

Trabajo Práctico 1 - Git Básico

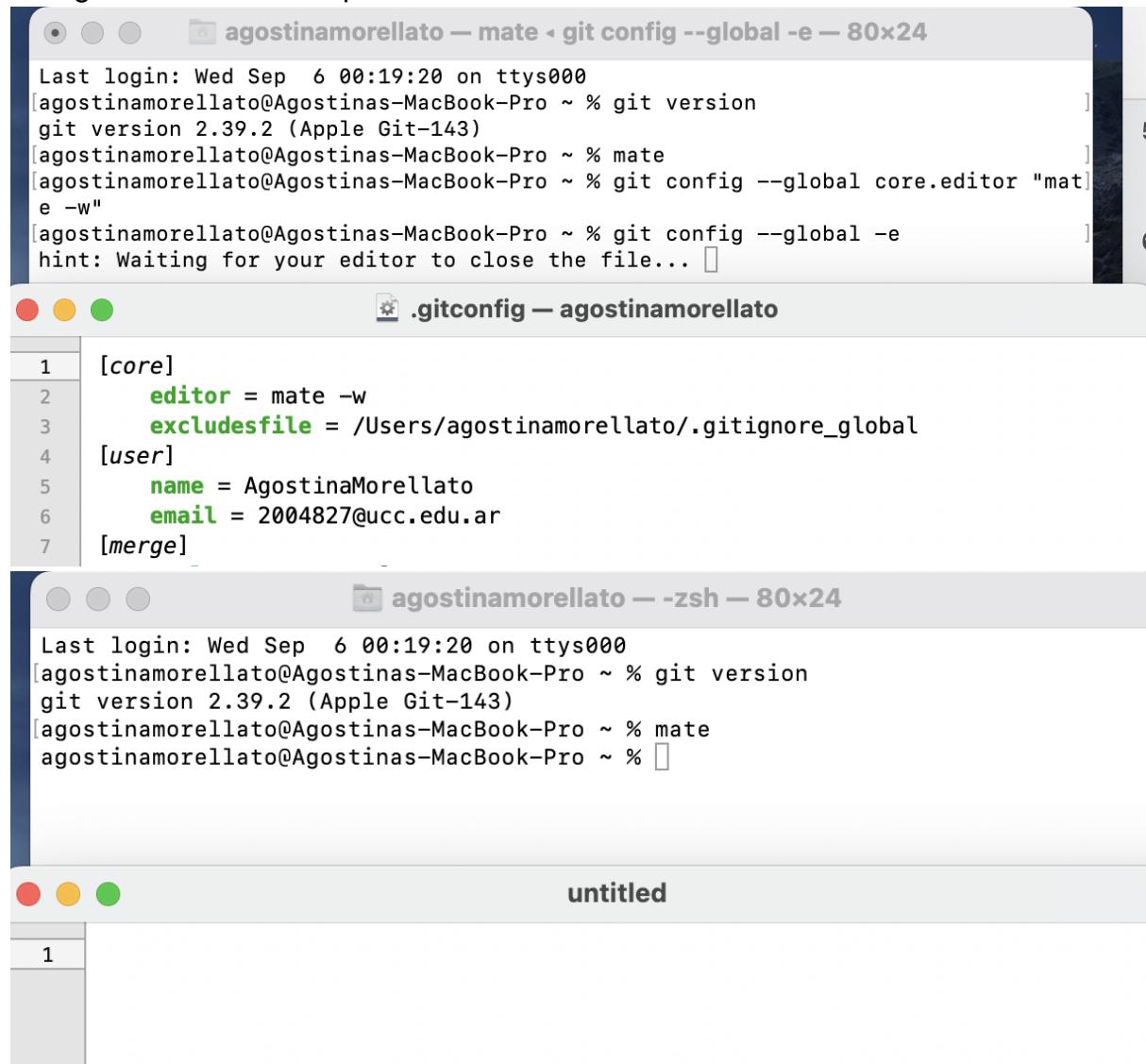
1- Instalar Git



```
Last login: Wed Sep 6 00:19:20 on ttys000
[agostinamorellato@Agostinas-MacBook-Pro ~ % git version
git version 2.39.2 (Apple Git-143)
```

