

Uma introdução ao git

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CCSL-IME/USP

- **Desempenho excelente**
 - ▶ Piora com número *muito* grande de arquivos (perto de 1M, segundo Torvalds em 2006)
- **Todas as funcionalidades imagináveis existem**
 - ▶ Mas subdiretórios não podem ser baixados/sincronizados separadamente
 - » *submodules, subtrees, partial clones e sparse checkouts podem quebrar o galho, mas são complexos*
- **Hoje em dia, multiplataforma**
- **Permite integrar fluxo de desenvolvimento e de implantação / operação**
 - ▶ Alguns pacotes sugerem esse processo
 - ▶ Alguns ambientes usam esse mecanismo (heroku, openshift...)
- **Viabiliza diversos fluxos de trabalho**
- **Projetos livres migraram em massa**
 - ▶ “Grife” Linus Torvalds
 - ▶ github/gitlab são excelentes e favorecem a colaboração
 - » *Funcionam como redes sociais e foram fundamentais na popularização*
- **Até a Microsoft está usando, além de ter comprado o github**

git não é amigável

O básico é fácil, mas mesmo usos comuns não são óbvios, porque

- Os nomes dos comandos e suas opções são inconsistentes
 - ▶ O contrário de `git add arquivo` é `git reset arquivo` 🤔
 - » mas `git reset` sem um nome de arquivo faz outra coisa 😞
 - ▶ `git checkout` faz várias coisas diferentes 🤯
 - ▶ `head` é uma coisa, `HEAD` é outra 🤦
 - ▶ `repo-remoto/nome-do-ramo` é uma coisa, `repo-remoto nome-do-ramo` é outra 🤦
 - ▶ `--index`, `--cached` e `--staged` são sinônimos, mas às vezes não 💩
 - ▶ etc.
- A documentação é boa e completa, mas é preciso saber *onde* procurar
 - ▶ Em geral, a melhor resposta para “como fazer X” é “procure no google”!
- Para coisas simples, mas não-triviais, é preciso entender como git funciona

Antes de começar

Quem sou eu?

- Várias pessoas podem trabalhar em conjunto com git
- Por isso, git sempre registra quem fez o quê
- Mas como git sabe quem é você?
 - ▶ Você precisa contar para ele :)

```
» git config --global user.name "Seu Nome"  
» git config --global user.email "email@algumlugar.com"
```

```
lovelace@engine:~/lerolero$ git log  
commit 3df3233c8cc6a81f0499ff1768d775ac9682f1bd  
Author: Ada Lovelace <ada@analyticalengine.com> ←  
Date:   Wed Nov 18 11:40:59 2020 -0300
```

Acrescenta descrição do projeto ao README

```
commit bc7de604e736c540ef06e71f1641b19c238ad3a0  
Author: Nelson Lago <lago@ime.usp.br> ←  
Date:   Mon Nov 16 13:53:13 2020 -0300
```

Initial commit

Autenticação com git

- Para git trabalhar via rede, é preciso haver algum mecanismo de *autenticação*
- O mais comum são as *chaves assimétricas* (através do protocolo ssh)
 - ▶ Você fornece para o servidor um “cadeado” para o qual só você tem a “chave”
 - ▶ Quando você solicita acesso a alguma coisa, o servidor envia para você uma mensagem secreta “trancada” com o “cadeado”
 - ▶ O acesso só é liberado quando você mostra que foi capaz de ler a mensagem (ou seja, abrir o “cadeado”)
- À primeira vista, a “chave” parece simplesmente uma senha bastante longa
 - ▶ Mas não é :)
 - » *Esse mecanismo tem diversas vantagens em termos de segurança, mas não vamos discutir isso aqui*

Gerando as chaves assimétricas

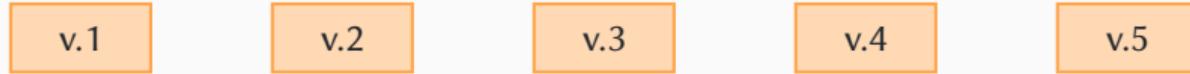
- Para gerar um par de chaves assimétricas (no Linux, é claro!), use o comando `ssh-keygen`
 - ▶ De maneira geral, não é necessário inserir uma *passphrase*
- O comando vai criar dois arquivos:
 - ▶ SEU_HOME/.ssh/id_rsa → a “chave”
 - ▶ SEU_HOME/.ssh/id_rsa.pub → o “cadeado”
- O arquivo `id_rsa.pub` não é secreto, você pode enviá-lo para qualquer pessoa que precisar dele
 - ▶ Esse é o arquivo que você vai registrar como sua *chave pública* no github ou gitlab
- O arquivo `id_rsa` é secreto!
 - ▶ Se alguém tiver acesso a ele, poderá modificar seus repositórios no github/gitlab como se fosse você

