

TP 4 GIT

PRUNEAU Baptiste

2.1 Création d'un nouveau dépôt:

```
Mewo@DESKTOP-RQ545SD MINGW64 ~  
$ git init monrepo  
Initialized empty Git repository in C:/Users/Mewo/monrepo/.git/
```

```
Mewo@DESKTOP-RQ545SD MINGW64 ~  
$ cd monrepo
```

```
Mewo@DESKTOP-RQ545SD MINGW64 ~/monrepo (master)
```

Question 2.1:

```
Mewo@DESKTOP-RQ545SD MINGW64 ~  
$ git init sandwich  
Initialized empty Git repository in C:/Users/Mewo/sandwich/.git/
```

```
Mewo@DESKTOP-RQ545SD MINGW64 ~  
$ cd sandwich
```

```
Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich (master)  
$ touch burger.txt
```

```
Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich (master)  
$ ls  
burger.txt
```

```
Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich (master)  
$ nano burger.txt
```

```
Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich (master)  
$ echo burger.txt  
burger.txt
```

```
Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich (master)  
$ cat burger.txt  
steak  
salade  
tomate  
cornichon  
fromage
```

2.2 Add et Commit:

Question 2.2:

```
Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich (master)
$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
    new file:   burger.txt

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:   burger.txt
```

Question 2.3 :

```
Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich (master)
$ git add burger.txt
warning: in the working copy of 'burger.txt', LF will be replaced by CRLF the next time Git touches it

Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich (master)
$ status
bash: status: command not found

Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich (master)
$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
    new file:   burger.txt
```

```
Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich (master)
$ git diff --cached
diff --git a/burger.txt b/burger.txt
new file mode 100644
index 0000000..3788869
--- /dev/null
+++ b/burger.txt
@@ -0,0 +1,5 @@
+steak
+salade
+tomate
+cornichon
+fromage
```

Question 2.4:

Identification auprès de Git:

```
Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich (master)
$ git config --global user.email "carti.drop@iammusic.com"

Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich (master)
$ git config --global user.name "baptiste"
```

Message de commit:

```
Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich (master)
$ git commit -m "miam burger"
[master (root-commit) 2620c6c] miam burger
1 file changed, 5 insertions(+)
create mode 100644 burger.txt
```

Question 2.5:

```
Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich (master)
$ git status
On branch master
nothing to commit, working tree clean
```

Question 2.6:

```
Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich (master)
$ git log
commit 2620c6cb906086735dc9b1934d72a68adaeefe3e (HEAD -> master)
Author: baptiste <carti.drop@iammusic.com>
Date: Tue Jan 21 10:18:46 2025 +0100

    miam burger
```

Il n'y a qu'un seul commit, son numéro est 2620c6cb906086735dc9b1934d72a68adaeefe3e en hash cryptographique en format SHA1.