2- Configuración del Editor Predeterminado

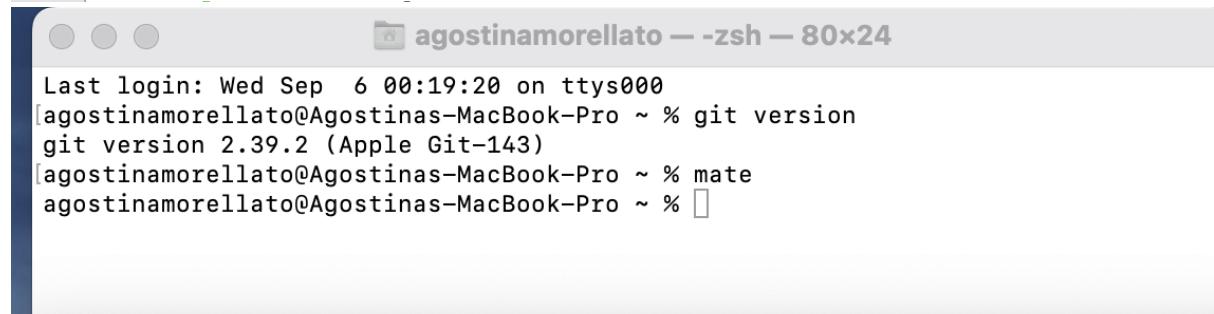
Instalar Notepad ++ para Windows o TextMate para Mac OS, colocarle un alias y configurarlo como editor predeterminado



```
Last login: Wed Sep 6 00:19:20 on ttys000
[agostinamorellato@Agostinas-MacBook-Pro ~ % git version
git version 2.39.2 (Apple Git-143)
[agostinamorellato@Agostinas-MacBook-Pro ~ % mate
[agostinamorellato@Agostinas-MacBook-Pro ~ % git config --global core.editor "mate
e -w"
[agostinamorellato@Agostinas-MacBook-Pro ~ % git config --global -e
hint: Waiting for your editor to close the file... ]
```

.gitconfig — agostinamorellato

```
[core]
editor = mate -w
excludesfile = /Users/agostinamorellato/.gitignore_global
[user]
name = AgostinaMorellato
email = 2004827@ucc.edu.ar
[merge]
```



```
Last login: Wed Sep 6 00:19:20 on ttys000
[agostinamorellato@Agostinas-MacBook-Pro ~ % git version
git version 2.39.2 (Apple Git-143)
[agostinamorellato@Agostinas-MacBook-Pro ~ % mate
agostinamorellato@Agostinas-MacBook-Pro ~ % ]
```

untitled

3- Creación de Repos 01 -> Crearlo en GitHub, clonarlo localmente y subir cambios

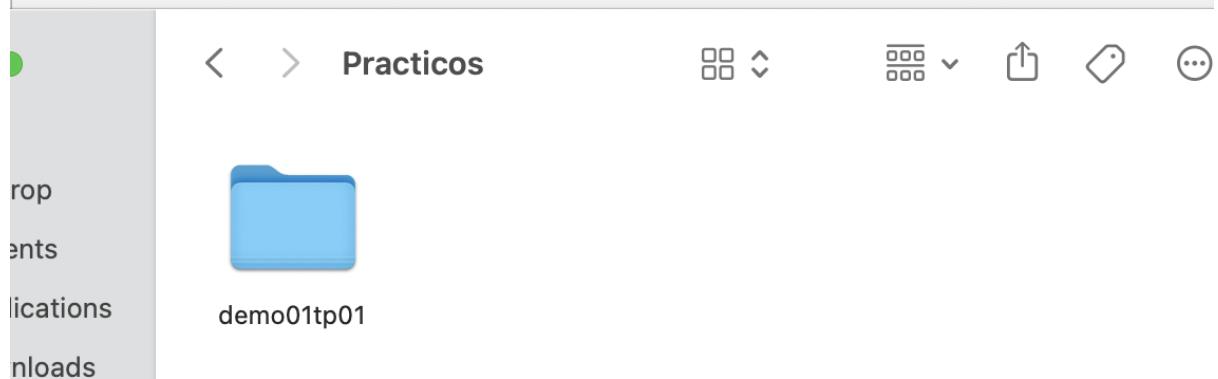
Crear una cuenta en <https://github.com>

Crear un nuevo repositorio en dicha página con el Readme.md por defecto

The screenshot shows a GitHub repository page for 'demo01tp01'. At the top, there's a navigation bar with links for Code, Issues, Pull requests, Actions, Projects, Wiki, Security, Insights, and Settings. Below the navigation bar, the repository name 'demo01tp01' is displayed, along with a 'Public' badge. There are buttons for Pin, Unwatch (1), Fork (0), and Star (0). The repository has 1 branch ('main') and 0 tags. A commit from 'AgostinaMorellato' titled 'Initial commit' is shown, dated 'now' with a commit hash '2efde30'. The README.md file contains the text 'Trabajo Practico Nro. 1'. On the right side, there's an 'About' section with details like 'Readme', 'Activity', '0 stars', '1 watching', and '0 forks'. The 'Releases' section indicates 'No releases published' and 'Create a new release'. The 'Packages' section also shows 'No packages published' and 'Publish your first package'.

