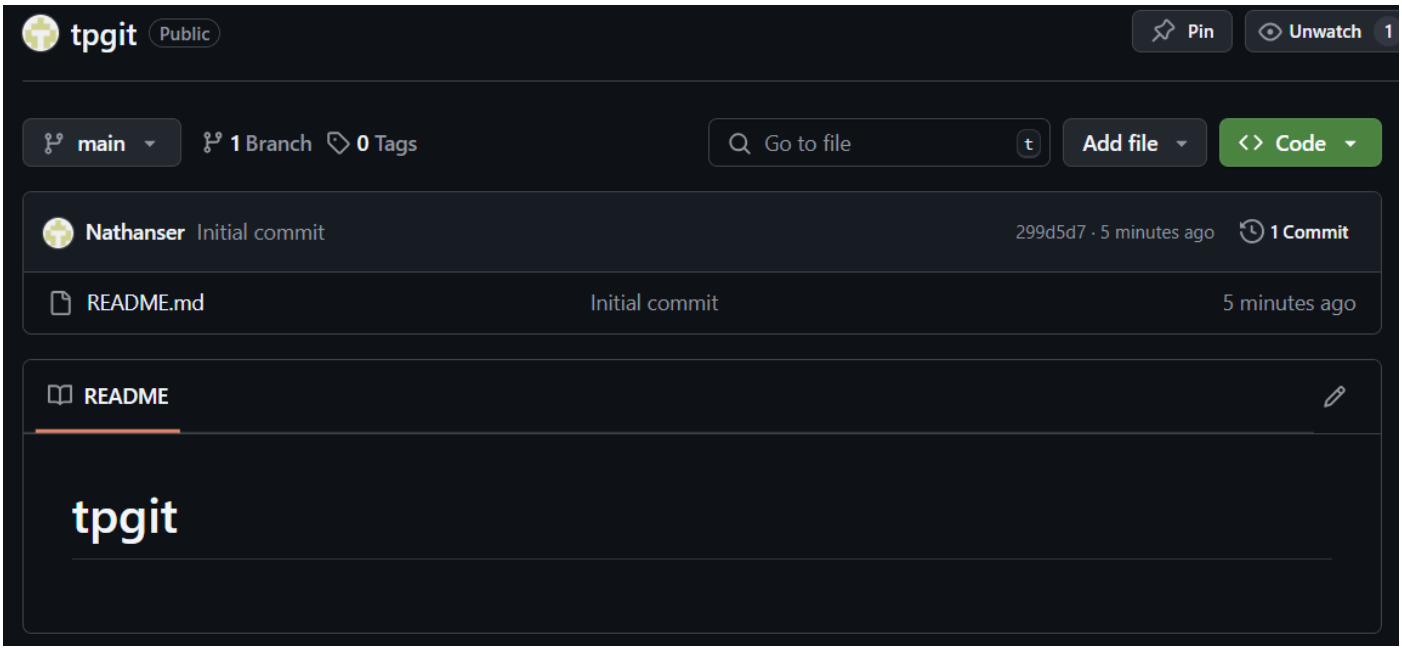
TP 1 Git

1- Création du dépôt distant sur Github :



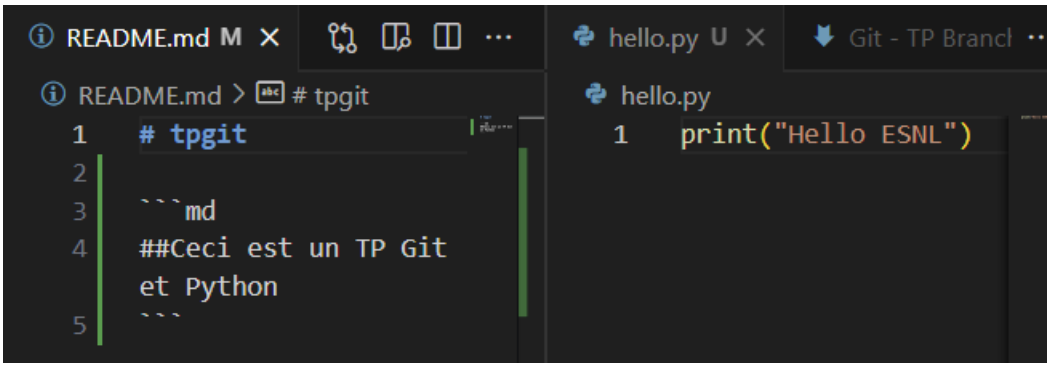
2- Clonage du repository en local :

```
nathan@SAMSUNG-BOOK-2-PRO-NATHAN MINGW64 ~
$ git clone https://github.com/Nathanser/tpgit.git
Cloning into 'tpgit'...
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
Receiving objects: 100% (3/3), done.
```