Parte I

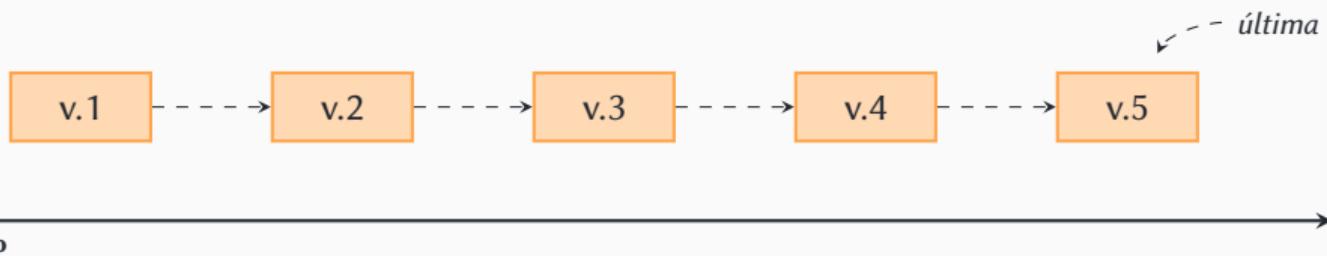
O bê-a-bá do git

Básico: álbum de fotos

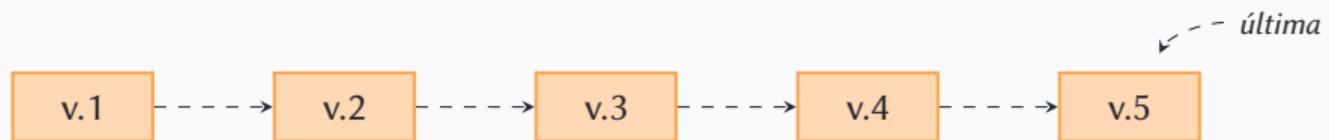
- git armazena o histórico de versões de um projeto



- git armazena o histórico de versões de um projeto
- Isso inclui a ordem das versões no tempo e quem é a “última”



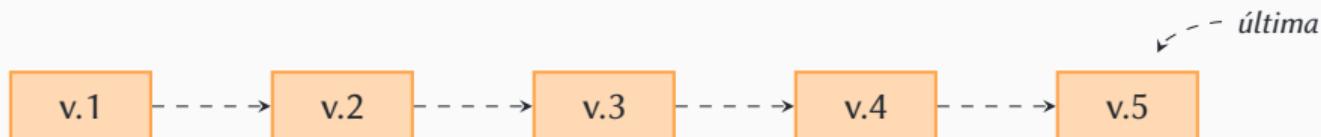
- De onde vêm as versões?



- De onde vêm as versões?

- ▶ São “fotografias” do diretório de trabalho

Diretório de trabalho (*workdir*)



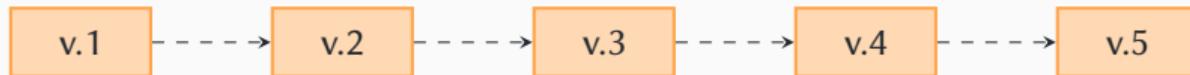
- De onde vêm as versões?

- ▶ São “fotografias” do diretório de trabalho
- ▶ O usuário seleciona “quem aparece” na foto

Diretório de trabalho (*workdir*)



Área de montagem (*staging area*)



✓ - - última

- De onde vêm as versões?

- ▶ São “fotografias” do diretório de trabalho
- ▶ O usuário seleciona “quem aparece” na foto

Diretório de trabalho (*workdir*)

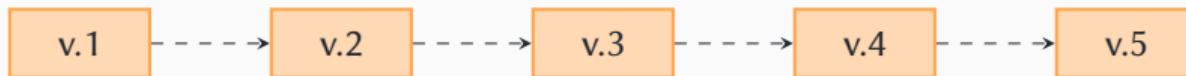


Área de montagem (*staging area*)



versão completa

✓ - - última



- **git permite colaborar via rede de várias maneiras**
- **A mais comum é utilizar plataformas como *github* ou *gitlab***
 - ▶ Ambas são bastante similares
 - ▶ Funcionam como redes sociais
 - ▶ Oferecem vários serviços agregados (gestão de *bugs*, wikis etc.)
 - ▶ *github* é mais popular
 - » Pertence à Microsoft
 - » Não é software livre
 - ▶ *gitlab* tem uma versão livre
 - » usada, por exemplo, pelo *GNOME*

Criando um repositório

Duas maneiras:

- **git init .**

- ▶ Cria um repositório no diretório atual
 - » *Talvez fosse melhor dizer que ele **transforma** o diretório atual em um repositório*
- ▶ Cria o diretório **.git** (o repositório de fato com as versões e a área de montagem)
- ▶ O diretório atual passa a ser a área de trabalho

- **git clone <URL> .**

- ▶ Executa **git init .**
- ▶ Registra **URL** como um repositório remoto chamado *origin*
- ▶ Copia o repositório *origin* para o repositório local



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Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere?