Question 2.7:

```
Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich (master)
$ touch hot_gog.txt

Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich (master)
$ touch jambon_beurre.txt

Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich (master)
$ touch tacos.txt
```

```
Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich (master)
$ git diff --cached
diff --git a/hot_dog.txt b/hot_dog.txt
new file mode 100644
index 0000000..68e5517
--- /dev/null
+++ b/hot_dog.txt
@@ -0,0 +1 @@
+pain
```

```
Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich (master)
$ nano hot_dog.txt

Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich (master)
$ git diff
warning: in the working copy of 'hot_dog.txt', LF will be replaced by CRLF the next time Git touches it
diff --git a/hot_dog.txt b/hot_dog.txt
index 68e5517..718d705 100644
--- a/hot_dog.txt
+++ b/hot_dog.txt
@@ -1,6 @@
 pain
+ketchup
+mayo
+saucisse
+oignon
+cornichon
```

```
Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich (master)
$ git add hot_dog.txt
warning: in the working copy of 'hot_dog.txt', LF will be replaced by CRLF the next time Git touches it

Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich (master)
$ git diff --cached
diff --git a/hot_dog.txt b/hot_dog.txt
index 68e5517..718d705 100644
--- a/hot_dog.txt
+++ b/hot_dog.txt
@@ -1,6 @@
 pain
+ketchup
+mayo
+saucisse
+oignon
+cornichon
```

```
Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich (master)
$ nano hot_dog.txt

Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich (master)
$ git diff
warning: in the working copy of 'hot_dog.txt', LF will be replaced by CRLF the next time Git touches it
diff --git a/hot_dog.txt b/hot_dog.txt
index 718d705..abc877a 100644
--- a/hot_dog.txt
+++ b/hot_dog.txt
@@ -3,4 +3,4 @@ ketchup
 mayo
 saucisse
 oignon
-cornichon
+
```

```
Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich (master)
$ git add hot_dog.txt
warning: in the working copy of 'hot_dog.txt', LF will be replaced by CRLF the next time Git touches it

Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich (master)
$ git diff --cached
diff --git a/hot_dog.txt b/hot_dog.txt
index 718d705..abc877a 100644
--- a/hot_dog.txt
+++ b/hot_dog.txt
@@ -3,4 +3,4 @@ ketchup
 mayo
 saucisse
 oignon
-cornichon
+
```

```
Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich (master)
$ git commit -m "pas de cornichons svp"
[master ed25d1c] pas de cornichons svp
1 file changed, 1 insertion(+), 1 deletion(-)
```

```
Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich (master)
$ git add tacos.txt
warning: in the working copy of 'tacos.txt', LF will be replaced by CRLF the next time Git touches it

Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich (master)
$ git diff --cached
diff --git a/tacos.txt b/tacos.txt
new file mode 100644
index 0000000..1804c2b
--- /dev/null
+++ b/tacos.txt
@@ -0,0 +1,8 @@
+tenders
+steak
+andalouse
+algerienne
+crudites
+fromagere
+frites
+cornichons
```

```
Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich (master)
$ git commit -m "des cornichons non merci"
[master 081f716] des cornichons non merci
1 file changed, 8 insertions(+)
create mode 100644 tacos.txt
```

```

Mewo@DESKTOP-RQ5455D MINGW64 ~/sandwich (master)
$ git diff
warning: in the working copy of 'tacos.txt', LF will be replaced by CRLF the next time Git touches it
diff --git a/tacos.txt b/tacos.txt
index 1804c2b..c830d5c 100644
--- a/tacos.txt
+++ b/tacos.txt
@@ -5,4 +5,4 @@ algerienne
 crudites
 fromagere
 frites
-cornichons
+
Mewo@DESKTOP-RQ5455D MINGW64 ~/sandwich (master)
$ git add tacos.txt
warning: in the working copy of 'tacos.txt', LF will be replaced by CRLF the next time Git touches it

Mewo@DESKTOP-RQ5455D MINGW64 ~/sandwich (master)
$ git diff --cached
diff --git a/tacos.txt b/tacos.txt
index 1804c2b..c830d5c 100644
--- a/tacos.txt
+++ b/tacos.txt
@@ -5,4 +5,4 @@ algerienne
 crudites
 fromagere
 frites
-cornichons
+
Mewo@DESKTOP-RQ5455D MINGW64 ~/sandwich (master)
$ git commit -m "miam le bon tacos"
[master 45316c4] miam le bon tacos
1 file changed, 1 insertion(+), 1 deletion(-)

```

```

Mewo@DESKTOP-RQ5455D MINGW64 ~/sandwich (master)
$ git add jambon_beurre.txt
warning: in the working copy of 'jambon_beurre.txt', LF will be replaced by CRLF the next time Git touches it

Mewo@DESKTOP-RQ5455D MINGW64 ~/sandwich (master)
$ git diff --cached
diff --git a/jambon_beurre.txt b/jambon_beurre.txt
new file mode 100644
index 0000000..88cc0c5
--- /dev/null
+++ b/jambon_beurre.txt
@@ -0,0 +1,3 @@
+baguette
+jambon
+beurre

Mewo@DESKTOP-RQ5455D MINGW64 ~/sandwich (master)
$ git commit -m "bon jambon beurre"
[master 2b2ea4b] bon jambon beurre
1 file changed, 3 insertions(+)
create mode 100644 jambon_beurre.txt

