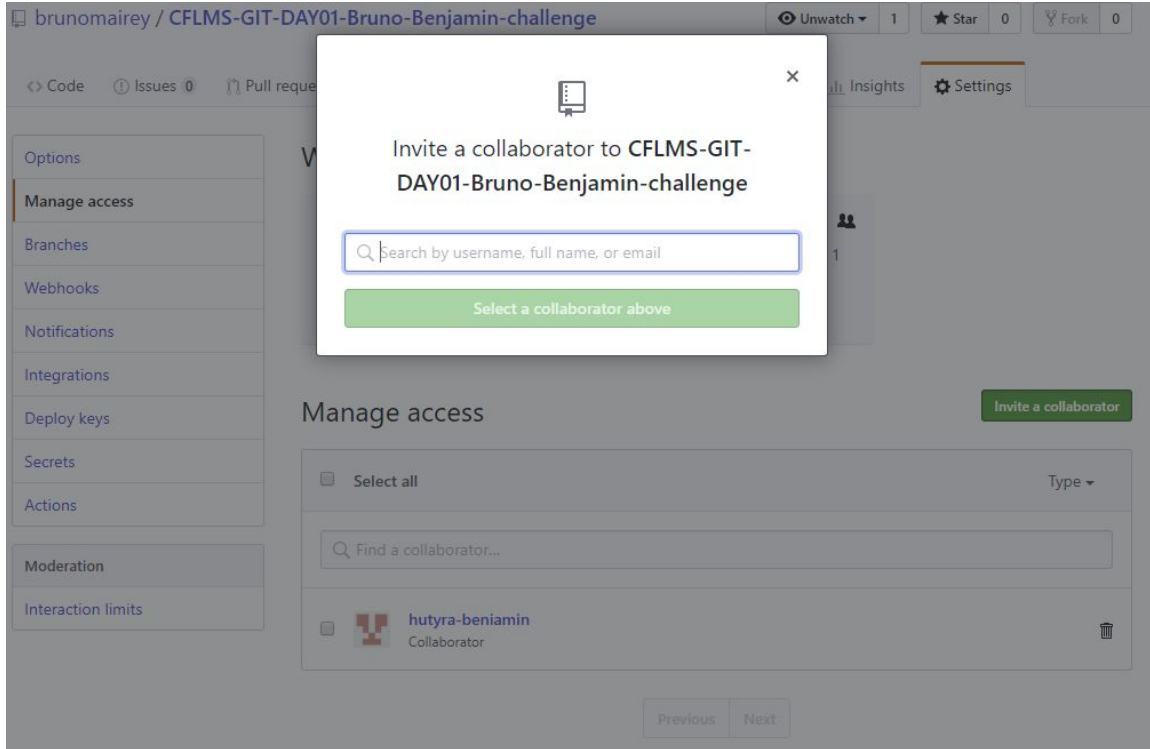
Manage topics

2 commits 1 branch 0 packages 0 releases 1 contributor

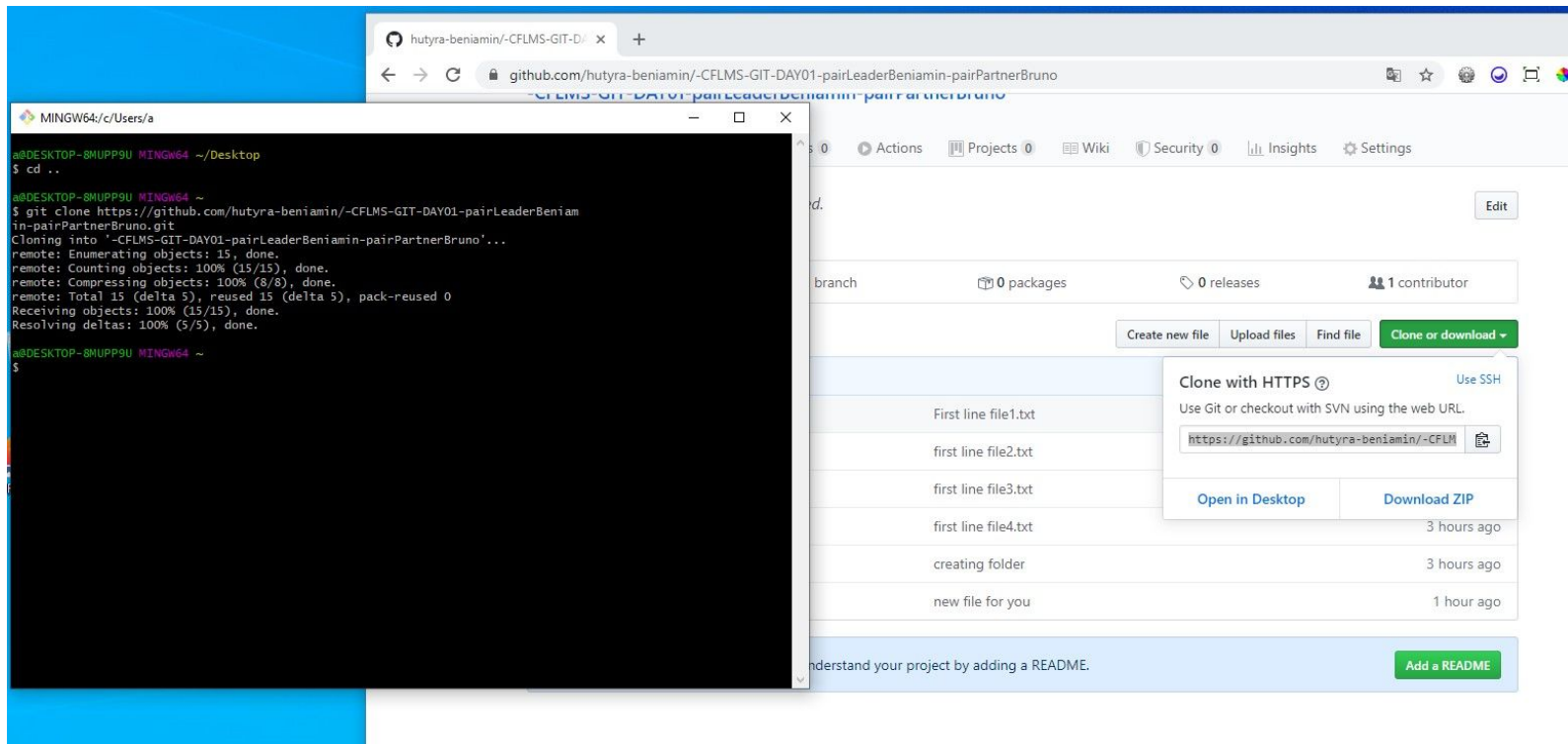
Branch: master New pull request Create new file Upload files Find file Clone or download

| hutya-benjamin new file |                       | Latest commit 421d800 26 minutes ago |
|-------------------------|-----------------------|--------------------------------------|
| file1.txt.txt           | adding five new files | 34 minutes ago                       |
| file2.txt.txt           | adding five new files | 34 minutes ago                       |
| file3.txt.txt           | adding five new files | 34 minutes ago                       |
| file4.txt.txt           | adding five new files | 34 minutes ago                       |
| file5.txt.txt           | adding five new files | 34 minutes ago                       |
| file6_colab.txt         | new file              | 26 minutes ago                       |

# Send the repository on github to the partner



# Download the repository on github by the partner



# Create a new file by the partner

The screenshot displays three overlapping windows illustrating the process of creating and committing a new file in a Git repository.

**File Explorer (Left):** Shows the directory structure of the project. The file `file7_colab` is highlighted, showing it was modified on 11.05.2020 at 14:52 and has a size of 0 KB.

| Nazwa       | Data modyfikacji | Typ               | Rozmiar |
|-------------|------------------|-------------------|---------|
| file1.txt   | 11.05.2020 14:46 | Dokument tekstowy | 1 KB    |
| file2.txt   | 11.05.2020 14:46 | Dokument tekstowy | 1 KB    |
| file3.txt   | 11.05.2020 14:46 | Dokument tekstowy | 1 KB    |
| file4.txt   | 11.05.2020 14:46 | Dokument tekstowy | 1 KB    |
| file5.txt   | 11.05.2020 14:46 | Dokument tekstowy | 1 KB    |
| file6_colab | 11.05.2020 14:46 | Dokument tekstowy | 1 KB    |
| file7_colab | 11.05.2020 14:52 | Dokument tekstowy | 0 KB    |