3- Création d'un dossier tp_git_python + initialisation du dépôt :

```
nathan@SAMSUNG-BOOK-2-PRO-NATHAN MINGW64 ~/tpgit (main)
$ mkdir tp_git_python_1

nathan@SAMSUNG-BOOK-2-PRO-NATHAN MINGW64 ~/tpgit (main)
$ cd tp_git_python_1

nathan@SAMSUNG-BOOK-2-PRO-NATHAN MINGW64 ~/tpgit/tp_git_python_1 (main)
$ git init
Initialized empty Git repository in C:/Users/natha/tpgit/tp_git_python_1/.git/
```

4- Création du fichier pyhton et readme.md :



5- Statuts du repository affiche que les fichiers ne sont pas sauvegardés dans le dépôt local, ils sont uniquement présent qu'en local :

```
$ git status
On branch main
Your branch is up to date with 'origin/main'.

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)
        modified:   README.md

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        hello.py
        tp_git_python_1/

no changes added to commit (use "git add" and/or "git commit -a")
```

6- Ajout des fichiers sur le dépôt distant et statuts mis à jour :

```
nathan@SAMSUNG-BOOK-2-PRO-NATHAN MINGW64 ~/tpgit (main)
$ git add .

nathan@SAMSUNG-BOOK-2-PRO-NATHAN MINGW64 ~/tpgit (main)
$ git status
On branch main
Your branch is up to date with 'origin/main'.

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        modified:   README.md
        new file:   hello.py
```

7- Commit :

```
nathan@SAMSUNG-BOOK-2-PRO-NATHAN MINGW64 ~/tpgit (main)
$ git commit -m 'Initialisation du projet'
[main 21c0607] Initialisation du projet
 2 files changed, 6 insertions(+), 1 deletion(-)
 create mode 100644 hello.py
```

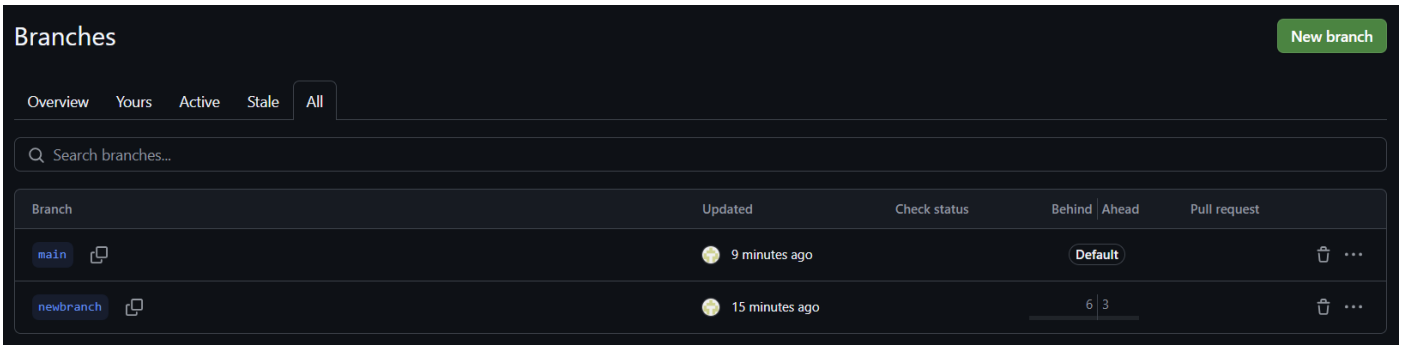
8- Push :

```
nathan@SAMSUNG-BOOK-2-PRO-NATHAN MINGW64 ~/tpgit (main)
$ git push
Enumerating objects: 6, done.
Counting objects: 100% (6/6), done.
Delta compression using up to 16 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (4/4), 359 bytes | 359.00 KiB/s, done.
Total 4 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/Nathanser/tpgit.git
   299d5d7..21c0607  main -> main
```

TP 2 Branches

1- Création d'une nouvelle branche « newbranch » :

```
nathan@SAMSUNG-BOOK-2-PRO-NATHAN MINGW64 ~/tpgit (main)
$ git branch
* main

nathan@SAMSUNG-BOOK-2-PRO-NATHAN MINGW64 ~/tpgit (main)
$ git checkout -b newbranch
Switched to a new branch 'newbranch'

nathan@SAMSUNG-BOOK-2-PRO-NATHAN MINGW64 ~/tpgit (newbranch)
$ git branch
  main
* newbranch
```