Clonar el repo remoto en un nuevo directorio local

```
[agostinamorellato@Agostinas-MacBook-Pro Practicos % git clone https://github.com/AgostinaMorellato/demo01tp01.git
Cloning into 'demo01tp01'...
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
Receiving objects: 100% (3/3), done.
agostinamorellato@Agostinas-MacBook-Pro Practicos % ]
```



Editar archivo Readme.md agregando algunas lineas de texto

```
[agostinamorellato@Agostinas-MacBook-Pro demo01tp01 % 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

no changes added to commit (use "git add" and/or "git commit -a")
agostinamorellato@Agostinas-MacBook-Pro demo01tp01 %
```

README.md — demo01tp01 (git: main)

demo01tp01

```
1 Trabajo Practico Nro. 1
2 Esto esta editado desde TextMate
3
4 Facultad de Ingenieria
```

Editar (o crear si no existe) el archivo .gitignore agregando los archivos *.bak

```
[agostinamorellato@Agostinas-MacBook-Pro demo01tp01 % mate .gitignore
[agostinamorellato@Agostinas-MacBook-Pro demo01tp01 % 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)
    .gitignore
```

README.md — demo01tp01 (git: main)

README.md

x

.gitignore

+

```
1 *.bak
```

~/Desktop/IngSwIII/Prac
demo01tp01/.gitignore

Crear un commit y proveer un mensaje descriptivo

Intentar un push al repo remoto

```

[agostinamorellato@Agostinas-MacBook-Pro demo01tp01 % 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)
    .gitignore

no changes added to commit (use "git add" and/or "git commit -a")
[agostinamorellato@Agostinas-MacBook-Pro demo01tp01 % git add .
[agostinamorellato@Agostinas-MacBook-Pro demo01tp01 % git commit -m "Primer Commit Tp 1"
[main ae316c8] Primer Commit Tp 1
  2 files changed, 3 insertions(+)
  create mode 100644 .gitignore
[agostinamorellato@Agostinas-MacBook-Pro demo01tp01 % git push origin main
Username for 'https://github.com': AgostinaMorellato
>Password for 'https://AgostinaMorellato@github.com':
remote: Support for password authentication was removed on August 13, 2021.
remote: Please see https://docs.github.com/en/get-started/getting-started-with-git/about-remote-repositories#cloning-with-https-urls for information on currently recommended modes of authentication.
fatal: Authentication failed for 'https://github.com/AgostinaMorellato/demo01tp01.git'
[agostinamorellato@Agostinas-MacBook-Pro demo01tp01 %

```

En caso de ser necesario configurar las claves SSH requeridas y reintentar el push.

```

[agostinamorellato@Agostinas-MacBook-Pro .ssh % cd ..
[agostinamorellato@Agostinas-MacBook-Pro ~ % cd ~/.ssh
[agostinamorellato@Agostinas-MacBook-Pro .ssh % ls
[agostinamorellato@Agostinas-MacBook-Pro .ssh % ssh-keygen -t rsa -b 4096 -C 2004827@ucc.edu.ar
[Generating public/private rsa key pair.
Enter file in which to save the key (/Users/agostinamorellato/.ssh/id_rsa): id_rsa
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in id_rsa
[Your public key has been saved in id_rsa.pub
[The key fingerprint is:
SHA256:WGC7VeEtg3pIHs37rBVU45xPmvwaux98xVFn0d8KabY 2004827@ucc.edu.ar
The key's randomart image is:
+---[RSA 4096]----+
|   o o o .*|
+---[SHA256]----+
[agostinamorellato@Agostinas-MacBook-Pro .ssh % mate ~/ssh/id_rsa.pub

```

| | ssh-rsa |
|--------|---|
| 1 | AAAAB3NzaC1yc2EAAAQABAAQDSvm2cMd50munWLVICvVXsE8sChcAIszJgNK8CXxJ3cqQW5Dib01V0fDahfJH1PGDSTTivYW2v97ib53hW00T5AVYe82mzYazZGJZ3BiuY30FYn0hr/Darr/0trGD |
| SSHKey | SHA256:WGC7VeEtg3pIHs37rBVU45xPmvwaux98xVFn0d8KabY |
| SSH | Added on Sep 6, 2023 |
| | Never used — Read/write |

```

[agostinamorellato@Agostinas-MacBook-Pro .ssh % ssh -T git@github.com
Hi AgostinaMorellato! You've successfully authenticated, but GitHub does not provide shell access.