**Terminal (Right):** Shows the execution of Git commands to add, commit, and push the new file.

```
$ git add .
a@DESKTOP-8MUPP9U MINGW64 ~/Desktop/CFLMS-GIT-DAY01-Bruno-Benjamin-challenge (master)
$ git commit -m "new file7_colab"
[master 84e55c1] new file7_colab
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 file7_colab.txt

a@DESKTOP-8MUPP9U MINGW64 ~/Desktop/CFLMS-GIT-DAY01-Bruno-Benjamin-challenge (master)
$ git status
On branch master
Your branch is ahead of 'origin/master' by 1 commit.
(use "git push" to publish your local commits)

nothing to commit, working tree clean

a@DESKTOP-8MUPP9U MINGW64 ~/Desktop/CFLMS-GIT-DAY01-Bruno-Benjamin-challenge (master)
$ git push origin master
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 4 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 288 bytes | 144.00 KiB/s, done.
Total 3 (delta 1), reused 1 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/brunomairey/CFLMS-GIT-DAY01-Bruno-Benjamin-challenge.git
 5244ece..84e55c1 master -> master

a@DESKTOP-8MUPP9U MINGW64 ~/Desktop/CFLMS-GIT-DAY01-Bruno-Benjamin-challenge (master)
$
```

**Text Editor (Bottom):** Shows the content of the newly created file `file7_colab`, which contains the text: `this is a new file - Benjamin`.

# The leader checks the Github repository

The screenshot shows a GitHub repository page. At the top, the repository name is 'brunomairey / CFLMS-GIT-DAY01-Bruno-Benjamin-challenge'. Below this, there are tabs for 'Code', 'Issues', 'Pull requests', 'Actions', 'Projects', 'Wiki', 'Security', 'Insights', and 'Settings'. The 'Code' tab is selected. Below the tabs, there is a section for 'No description, website, or topics provided.' with an 'Edit' button. Below this, there is a section for 'Manage topics'. Below this, there is a section for repository statistics: '7 commits', '1 branch', '0 packages', '0 releases', and '1 contributor'. Below this, there is a section for 'Branch: master' with a 'New pull request' button. Below this, there is a section for 'Create new file', 'Upload files', 'Find file', and 'Clone or download'. Below this, there is a table of commits.

| Commit          | Message  | Time                               |
|-----------------|--|------------------------------------|
| hutyra-benjamin | new text in file                                 | Latest commit fdebe7a 1 minute ago |
| file1.txt.txt   | adding five new files                            | 1 hour ago                         |
| file2.txt.txt   | adding five new files                            | 1 hour ago                         |
| file3.txt.txt   | adding five new files                            | 1 hour ago                         |
| file4.txt.txt   | adding five new files                            | 1 hour ago                         |
| file5.txt.txt   | adding five new files                            | 1 hour ago                         |
| file6_colab.txt | new version of the file 6 with all modifications | 31 minutes ago                     |
| file7_colab.txt | new text in file                                 | 1 minute ago                       |

