TP 1

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25 September 2025

1 Introduction

In this project, we practiced the basics of Git by creating files, merging branches, and collaborating with classmates. We also learned how to push our work and pull updates, which helped us understand teamwork and problem-solving with Git.

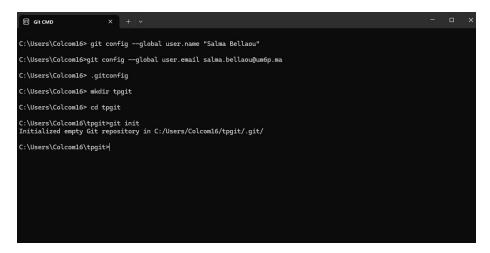


Figure 1: configuration of my git account, I created a folder to work on it

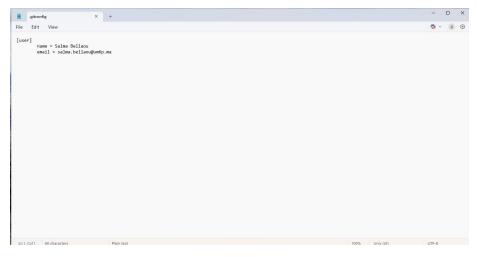


Figure 2: A file was created with the information that I entered

```
C:\Users\Colcom16> .gitconfig
 C:\Users\Colcom16> mkdir tpgit
C:\Users\Colcom16> cd tpgit
C:\Users\Colcom16\tpgit>git init
Initialized empty Git repository in C:/Users/Colcom16/tpgit/.git/
C:\Users\Colcom16\tpgit> echo mango
C:\Users\Colcom16\tpgit> echo mango >> fruits.txt
C:\Users\Colcom16\tpgit> git status
On branch master
No commits yet
Untracked files:
(use "git add <file>..." to include in what will be committed)
nothing added to commit but untracked files present (use "git add" to track)
C:\Users\Colcom16\tpgit> git add fruits.txt
C:\Users\Colcom16\tpgit> git commit - " Added mango to fruit list"
error: pathspec '-' did not match any file(s) known to git
error: pathspec ' Added mango to fruit list' did not match any file(s) known to git
C:\Users\Colcom16\tpgit> git commit -m " Added mango to fruits list"
[master (root-commit) 80fc065] Added mango to fruits list
1 file changed, 1 insertion(+)
create mode 1006444 fruits.txt
C:\Users\Colcom16\tpgit>git status
On branch master
nothing to commit, working tree clean
C:\Users\Colcom16\tpgit>
```

Figure 3: a file named fruits.txt was created and a fruite was added an each time I type git status to know the current status

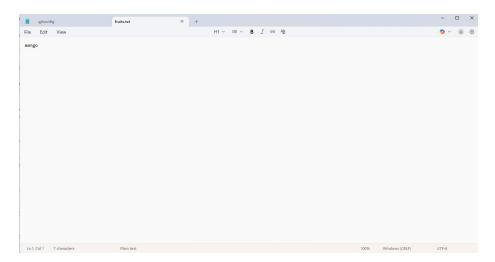


Figure 4: the fruit appeared on the notes

Figure 5: Other fruits were added and each time we write a commit saying that it was added so people can understand what was going on.

```
C:\Users\Colcom16\tpgit>git log --graph --oneline --decorate --all
* 05d0f48 (HEAD -> master) Added apple to the fruits
* da5e6df Added pear to the fruits
* c6011c7 Added grape to fruits
* 80fc065 Added mango to fruits list
C:\Users\Colcom16\tpgit>
```