```

```
[agostinamorellato@Agostinas-MacBook-Pro demo01tp01 % git remote set-url origin git@github.com:AgostinaMorellato/demo01tp01.git
[agostinamorellato@Agostinas-MacBook-Pro demo01tp01 % git status
On branch main
Your branch is ahead of 'origin/main' by 1 commit.
  (use "git push" to publish your local commits)

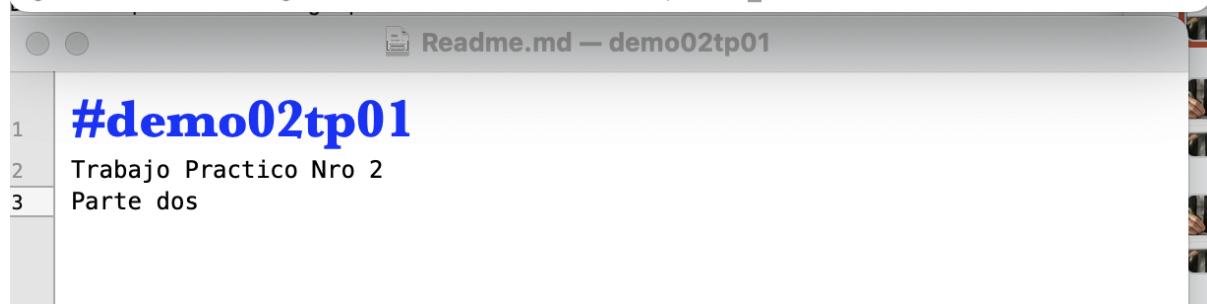
nothing to commit, working tree clean
[agostinamorellato@Agostinas-MacBook-Pro demo01tp01 % git push origin main
Enumerating objects: 6, done.
Counting objects: 100% (6/6), done.
Delta compression using up to 10 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (4/4), 389 bytes | 389.00 KiB/s, done.
Total 4 (delta 0), reused 0 (delta 0), pack-reused 0
To github.com:AgostinaMorellato/demo01tp01.git
  2efde30..ae316c8  main -> main
[agostinamorellato@Agostinas-MacBook-Pro demo01tp01 %
```

4- Creación de Repos 02-> Crearlo localmente y subirlo a GitHub

Crear un repo local

Agregar archivo Readme.md con algunas líneas de texto

```
[agostinamorellato@Agostinas-MacBook-Pro Practicos % mkdir demo02tp01
[agostinamorellato@Agostinas-MacBook-Pro Practicos % cd demo02tp01
[agostinamorellato@Agostinas-MacBook-Pro demo02tp01 % git init
Initialized empty Git repository in /Users/agostinamorellato/Desktop/IngSwIII/Practicos/demo02tp01/.git/
[agostinamorellato@Agostinas-MacBook-Pro demo02tp01 % mate Readme.md
[agostinamorellato@Agostinas-MacBook-Pro demo02tp01 %
```



Crear archivo .gitignore

```
[agostinamorellato@Agostinas-MacBook-Pro demo02tp01 % mate .gitignore
[agostinamorellato@Agostinas-MacBook-Pro demo02tp01 %
```



Crear un commit y proveer un mensaje descriptivo

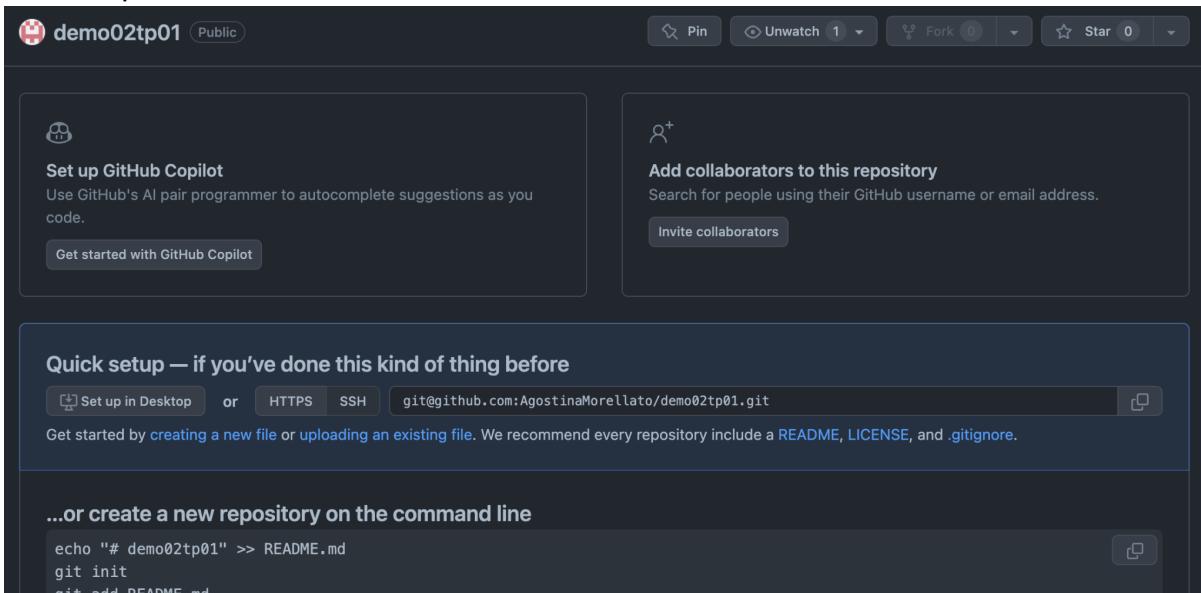
```
[agostinamorellato@Agostinas-MacBook-Pro demo02tp01 % git status
On branch main

No commits yet

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

nothing added to commit but untracked files present (use "git add" to track)
[agostinamorellato@Agostinas-MacBook-Pro demo02tp01 % git add .
[agostinamorellato@Agostinas-MacBook-Pro demo02tp01 % git commit -m "Agrego Readme.md y
  .gitignore"
[main (root-commit) c636510] Agrego Readme.md y .gitignore
  2 files changed, 3 insertions(+)
  create mode 100644 .gitignore
  create mode 100644 Readme.md
```