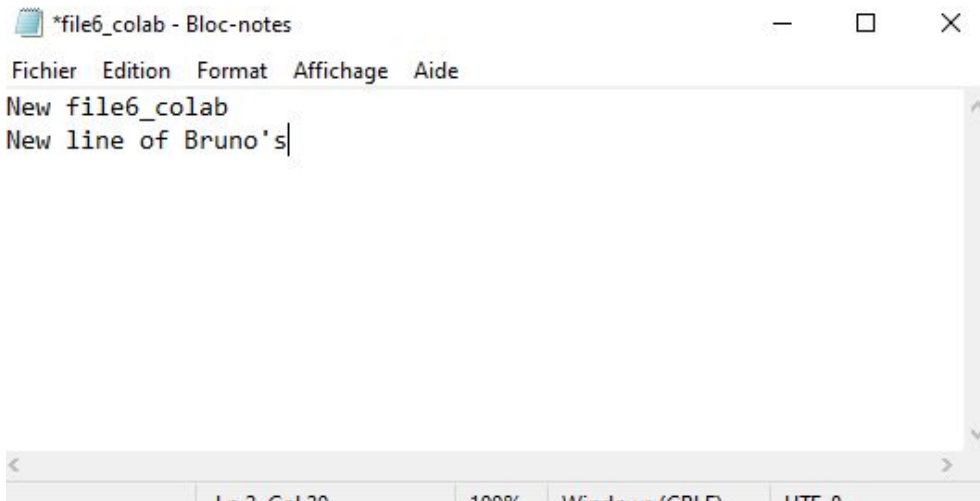


# The leader is downloading the file to his local repository

```
bruno@LAPTOP-0IU68HVD MINGW64 ~/Desktop/code factory/01 Git/CFLMS-GIT-DAY01-Bruno-Benjamin-challenge (master)
$ git pull origin master
remote: Enumerating objects: 4, done.
remote: Counting objects: 100% (4/4), done.
remote: Compressing objects: 100% (1/1), done.
remote: Total 3 (delta 1), reused 3 (delta 1), pack-reused 0
Unpacking objects: 100% (3/3), 263 bytes | 11.00 KiB/s, done.
From https://github.com/brunomairey/CFLMS-GIT-DAY01-Bruno-Benjamin-challenge
* branch                master      -> FETCH_HEAD
   ca0a628..421d800      master      -> origin/master
Updating ca0a628..421d800
Fast-forward
 file6_colab.txt | 0
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 file6_colab.txt
```

# Create a conflict in the same file

Bruno's Version

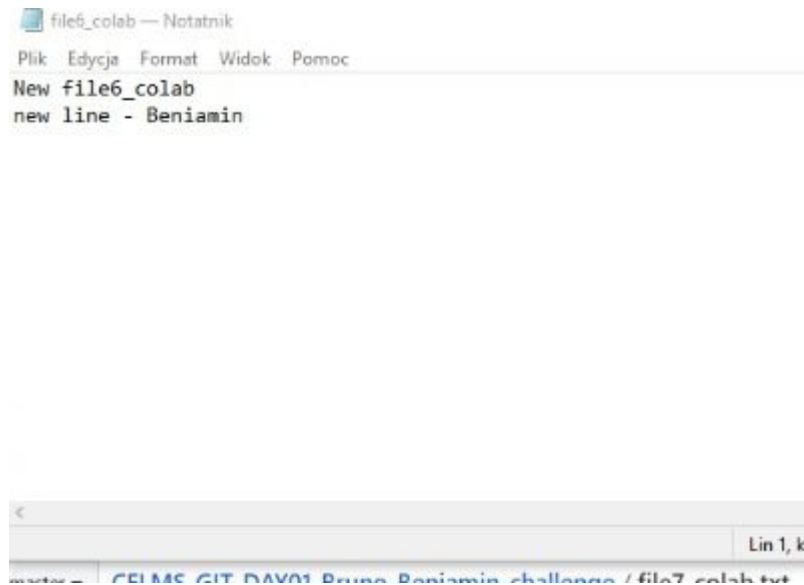


A screenshot of a Notepad window titled '\*file6\_colab - Bloc-notes'. The window has a menu bar with 'Fichier', 'Edition', 'Format', 'Affichage', and 'Aide'. The text content is as follows:

```
New file6_colab  
New line of Bruno's|
```

The status bar at the bottom shows 'Ln 2, Col 20', '100%', 'UTF-8', and 'Windows (CP1250)'.

Benjamin's Version



A screenshot of a Notepad window titled 'file6\_colab — Notatnik'. The window has a menu bar with 'Plik', 'Edycja', 'Format', 'Widok', and 'Pomoc'. The text content is as follows:

```
New file6_colab  
new line - Benjamin
```

The status bar at the bottom shows 'Lin 1, k' and a file path: 'C:\Users\Benjamin\Desktop\file6\_colab.txt'.

# Pushing the same file at different time without checking

Benjamin's Version

```
MINGW64/c/Users/a/Desktop/CFLMS-GIT-DAY01-Mairey-Hutyra-local (master)
$ git commit -m "new text in file6_colab"
[master 8ed4847] new text in file6_colab
1 file changed, 1 insertion(+)

MINGW64/c/Users/a/Desktop/CFLMS-GIT-DAY01-Mairey-Hutyra-local (master)
$ git status
On branch master
Your branch is ahead of 'origin/master' by 1 commit.
(use "git push" to publish your local commits)

nothing to commit, working tree clean

MINGW64/c/Users/a/Desktop/CFLMS-GIT-DAY01-Mairey-Hutyra-local (master)
$ git push origin master
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 4 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 304 bytes | 152.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/brunomairey/CFLMS-GIT-DAY01-Mairey-Hutyra-local.git
cc52e04..8ed4847 master -> master

MINGW64/c/Users/a/Desktop/CFLMS-GIT-DAY01-Mairey-Hutyra-local (master)
$
```