Figure 6: Each time we check the detailed global history we type what appears in this figure

```
C:\Users\Colcom16\tpgit> echo banana >> fruits.txt

C:\Users\Colcom16\tpgit>git add fruits.txt

C:\Users\Colcom16\tpgit> git commit -m " Added banana to fruits"
[master dd60aa5] Added banana to fruits
  1 file changed, 1 insertion(+)

C:\Users\Colcom16\tpgit> git status
On branch master
nothing to commit, working tree clean

C:\Users\Colcom16\tpgit> git log --graph --oneline --decorate --all
  * dd60aa5 (HEAD -> master) Added banana to fruits
  * 05d0f48 Added apple to the fruits
  * da5e6df Added pear to the fruits
  * c6011c7 Added grape to fruits
  * 80fc065 Added mango to fruits list

C:\Users\Colcom16\tpgit>|
```

Figure 7: another fruit was added and the detailed history was checked again

```
C:\Users\Colcom16\tpgit> git branch vegetables
C:\Users\Colcom16\tpgit>git checkout vegetables
Switched to branch 'vegetables'
C:\Users\Colcom16\tpgit>
```

Figure 8: we created a branch named vegetables

```
C:\Users\Colcom16\tpgit>git checkout vegetables
Switched to branch 'vegetables'
C:\Users\Colcom16\tpgit> git branch
  master
* vegetables
```

Figure 9: we verified the existence of vegetables

```
C:\Users\Colcom16\tpgit> echo potato >> vegetables.txt

C:\Users\Colcom16\tpgit>git add vegetables.txt

C:\Users\Colcom16\tpgit> git status

On branch vegetables

Changes to be committed:

(use "git restore --staged <file>..." to unstage)

new file: vegetables.txt

C:\Users\Colcom16\tpgit> git commit -m " added potato to vegies"

[vegetables 03a8983] added potato to vegies

1 file changed, 1 insertion(+)

create mode 100644 vegetables.txt

C:\Users\Colcom16\tpgit> git log --graph --oneline --decorate --all

* 03a8983 (HEAD -> vegetables) added potato to vegies

* dd60aa5 (master) Added banana to fruits

* 05d0f48 Added apple to the fruits

* da5e6df Added pear to the fruits

* da5e6df Added grape to fruits

* c6011c7 Added grape to fruits

* 80fc065 Added mango to fruits list

C:\Users\Colcom16\tpgit>|
```

Figure 10: I created a file named "vegetables.txt" and i added some vegetables to the file

```
C:\Users\Colcom16\tpgit> echo tomato >> vegetables.txt
C:\Users\Colcom16\tpgit>git add vegetables.txt
C:\Users\Colcom16\tpgit>git commit -m "Added tomato to vegetable list"
[vegetables 8728f5d] Added tomato to vegetable list
 1 file changed, 1 insertion(+)
C:\Users\Colcom16\tpgit>echo lettuce >> vegetables.txt
C:\Users\Colcom16\tpgit>git status
On branch vegetables
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")
C:\Users\Colcom16\tpgit> git add vegetables.txt
C:\Users\Colcom16\tpgit> git commit -m " added lettuce to vegetables"
[vegetables 296eee7] added lettuce to vegetables
1 file changed, 1 insertion(+)
C:\Users\Colcom16\tpgit> git log --graph --oneline --decorate --all
* 296eee7 (HEAD -> vegetables) added lettuce to vegetables
* 8728f5d Added tomato to vegetable list
* 03a8983 added potato to vegies
* dd60aa5 (master) Added banana to fruits
* 05d0f48 Added apple to the fruits
* da5e6df Added pear to the fruits

* c6011c7 Added grape to fruits

* 80fc065 Added mango to fruits list
C:\Users\Colcom16\tpgit>
```

Figure 11: more vegetables were added and we keep checking the detailed history

```
C:\Users\Colcom16\tpgit> git branch sauces
C:\Users\Colcom16\tpgit>git checkout sauces
Switched to branch 'sauces'
```