```

Question 2.8:

```
Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich (master)
$ git log
commit 2b2ea4b568e6fc2019f81d7511c28ed900253e6b (HEAD -> master)
Author: baptiste <carti.drop@iammusic.com>
Date: Tue Jan 21 10:52:48 2025 +0100

    bon jambon beurre

commit 45316c44940b48c0d22924feb6e0941068327fd8
Author: baptiste <carti.drop@iammusic.com>
Date: Tue Jan 21 10:50:59 2025 +0100

    miam le bon tacos

commit 081f71618618b784005498415f231177c3527df0
Author: baptiste <carti.drop@iammusic.com>
Date: Tue Jan 21 10:49:17 2025 +0100

    des cornichons non merci

commit ed25d1cd6dd634221610fc80d0dc7e1edcda9bbf
Author: baptiste <carti.drop@iammusic.com>
Date: Tue Jan 21 10:46:23 2025 +0100

    pas de cornichons svp

commit e4bc77c90f9cb233e2c4a372cd0574ff0199bb3a
Author: baptiste <carti.drop@iammusic.com>
Date: Tue Jan 21 10:43:37 2025 +0100

    miam hot dog

commit f0df76196a9ee55baa7bf25a890ab850902d444f
Author: baptiste <carti.drop@iammusic.com>
Date: Tue Jan 21 10:36:32 2025 +0100

    hot_dog.txt

commit 2620c6cb906086735dc9b1934d72a68adaeefe3e
Author: baptiste <carti.drop@iammusic.com>
Date: Tue Jan 21 10:18:46 2025 +0100

    miam burger
```

```
Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich (master)
$ git log --graph --pretty=short
* commit 2b2ea4b568e6fc2019f81d7511c28ed900253e6b (HEAD -> master)
| Author: baptiste <carti.drop@iammusic.com>
|
|     bon jambon beurre
|
* commit 45316c44940b48c0d22924feb6e0941068327fd8
| Author: baptiste <carti.drop@iammusic.com>
|
|     miam le bon tacos
|
* commit 081f71618618b784005498415f231177c3527df0
| Author: baptiste <carti.drop@iammusic.com>
|
|     des cornichons non merci
|
* commit ed25d1cd6dd634221610fc80d0dc7e1edcda9bbf
| Author: baptiste <carti.drop@iammusic.com>
|
|     pas de cornichons svp
|
* commit e4bc77c90f9cb233e2c4a372cd0574ff0199bb3a
| Author: baptiste <carti.drop@iammusic.com>
|
|     miam hot dog
|
* commit f0df76196a9ee55baa7bf25a890ab850902d444f
| Author: baptiste <carti.drop@iammusic.com>
|
|     hot_dog.txt
|
* commit 2620c6cb906086735dc9b1934d72a68adaeefe3e
| Author: baptiste <carti.drop@iammusic.com>
|
|     miam burger
```

2.3 Voyage dans le temps:

Question 2.9:

```

Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich (master)
$ nano hot_dog.txt

Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich (master)
$

Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich (master)
$ git add
Nothing specified, nothing added.
hint: Maybe you wanted to say 'git add .'
hint: Disable this message with "git config advice.addEmptyPaths false"

Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich (master)
$ git add hot_dog.txt
warning: in the working copy of 'hot_dog.txt', LF will be replaced by CRLF the next time Git touches it

Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich (master)
$ git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        modified:   hot_dog.txt

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

```

```

Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich (master)
$ git reset hot_dog.txt
Unstaged changes after reset:
M       hot_dog.txt

Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich (master)
$ git status
On branch 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)
        modified:   hot_dog.txt

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

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

```

Question 2.10:

```

Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich (master)
$ git reset hot_dog.txt
Unstaged changes after reset:
M      hot_dog.txt

Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich (master)
$ git status
On branch 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)
        modified:   hot_dog.txt

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

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

Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich (master)
$ git checkout hot_dog.txt
Updated 1 path from the index

Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich (master)
$ git status
On branch master
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        hot_gog.txt

nothing added to commit but untracked files present (use "git add" to track)