Bruno's Version

```
MINGW64/c/Users/bruno/Desktop/code factory/01 Git/CFLMS-GIT-DAY01-Ma...
bruno@LAPTOP-OIU68HVD MINGW64 ~/Desktop/code factory/01 Git/CFLMS-GIT-DAY01-Ma...
$ git push origin master
To https://github.com/brunomairey/CFLMS-GIT-DAY01-Mairey-Hutyra-local.git
! [rejected] master -> master (fetch first)
error: Failed to push some refs to 'https://github.com/brunomairey/CFLMS-GIT-DAY01-Mairey-Hutyra-local.git'
hint: Updates were rejected because the remote contains work that you do
hint: not have locally. This is usually caused by another repository pushing
hint: to the same ref. You may want to first integrate the remote changes
hint: (e.g., 'git pull ...') before pushing again.
hint: See the 'Note about fast-forwards' in 'git push --help' for details.

bruno@LAPTOP-OIU68HVD MINGW64 ~/Desktop/code factory/01 Git/CFLMS-GIT-DAY01-Ma...
$
```

# Solving the conflict's issue : pull the file.

```
bruno@LAPTOP-0IU68HVD MINGW64 ~/Desktop/code factory/01 Git/CFLMS-GIT-DAY01-Mairey
-Hutyra-local (master)
$ git add .

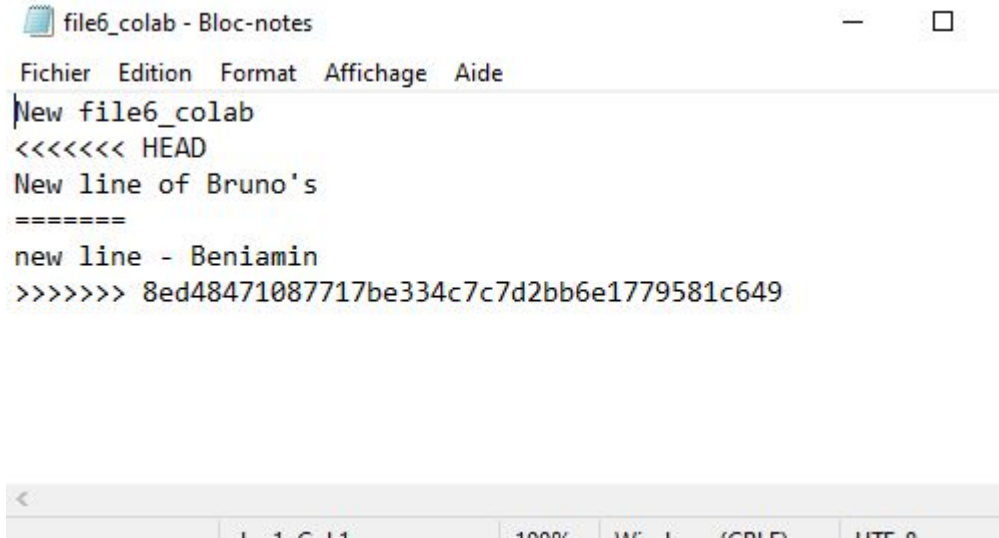
bruno@LAPTOP-0IU68HVD MINGW64 ~/Desktop/code factory/01 Git/CFLMS-GIT-DAY01-Mairey
-Hutyra-local (master)
$ git commit -m "New Versions"
[master deec1f9] New Versions
1 file changed, 1 insertion(+)

bruno@LAPTOP-0IU68HVD MINGW64 ~/Desktop/code factory/01 Git/CFLMS-GIT-DAY01-Mairey
-Hutyra-local (master)
$ git push
To https://github.com/brunomairey/CFLMS-GIT-DAY01-Mairey-Hutyra-local.git
! [rejected]        master -> master (non-fast-forward)
error: failed to push some refs to 'https://github.com/brunomairey/CFLMS-GIT-DAY01
-Mairey-Hutyra-local.git'
hint: Updates were rejected because the tip of your current branch is behind
hint: its remote counterpart. Integrate the remote changes (e.g.
hint: 'git pull ...') before pushing again.
hint: See the 'Note about fast-forwards' in 'git push --help' for details.

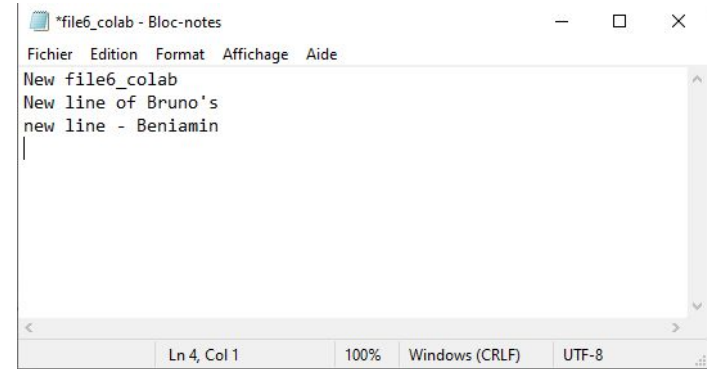
bruno@LAPTOP-0IU68HVD MINGW64 ~/Desktop/code factory/01 Git/CFLMS-GIT-DAY01-Mairey
-Hutyra-local (master)
$ git push origin master
To https://github.com/brunomairey/CFLMS-GIT-DAY01-Mairey-Hutyra-local.git
! [rejected]        master -> master (non-fast-forward)
error: failed to push some refs to 'https://github.com/brunomairey/CFLMS-GIT-DAY01
-Mairey-Hutyra-local.git'
hint: Updates were rejected because the tip of your current branch is behind
hint: its remote counterpart. Integrate the remote changes (e.g.
hint: 'git pull ...') before pushing again.
hint: See the 'Note about fast-forwards' in 'git push --help' for details.

bruno@LAPTOP-0IU68HVD MINGW64 ~/Desktop/code factory/01 Git/CFLMS-GIT-DAY01-Mairey
-Hutyra-local (master)
$ git pull origin master
From https://github.com/brunomairey/CFLMS-GIT-DAY01-Mairey-Hutyra-local
 * branch                master      -> FETCH_HEAD
Auto-merging file6_colab.txt
CONFLICT (content): Merge conflict in file6_colab.txt
Automatic merge failed; fix conflicts and then commit the result.
```