Figure 12: Another branch named "sauces" was created

```
C:\Users\Colcom16\tpgit> echo mayo >> sauces.txt
C:\Users\Colcom16\tpgit> git add sauces.txt
C:\Users\Colcom16\tpgit>git status
On branch sauces
Changes to be committed:
   (use "git restore --staged <file>..." to unstage)
C:\Users\Colcom16\tpgit> git commit -m "Added mayo to sauces list"
 [sauces d6ac3f5] Added mayo to sauces list
 1 file changed, 2 insertions(+)
  create mode 100644 sauces.txt
C:\Users\Colcom16\tpgit> git log --graph --oneline --decorate --all
* d6ac3f5 (HEAD -> sauces) Added mayo to sauces list
* 296eee7 (vegetables) added lettuce to vegetables
* 8728f58 Added tomato to vegetable list
* 03a8983 added potato to vegies
* dd60aa5 (master) Added banana to fruits
* 05d0f48 Added apple to the fruits
* da5e6df Added pear to the fruits

* c6011c7 Added grape to fruits

* 80fc065 Added mango to fruits list
C:\Users\Colcom16\tpgit> echo biggy >> sauces.txt
C:\Users\Colcom16\tpgit> git add sauces.txt
C:\Users\Colcom16\tpgit> git commit -m "Added biggy to sauces list"
[sauces 152b0f9] Added biggy to sauces list
1 file changed, 1 insertion(+)
C:\Users\Colcom16\tpgit> git log --graph --oneline --decorate --all
* 152b0f9 (HEAD -> sauces) Added biggy to sauces list
* d6ac3f5 Added mayo to sauces list
* 296eee7 (vegetables) added lettuce to vegetables
* 8728f5d Added tomato to vegetable list
* 03a8983 added tomato to vegetable tist

* 03a8983 added potato to vegies

* dd60aa5 (master) Added banana to fruits

* 05d0f48 Added apple to the fruits

* da5e6df Added pear to the fruits

* c6011c7 Added grape to fruits
* 80fc065 Added mango to fruits list
C:\Users\Colcom16\tpgit>
```

Figure 13: Two elements were added to sauce file and no the "head" is now on sauces

```
C:\Users\Colcom16\tpgit> git log
commit dd60aa5c60aa7052ea73a103bca3b953092ce4fa (HEAD -> master)
Author: Salma Bellaou <salma.bellaou@um6p.ma>
       Wed Sep 24 11:48:25 2025 +0100
Date:
     Added banana to fruits
commit 05d0f4894c45848400cc2443d4fbabc63f6f5c15
Author: Salma Bellaou <salma.bellaou@um6p.ma>
Date: Wed Sep 24 11:44:38 2025 +0100
     Added apple to the fruits
commit da5e6dfeda30bd9ccfad9cd17ab5ead68dc287a7
Author: Salma Bellaou <salma.bellaou@um6p.ma>
Date: Wed Sep 24 11:40:39 2025 +0100
     Added pear to the fruits
commit c6011c7e08f17d30feef2f1d39a71b6be3fd985d
Author: Salma Bellaou <salma.bellaou@um6p.ma>
Date: Wed Sep 24 11:35:39 2025 +0100
     Added grape to fruits
commit 80fc065133038113e39bc449377a5133b76e0ec9
Author: Salma Bellaou <salma.bellaou@um6p.ma>
Date: Wed Sep 24 11:30:07 2025 +0100
     Added mango to fruits list
C:\Users\Colcom16\tpgit>
```

Figure 14: we used "git log" to understand the state of our repository

```
C.\Noses\Colombit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegrit\tegri
```

```
C. Nissen/Colcomit/Cypits-git checkout master
Smitched to branch 'master'
C:\Usern\Colcomit/Cypits-git diff vegetables
diff-_git alvegtables.txt b/vegetables.txt
diff-_git alvegtables.txt b/vegetables.txt
diff-_git alvegtables.txt
diff-
diff-_git alvegtables.txt
diff-_git alvegtables.diff-_git alvegtables
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diff-_git alvegtables.txt
diff-_git alvegtables.diff-_git alvegtables
diff-_git alvegtables.diff-_git alveg
```

Figure 15: Merging master to vegetables and merging vegetables back to master, and it was done successfully.

```
Chimera Calcinated Pagastraph among member
German Calcinated Pagastra
```