[Import a repository.](#)

Owner *



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Repository name *

Great repository names are short and memorable. Need inspiration? How about [fantastic-octo-journey](#)?

Description (optional)



Public

Anyone on the internet can see this repository. You choose who can commit.



Private

You choose who can see and commit to this repository.

Initialize this repository with:

Skip this step if you're importing an existing repository.



Add a README file



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Create a new repository

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lerolero

Great repository names

lerolero is available. [Create repository](#). Need inspiration? How about [fantastic-octo-journey](#)?

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Great repository names like `lrolero` is available. Cool. Need inspiration? How about `fantastic-octo-journey`?

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Initialize this repository with:

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Add a README file

This is where you can write a long description for your project. [Learn more](#).

Add .gitignore

Choose which files not to track from a list of templates. [Learn more](#).

Choose a license

A license tells others what they can and can't do with your code. [Learn more](#).

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1



0



0

Code

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Security

Insights

Settings

main

1 branch

0 tags

Go to file

Add file

Code



urrameu Initial commit

bc7de60 in 35 seconds 1 commits

LICENSE

Initial commit

now

README.md

Initial commit

now

README.md



lerolero

About



No description, website, or topics provided.

Readme

Releases

No releases published

Create a new release

Packages

No packages published

Publish your first package



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Unwatch 1

Star 0

Fork 0

Code

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Actions

Projects

Wiki

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Insights

Settings

main

1 branch

0 tags

Go to file

Add file

Code



urrameu Initial commit

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lerolero

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Unwatch 1

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Pull requests

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Insights

Settings

main

1 branch

0 tags

Go to file

Add file

Code



urrameu Initial commit

LICENSE

Initial commit

README.md

Initial commit

README.md

lerolero

Clone

HTTPS SSH GitHub CLI

git@github.com:urrameu/lerolero.git



Use a password-protected SSH key.

Download ZIP

About

No description, website, or topics provided.

Readme

Releases

No releases published

Create a new release

Packages

No packages published

Publish your first package

Arquivo Editar Ver Pesquisar Terminal Abas Ajuda

lovelace@drivethru: ~

lovelace@engine:~\$ █

turing@drivethru: ~

Arquivo Editar Ver Pesquisar Terminal Abas Ajuda

lovelace@drivethru: ~

turing@machine:~\$ █

turing@drivethru: ~

lovelace@drivethru: ~

turing@drivethru: ~

lovelace@engine:~\$ git clone git@github.com:urrameu/lerolero.git

lovelace@drivethru: ~

turing@drivethru: ~

lovelace@engine:~\$ git clone git@github.com:urrameu/lerolero.git

Cloning into 'lerolero'...

Warning: Permanently added the RSA host key for IP address '140.82.112.3' to the list of known hosts.

Enter passphrase for key '/home/lovelace/.ssh/id_rsa':

remote: Enumerating objects: 4, done.

remote: Counting objects: 100% (4/4), done.

remote: Compressing objects: 100% (3/3), done.

remote: Total 4 (delta 0), reused 0 (delta 0), pack-reused 0

Receiving objects: 100% (4/4), 12.46 KiB | 6.23 MiB/s, done.

lovelace@engine:~\$ □

lovelace@drivethru: ~

turing@drivethru: ~

lovelace@engine:~\$ git clone git@github.com:urrameu/lerolero.git

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lovelace@drivethru:~/lerolero

turing@drivethru:~

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remote: Total 4 (delta 0), reused 0 (delta 0), pack-reused 0

Receiving objects: 100% (4/4), 12.46 KiB | 6.23 MiB/s, done.

lovelace@engine:~\$ cd lerolero**lovelace@engine:~/lerolero\$ ls -l**

lovelace@drivethru:~/lerolero

turing@drivethru:~

```
lovelace@engine:~$ git clone git@github.com:urrameu/lerolero.git
Cloning into 'lerolero'...
Warning: Permanently added the RSA host key for IP address '140.82.112.3' to th
e list of known hosts.
Enter passphrase for key '/home/lovelace/.ssh/id_rsa':
remote: Enumerating objects: 4, done.
remote: Counting objects: 100% (4/4), done.
remote: Compressing objects: 100% (3/3), done.
remote: Total 4 (delta 0), reused 0 (delta 0), pack-reused 0
Receiving objects: 100% (4/4), 12.46 KiB | 6.23 MiB/s, done.
lovelace@engine:~$ cd lerolero
lovelace@engine:~/lerolero$ ls -l
total 40
-rw-r--r-- 1 lovelace lovelace 35149 nov 18 11:35 LICENSE
-rw-r--r-- 1 lovelace lovelace      10 nov 18 11:35 README.md
lovelace@engine:~/lerolero$ 
```