- Solving the conflict's issue : modify hte file to contain both version



```
file6_colab - Bloc-notes
Fichier  Edition  Format  Affichage  Aide
New file6_colab
<<<<<< HEAD
New line of Bruno's
=====
new line - Benjamin
>>>>>> 8ed48471087717be334c7c7d2bb6e1779581c649
```



```
*file6_colab - Bloc-notes
Fichier  Edition  Format  Affichage  Aide
New file6_colab
New line of Bruno's
new line - Benjamin
|
```

# – Solving the conflict's issue : push the new version of the file to the repository

```
bruno@LAPTOP-0IU68HVD MINGW64 ~/Desktop/code factory/01 Git/CFLMS-GIT-DAY01-Mairey-Hutyra-local (master|MERGING)
$ git add .

bruno@LAPTOP-0IU68HVD MINGW64 ~/Desktop/code factory/01 Git/CFLMS-GIT-DAY01-Mairey-Hutyra-local (master|MERGING)
$ git status
On branch master
Your branch and 'origin/master' have diverged,
and have 3 and 1 different commits each, respectively.
(use "git pull" to merge the remote branch into yours)

All conflicts fixed but you are still merging.
(use "git commit" to conclude merge)

Changes to be committed:
  modified:   file6_colab.txt

bruno@LAPTOP-0IU68HVD MINGW64 ~/Desktop/code factory/01 Git/CFLMS-GIT-DAY01-Mairey-Hutyra-local (master|MERGING)
$ git commit -m "new version of file 6"
[master 410108b] new version of file 6

bruno@LAPTOP-0IU68HVD MINGW64 ~/Desktop/code factory/01 Git/CFLMS-GIT-DAY01-Mairey-Hutyra-local (master)
$ git push origin master
Enumerating objects: 19, done.
Counting objects: 100% (17/17), done.
Delta compression using up to 8 threads
Compressing objects: 100% (9/9), done.
Writing objects: 100% (11/11), 1.12 KiB | 382.00 KiB/s, done.
Total 11 (delta 4), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (4/4), completed with 1 local object.
To https://github.com/brunomairey/CFLMS-GIT-DAY01-Mairey-Hutyra-local.git
   8ed4847..410108b  master -> master

bruno@LAPTOP-0IU68HVD MINGW64 ~/Desktop/code factory/01 Git/CFLMS-GIT-DAY01-Mairey-Hutyra-local (master)
$ |
```