Figure 16: Here we merged master to sauces and merged back sauces to master, and once again it was done successfully as it appears in the figures

```
C:\Users\PC GOLD\tpgit> git remote add origin https://github.com/salmabellaou-max/tpgit.git
C:\Users\PC GOLD\tpgit> git remote -v
origin https://github.com/salmabellaou-max/tpgit.git (fetch)
origin https://github.com/salmabellaou-max/tpgit.git (push)
C:\Users\PC GOLD\tpgit>git push -u origin master
```

Figure 17: created an account in Github

```
PS C:\Users\Colcom16\tpgit> git clone https://github.com/Assma51/tpgit.git tp-git-binome Cloning into 'tp-git-binome'...
remote: Enumerating objects: 36, done.
remote: Counting objects: 100% (36/36), done.
remote: Compressing objects: 100% (19/19), done.
remote: Total 36 (delta 7), reused 36 (delta 7), pack-reused 0 (from 0)
Receiving objects: 100% (36/36), done.
Resolving deltas: 100% (7/7), done.
PS C:\Users\Colcom16\tpgit> |
```

Figure 18: added my teammeat to my Github account

🛅 .git	9/25/2025 3:49 PM	File fo	lder	
🛅 tp-git-binome	9/25/2025 4:23 PM	File fo	lder	
fruits	9/24/2025 11:47 AM	Text D	ocument	1 KB
sauces	9/24/2025 12:43 PM	Text D	ocument	1 KB
vegetables	9/24/2025 12:34 PM	Text D	ocument	1 KB
igit .git	9/25/2025 4:23	PM	File folder	
fruits	9/25/2025 4:23	PM	Text Docume	ent
sauces	9/25/2025 4:23	PM	Text Docume	ent
spices	9/25/2025 4:23	PM	Text Docume	ent
vegetables	9/25/2025 4:23	PM	Text Docume	ent

Figure 19: a new folder was created and it contains my teammate's information

```
PS C:\Users\Colcom16\tpgit> git branch herbs
PS C:\Users\Colcom16\tpgit> git checkout herbs
D herbs.txt
Switched to branch 'herbs'
PS C:\Users\Colcom16\tpgit> echo rosemary >> herbs.txt
PS C:\Users\Colcom16\tpgit> git add herbs.txt
PS C:\Users\Colcom16\tpgit> git commit -m " added rosemary to herbs list"
[herbs 4a8b1a1] added rosemary to herbs list
1 file changed, 0 insertions(+), 0 deletions(-)
PS C:\Users\Colcom16\tpgit> echo oregano >> herbs.txt
PS C:\Users\Colcom16\tpgit> git add herbs.txt
PS C:\Users\Colcom16\tpgit> git commit -m "added oregano to herbs"
[herbs 4269616] added oregano to herbs
1 file changed, 0 insertions(+), 0 deletions(-)
```

Figure 20: a new file called herbs was created

```
PS C:\Users\Colcom16\tpgit> git checkout herbs
Already on 'herbs'
PS C:\Users\Colcom16\tpgit> git diff main diff --git a/herbs.txt b/herbs.txt index be38ed2..1503ac6 1006444
Binary files a/herbs.txt and b/herbs.txt differ
PS C:\Users\Colcom16\tpgit> git merge main
Already up to date.
PS C:\Users\Colcom16\tpgit> git checkout main
Switched to branch 'main'
Your branch is ahead of 'origin/main' by 2 commits.
(use "git push" to publish your local commits)
PS C:\Users\Colcom16\tpgit> git diff herbs
diff --git a/herbs.txt b/herbs.txt
index 1503ac6..be38ed2 100644
Binary files a/herbs.txt and b/herbs.txt differ PS C:\Users\Colcom16\tpgit> git merge herbs
Updating da0417c..4269616
Fast-forward
 herbs.txt | Bin 40 -> 40 bytes
1 file changed, 0 insertions(+), 0 deletions(-)
PS C:\Users\Colcom16\tpgit> git log
commit 42696167ba5a2fffad368843c581cc61fcf9bfda (HEAD -> main, herbs)
Author: Salma Bellaou <salma.bellaou@um6p.ma>
          Thu Sep 25 16:35:30 2025 +0100
Date:
      added oregano to herbs
```