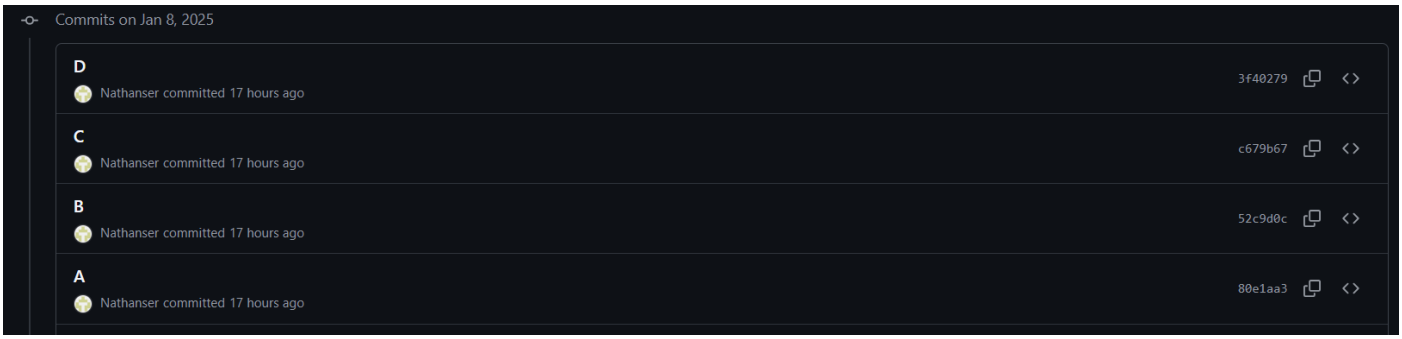
2- Fusion des branches avec la commande « merge » :

```
nathan@SAMSUNG-BOOK-2-PRO-NATHAN MINGW64 ~/tpgit (main)
$ git checkout main
Already on 'main'
M       hello.py
Your branch is up to date with 'origin/main'.

nathan@SAMSUNG-BOOK-2-PRO-NATHAN MINGW64 ~/tpgit (main)
$ git merge newbranch
Already up to date.

nathan@SAMSUNG-BOOK-2-PRO-NATHAN MINGW64 ~/tpgit (main)
$ git branch -d newbranch
Deleted branch newbranch (was 21c0607).

nathan@SAMSUNG-BOOK-2-PRO-NATHAN MINGW64 ~/tpgit (main)
$
```

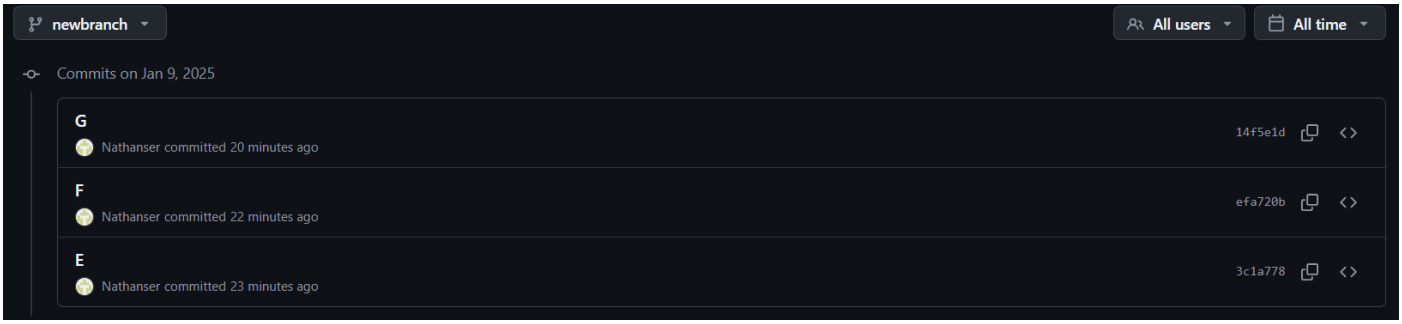
3- Création des commits sur les 2 branches :

```
A---B---C---D---H---I ← main
            \
             E---F---G ← newbranch

A---B---C---D---H---I---J ← main
            \           /
             E---F---G ← newbranch
```

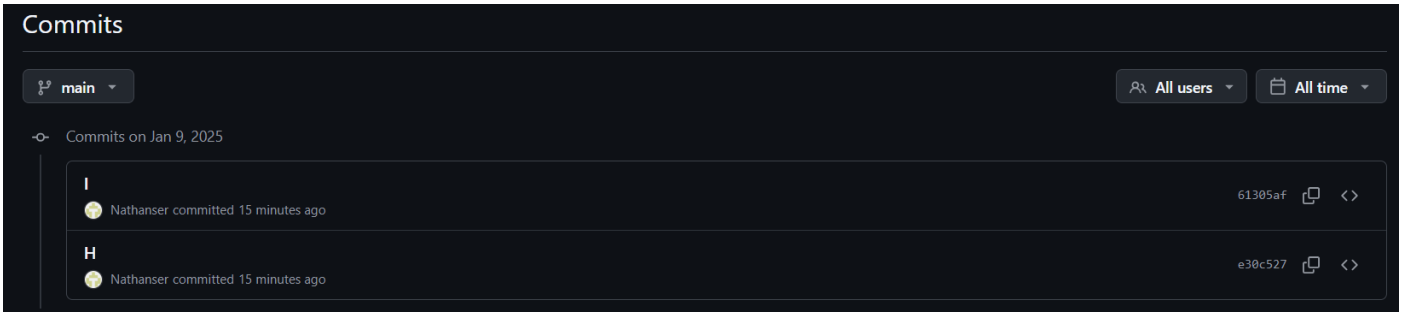
a) Commit sur la branche « main » : A, B, C, D



b) Commit sur la branche « newbranch » : E, F, G



c) Commit sur la branche « main » : H, I



On fait la commande git rebase ensuite