```

(On peut remarquer la subtile présence de hot_gog.txt depuis pas mal de screen qui n'est simplement qu'une bourde)

Question 2.11:

```

Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich (master)
$ git log
commit 2b2ea4b568e6fc2019f81d7511c28ed900253e6b (HEAD -> master)
Author: baptiste <carti.drop@iammusic.com>
Date: Tue Jan 21 10:52:48 2025 +0100

    bon jambon beurre

commit 45316c44940b48c0d22924feb6e0941068327fd8
Author: baptiste <carti.drop@iammusic.com>
Date: Tue Jan 21 10:50:59 2025 +0100

    miam le bon tacos

commit 081f71618618b784005498415f231177c3527df0
Author: baptiste <carti.drop@iammusic.com>
Date: Tue Jan 21 10:49:17 2025 +0100

    des cornichons non merci

commit ed25d1cd6dd634221610fc80d0dc7e1edcda9bbf
Author: baptiste <carti.drop@iammusic.com>
Date: Tue Jan 21 10:46:23 2025 +0100

    pas de cornichons svp

commit e4bc77c90f9cb233e2c4a372cd0574ff0199bb3a
Author: baptiste <carti.drop@iammusic.com>
Date: Tue Jan 21 10:43:37 2025 +0100

    miam hot dog

commit f0df76196a9ee55baa7bf25a890ab850902d444f
Author: baptiste <carti.drop@iammusic.com>
Date: Tue Jan 21 10:36:32 2025 +0100

    hot_dog.txt

commit 2620c6cb906086735dc9b1934d72a68adaeefe3e
Author: baptiste <carti.drop@iammusic.com>
Date: Tue Jan 21 10:18:46 2025 +0100

    miam burger

Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich (master)
$ git checkout 081f71618618b784005498415f231177c3527df0
Note: switching to '081f71618618b784005498415f231177c3527df0'.

You are in 'detached HEAD' state. You can look around, make experimental
changes and commit them, and you can discard any commits you make in this
state without impacting any branches by switching back to a branch.

If you want to create a new branch to retain commits you create, you may
do so (now or later) by using -c with the switch command. Example:

    git switch -c <new-branch-name>

Or undo this operation with:

    git switch -

Turn off this advice by setting config variable advice.detachedHead to false

HEAD is now at 081f716 des cornichons non merci

Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich ((081f716...))
$

```

```

Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich ((081f716...))
$ git status
HEAD detached at 081f716
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    hot_gog.txt

nothing added to commit but untracked files present (use "git add" to track)

```

Question 2.12:

```

Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich ((081f716...))
$ git checkout master
Previous HEAD position was 081f716 des cornichons non merci
Switched to branch 'master'

Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich (master)
$ git status
On branch master
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        hot_gog.txt

nothing added to commit but untracked files present (use "git add" to track)

Mewo@DESKTOP-RQ545SD MINGW64 ~/sandwich (master)
$ |

```

Commandes utiles:

Creation
Cloner localement un dépôt distant <code>git clone https://github.com/<remote></code>
Créer un nouveau dépôt local <code>git init</code>
Changements locaux
Fichiers modifiés dans le répertoire de travail. À utiliser fréquemment ! <code>git status</code>
Intégrer les changements d'un fichier au prochain commit <code>git add <fichier></code>
Retirer un fichier du prochain commit <code>git rm <fichier></code>
Envoyer les changements vers le dépôt <code>git commit</code>

Historique des commits

Afficher tous les commits commençant par les plus récents

..... `git log`

Afficher les changements dans le temps pour un fichier spécifique

..... `git log -p <fichier>`

Responsable du dernier changement d'un fichier

..... `git blame <fichier>`

Mettre à jour et publier

Télécharger toutes les modifications depuis REMOTE et les fusionner / les intégrer à HEAD

..... `git pull <remote> <branch>`

Télécharger toutes les modifications depuis REMOTE, mais ne pas les intégrer à HEAD

..... `git fetch <remote>`

Fusionner et Versionnage

Fusionner une branche dans le HEAD actuelle

..... `git merge <branch>`