Crear repo en GitHub



Asociar repo local con remoto

Subir cambios.

```
[agostinamorellato@Agostinas-MacBook-Pro demo02tp01 % git remote add origin git@github.com:AgostinaMorellato/demo02tp01.git
[agostinamorellato@Agostinas-MacBook-Pro demo02tp01 % git branch -M main
[agostinamorellato@Agostinas-MacBook-Pro demo02tp01 % git status
On branch main
nothing to commit, working tree clean
[agostinamorellato@Agostinas-MacBook-Pro demo02tp01 % git push -u origin main
  Enumerating objects: 4, done.
  Counting objects: 100% (4/4), done.
  Delta compression using up to 10 threads
  Compressing objects: 100% (2/2), done.
  Writing objects: 100% (4/4), 319 bytes | 319.00 KiB/s, done.
  Total 4 (delta 0), reused 0 (delta 0), pack-reused 0
To github.com:AgostinaMorellato/demo02tp01.git
 * [new branch]      main -> main
branch 'main' set up to track 'origin/main'.
```

Screenshot of a GitHub repository page for 'demo02tp01'. The repository is public. It shows a main branch, 1 branch, and 0 tags. There are three commits listed:

- AgostinaMorellato Agrego Readme.md y .gitignore (commit c636510, 5 minutes ago)
- .gitignore (commit Agrego Readme.md y .gitignore, 5 minutes ago)
- Readme.md (commit Agrego Readme.md y .gitignore, 5 minutes ago)

The 'Readme.md' file content is displayed in a code editor:

```
#demo02tp01 Trabajo Practico Nro 2 Parte dos
```

6- Ramas

Crear una nueva rama

Cambiarse a esa rama

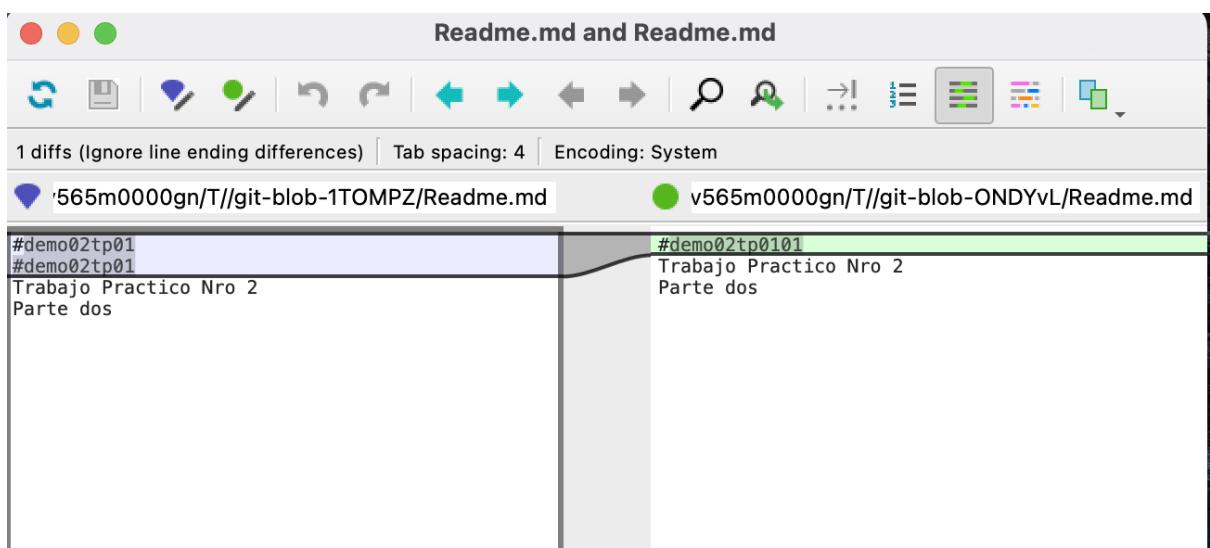
Hacer un cambio en el archivo Readme.md y hacer commit