Figure 21: merging herbs to master and vice versa and i pushed it to my teammate's account

Assma51 added pepper to spices		ed84179 · 4 minutes ago 16 Commits
fruits.txt	Added banana to fruits	yesterday
herbs.txt	added oregano to herbs	45 minutes ago
🗅 sauces.txt	Added biggy to sauces list	yesterday
spices.txt	added pepper to spices	4 minutes ago
uegetables.txt	added lettuce to vegetables	yesterday

Figure 22: herbs appeared in her teammate's account

```
S. C. Ubservickierenii Popsittor gis-biomese acho draupefruit vs fruits.txt
S. C. Ubservickierunii Vppitty-gis-biomese pit and fruits.txt
S. C. Ubservickierunii Vppitty-gis-biomese pit demait - m *added dragonfruit to fruits*
S. C. Ubservickierunii Vppitty-gis-biomese pit commit - m *added dragonfruit to fruits*
S. C. Ubservickierunii Vppitty-gis-biomese pit publi
Attendy up to dar.
S. C. Ubservickierunii Vppitty-gis-biomese pit publi
Committang bysteri 1980 (5/7), dome.
Suitting dojects: 1980 (5/7), dojects.
Suitting dojects: 1980 (5/7), dojects.
Suitting dojects
```

Figure 23: I added a fruit and then I pulled and pushed

🔭 salmabellaou added dragonfruit to frui	its	b4f317e · now ○ 29 Commits
fruits.txt	added dragonfruit to fruits	now
herbs.txt	added egg plant to vegetables	5 minutes ago
sauces.txt	soysauce added to sauces	yesterday
spices.txt	added chili to spices	yesterday
uegetables.txt	added egg plant to vegetables	5 minutes ago

Figure 24: the added fruit appeared in my teammate's account

Figure 25: we had an error, and then we used chatgpt to know how to solve it and we managed to solve it

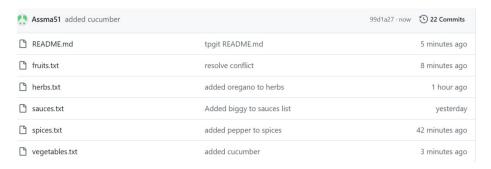


Figure 26: we managed to add fruits into my account



(a) my terminal

(b) my teammate's terminal

Figure 27: we did the same thing as fruits but here we switched the roles

💢 salmabellaou added dragonfruit to fruits		bif317e - now 🕚 29 Commits
fruits.txt	added dragonfruit to fruits	now
herbs.txt	added egg plant to vegetables	5 minutes ago
Sauces.txt Sauces.txt	soysauce added to sauces	yesterday
spices.trt	added chili to spices	yesterday
□ vegetables.txt	added egg plant to vegetables	5 minutes ago

(a) the change appeared in my teammate's account



(b) the change appeared in my account

```
# Git Learning Project
## Description
This project is a TP designed to help students learn how to use Git, collaborate in teams, and solve common problems they may face while working togethe
## Authors
- Salma Bellaou
- Asma Khamri
```

- ## Objectives
- Learn how to work with Git
 Develop problem-solving skills
 Practice teamwork and collaboration

Figure 29: documenting my project using markdown

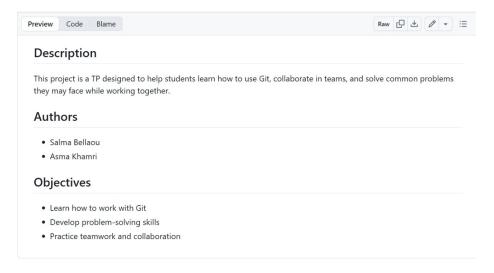


Figure 30: final result