Revisar la diferencia entre ramas

Hacer un merge FF

Borrar la rama creada

Ver el log de commits



```
[agostinamorellato@Agostinas-MacBook-Pro demo02tp01 % git checkout main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.
[agostinamorellato@Agostinas-MacBook-Pro demo02tp01 % git merge nueva-rama
Updating 2162183..6640699
Fast-forward
 Readme.md      | 3 +--
 nuevoArchivo.txt | 1 +
 2 files changed, 2 insertions(+), 2 deletions(-)
 create mode 100644 nuevoArchivo.txt
[agostinamorellato@Agostinas-MacBook-Pro demo02tp01 % git branch -d nueva-rama
Deleted branch nueva-rama (was 6640699).
[agostinamorellato@Agostinas-MacBook-Pro demo02tp01 % git log
commit 66406991206c646543cadbc78e1ae5929b9ad17c (HEAD -> main)
Author: AgostinaMorellato <2004827@ucc.edu.ar>
Date:   Thu Sep 7 12:59:53 2023 -0300

    Cambio en readme desde nueva rama

commit 70557100fb9777a52bfce16d52ae936fb1ec901d (origin/pullReqBranch, pullReqBranch)
Author: AgostinaMorellato <2004827@ucc.edu.ar>
Date:   Wed Sep 6 12:20:58 2023 -0300

    Nuevo archivo

commit 21621830b44394c27c6ae72a00eaa8eaad99b9da (origin/main)
Author: AgostinaMorellato <2004827@ucc.edu.ar>
Date:   Wed Sep 6 11:33:48 2023 -0300

    Resuelto el conflicto

commit d314cf352298ef84359ea33f4f005613ae9cae0d
Merge: 055842e 384a568
Author: AgostinaMorellato <2004827@ucc.edu.ar>
Date:   Wed Sep 6 11:31:18 2023 -0300

    Merge
```

Crear una nueva rama conflictBranch

Realizar una modificación en la linea 1 del Readme.md desde main y commitear

En la conflictBranch modificar la misma línea del Readme.md y commitear

Ver las diferencias con git difftool main conflictBranch

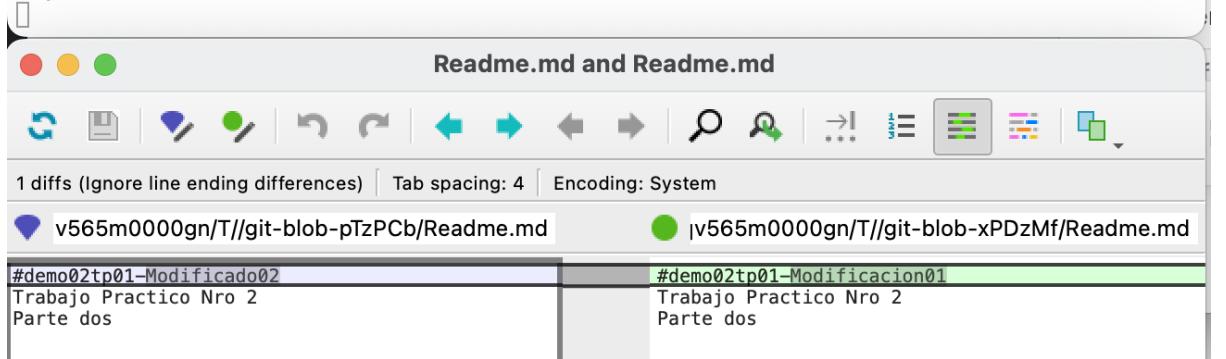
Cambiarse a la rama main e intentar mergear con la rama conflictBranch

Resolver el conflicto con git mergetool

Agregar .orig al .gitignore

Hacer commit y push

```
(use "git add <file>..." to update what will be committed)
[ (use "git restore <file>..." to discard changes in working directory)
  modified:   Readme.md
[no changes added to commit (use "git add" and/or "git commit -a")
agostinamorellato@Agostinas-MacBook-Pro demo02tp01 % git add .
agostinamorellato@Agostinas-MacBook-Pro demo02tp01 % git commit -m "modificacion Readme con
flictBranch"
[conflictBranch 384a568] modificacion Readme conflictBranch
 1 file changed, 1 insertion(+), 1 deletion(-)
agostinamorellato@Agostinas-MacBook-Pro demo02tp01 % git checkout main
Switched to branch 'main'
[Your branch is ahead of 'origin/main' by 1 commit.
 (use "git push" to publish your local commits)
agostinamorellato@Agostinas-MacBook-Pro demo02tp01 % mate Readme.md
agostinamorellato@Agostinas-MacBook-Pro demo02tp01 % git add .
agostinamorellato@Agostinas-MacBook-Pro demo02tp01 % git commit -m "modificacion Readme mai
n"
[main 055842e] modificacion Readme main
 1 file changed, 1 insertion(+), 1 deletion(-)
agostinamorellato@Agostinas-MacBook-Pro demo02tp01 % git difftool main conflictBranch
[2023-09-06 11:25:44.322 p4merge[10547:132568] Warning: Window move completed without beginn
ing
```



```
[agostinamorellato@Agostinas-MacBook-Pro demo02tp01 % git checkout main
Switched to branch 'main'
Your branch is ahead of 'origin/main' by 1 commit.
 (use "git push" to publish your local commits)
[agostinamorellato@Agostinas-MacBook-Pro demo02tp01 % git merge conflictBranch
Auto-merging Readme.md
CONFLICT (content): Merge conflict in Readme.md
Automatic merge failed; fix conflicts and then commit the result.
[agostinamorellato@Agostinas-MacBook-Pro demo02tp01 % git status
On branch main
Your branch is ahead of 'origin/main' by 1 commit.
 (use "git push" to publish your local commits)

You have unmerged paths.
 (fix conflicts and run "git commit")
 (use "git merge --abort" to abort the merge)

Unmerged paths:
 (use "git add <file>..." to mark resolution)
 both modified:   Readme.md

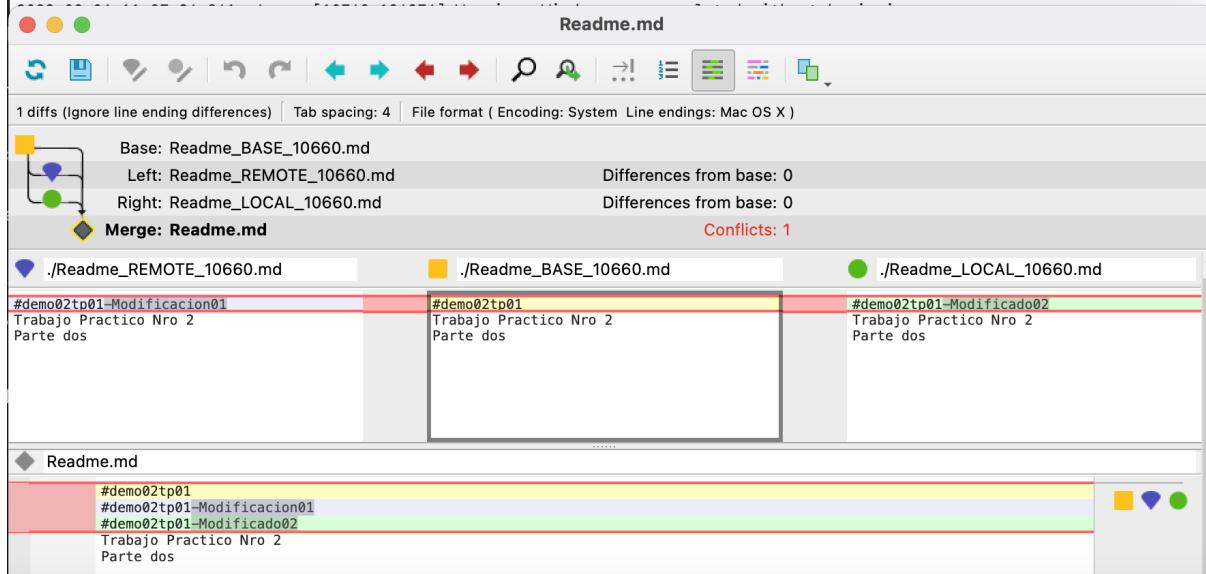
no changes added to commit (use "git add" and/or "git commit -a")
```

```

agostinamorellato@Agostinas-MacBook-Pro demo02tp01 % git checkout main
Already on 'main'
Your branch is ahead of 'origin/main' by 2 commits.
  (use "git push" to publish your local commits)
[agostinamorellato@Agostinas-MacBook-Pro demo02tp01 % git merge conflictBranch
Auto-merging Readme.md
CONFLICT (content): Merge conflict in Readme.md
Automatic merge failed; fix conflicts and then commit the result.
agostinamorellato@Agostinas-MacBook-Pro demo02tp01 % git mergetool
Merging:
Readme.md

Normal merge conflict for 'Readme.md':
{local}: modified file
{remote}: modified file

```



```

<<<<< HEAD
#demo02tp01-Modificado02
=====
#demo02tp01-Modificacion01
>>>>> conflictBranch
Trabajo Practico Nro 2
Parte dos

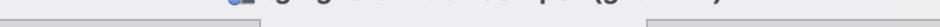
```

```

<<<<< HEAD
#demo02tp01
Trabajo Practico Nro 2
Parte dos

```

Agregar .orig al .gitignore



.gitignore — demo02tp01 (git: main)

```
Readme.md.orig  
.*.orig
```

Hacer commit y push

```
[agostinamorellato@Agostinas-MacBook-Pro demo02tp01 % git commit -m "Resuelto el conflicto"
[main 2162183] Resuelto el conflicto
 1 file changed, 1 insertion(+)
[agostinamorellato@Agostinas-MacBook-Pro demo02tp01 % git push origin main
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 10 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 321 bytes | 321.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To github.com:AgostinaMorellato/demo02tp01.git
  d314cf3..2162183  main -> main
```

8- Familiarizarse con el concepto de Pull Request

Explicar que es un pull request.

Crear un branch local y agregar cambios a dicho branch.

Subir el cambio a dicho branch y crear un pull request.

```
[agostinamorellato@Agostinas-MacBook-Pro demo02tp01 % git branch pullReqBranch
[agostinamorellato@Agostinas-MacBook-Pro demo02tp01 % git checkout pullReqBranch
git: 'checkoutpullReqBranch' is not a git command. See 'git --help'.
[agostinamorellato@Agostinas-MacBook-Pro demo02tp01 % git checkout pullReqBranch
Switched to branch 'pullReqBranch'
[agostinamorellato@Agostinas-MacBook-Pro demo02tp01 % mate nuevo-archivo.txt
[agostinamorellato@Agostinas-MacBook-Pro demo02tp01 % git status
On branch pullReqBranch
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    nuevo-archivo.txt

nothing added to commit but untracked files present (use "git add" to track)
[agostinamorellato@Agostinas-MacBook-Pro demo02tp01 % git add .
[agostinamorellato@Agostinas-MacBook-Pro demo02tp01 % git commit -m "Nuevo archivo"
[pullReqBranch 7055710] Nuevo archivo
 1 file changed, 1 insertion(+)
  create mode 100644 nuevo-archivo.txt
[agostinamorellato@Agostinas-MacBook-Pro demo02tp01 % git push origin pullReqBranch
Enumerating objects: 28, done.
Counting objects: 100% (28/28), done.
Delta compression using up to 10 threads
Compressing objects: 100% (24/24), done.
Writing objects: 100% (28/28), 2.68 KiB | 2.68 MiB/s, done.
Total 28 (delta 2), reused 0 (delta 0), pack-reused 0
```

Completar el proceso de revisión en github y mergear el PR al branch master.

 demo02tp01 Public

Pin Unwatch 1 ...

pullReqBranch had recent pushes 1 minute ago Compare & pull request

main Go to file Add file Code

Branches Tags

Your main branch isn't protected
Protect this branch from force pushing or deletion, or require status checks before merging. [Learn more](#)

Protect this branch Dismiss

| | | | | |
|---|------------------|-----------------------|----------------|---|
|  AgostinaMorellato | Update Readme.md | ... | 48 minutes ago |  9 |
|  | .gitignore | Resuelto el conflicto | 49 minutes ago | |
|  | Readme.md | Update Readme.md | 48 minutes ago | |
|  | Readme.md.orig | Merge | 51 minutes ago | |

Nuevo archivo #1

 Open

AgostinaMorellato wants to merge 1 commit into `main` from `pullReqBranch` 

 Conversation 0

 Commits 1

 Checks 0

 Files changed 1



AgostinaMorellato commented now

Owner 

No description provided.



 Nuevo archivo

7055710

Add more commits by pushing to the `pullReqBranch` branch on
AgostinaMorellato/demo02tp01.



 **Require approval from specific reviewers before merging**

Branch protection rules ensure specific people approve pull requests before they're merged.

 Add rule 

 **Continuous integration has not been set up**

GitHub Actions and [several other apps](#) can be used to automatically catch bugs and enforce style.

https://github.com/AgostinaMorellato/demo02tp01/settings/branch_protection_rules/new?branch_name=main

10- Crear Repositorio de la materia

Crear un repositorio para la materia en github. Por ejemplo ing-software-3

Subir archivo(s).md con los resultados e imágenes de este trabajo práctico. Puede ser en una subcarpeta trabajo-practico-01

  AgostinaMorellato / **ing-sw-3** 🔍 Type ⏺ to search

 **Code**  **Issues**  **Pull requests**  **Actions**  **Projects**  **Wiki**  **Sec**

 **ing-sw-3** Public Pin

 **main** ▼  **1 branch**  **0 tags** Go to file Add file ▾

 **AgostinaMorellato** Initial commit 477dc79 2 days ago

 README.md Initial commit

README.md

ing-sw-3

Trabajos Practicos - Ing Software III