lovelace@drivethru:~/lerolero

turing@drivethru:~

```
lovelace@engine:~$ git clone git@github.com:urrameu/lerolero.git
Cloning into 'lerolero'...
Warning: Permanently added the RSA host key for IP address '140.82.112.3' to th
e list of known hosts.
Enter passphrase for key '/home/lovelace/.ssh/id_rsa':
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-rw-r--r-- 1 lovelace lovelace 35149 nov 18 11:35 LICENSE
-rw-r--r-- 1 lovelace lovelace     10 nov 18 11:35 README.md
lovelace@engine:~/lerolero$ ls -la
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~

```
Warning: Permanently added the RSA host key for IP address '140.82.112.3' to th  
e list of known hosts.
```

```
Enter passphrase for key '/home/lovelace/.ssh/id_rsa':
```

```
remote: Enumerating objects: 4, done.
```

```
remote: Counting objects: 100% (4/4), done.
```

```
remote: Compressing objects: 100% (3/3), done.
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Receiving objects: 100% (4/4), 12.46 KiB | 6.23 MiB/s, done.
```

```
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```

```
lovelace@engine:~/lerolero$ ls -l
```

```
total 40
```

```
-rw-r--r-- 1 lovelace lovelace 35149 nov 18 11:35 LICENSE
```

```
-rw-r--r-- 1 lovelace lovelace 10 nov 18 11:35 README.md
```

```
lovelace@engine:~/lerolero$ ls -la
```

```
total 52
```

```
drwxr-xr-x 3 lovelace lovelace 4096 nov 18 11:35 .
```

```
drwxr-xr-x 4 lovelace lovelace 4096 nov 18 11:35 ..
```

```
drwxr-xr-x 8 lovelace lovelace 4096 nov 18 11:35 .git
```

```
-rw-r--r-- 1 lovelace lovelace 35149 nov 18 11:35 LICENSE
```

```
-rw-r--r-- 1 lovelace lovelace 10 nov 18 11:35 README.md
```

```
lovelace@engine:~/lerolero$ 
```

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lovelace@drivethru: ~/lerolero

turing@drivethru: ~

turing@machine:~\$ git clone git@github.com:urrameu/lerolero.git

lovelace@drivethru: ~/lerolero

turing@drivethru: ~

turing@machine:~\$ git clone git@github.com:urrameu/lerolero.git

Cloning into 'lerolero'...

Warning: Permanently added the RSA host key for IP address '140.82.114.4' to the list of known hosts.

Enter passphrase for key '/home/turing/.ssh/id_rsa':

remote: Enumerating objects: 4, done.

remote: Counting objects: 100% (4/4), done.

remote: Compressing objects: 100% (3/3), done.

remote: Total 4 (delta 0), reused 0 (delta 0), pack-reused 0

Receiving objects: 100% (4/4), 12.46 KiB | 2.49 MiB/s, done.

turing@machine:~\$ □

Comandos cotidianos

- **git add arquivo**

- ▶ Copia **arquivo** da área de trabalho para a área de montagem
 - » *Não é preciso fazer **git add** com arquivos que não mudaram, só o que efetivamente mudou!*

- **git commit**

- ▶ Copia **o conteúdo completo** da área de montagem para uma nova versão no repositório
 - ▶ Atualiza a indicação de quem é a “última” versão

- **git push**

- ▶ Atualiza o repositório remoto (*origin*)

- **git pull**

- ▶ Atualiza o repositório local (a partir de *origin*)

- **git log e git status**

- **Lição de casa**

- ▶ Aprenda a usar **.gitignore**

Arquivo Editar Ver Pesquisar Terminal Abas Ajuda

lovelace@drivethru: ~/lerolero

lovelace@engine:~/lerolero\$ vi README.md □

turing@drivethru: ~

lovelace@drivethru: ~/lerolero

turing@drivethru: ~

```
# lerolero
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Já está na alteração mais antiga

1,10

Tudo

lovelace@drivethru: ~/lerolero

turing@drivethru: ~

lerolero

Um gerador de frases de efeito sem sentido.

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Arquivo Editar Ver Pesquisar Terminal Abas Ajuda

lovelace@drivethru: ~/lerolero

lovelace@engine:~/lerolero\$ vi README.md
lovelace@engine:~/lerolero\$ git status

turing@drivethru: ~

lovelace@drivethru: ~/lerolero

turing@drivethru: ~

```
lovelace@engine:~/lerolero$ vi README.md
lovelace@engine:~/lerolero$ 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")
lovelace@engine:~/lerolero$ 
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~

```
lovelace@engine:~/lerolero$ vi README.md
lovelace@engine:~/lerolero$ 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")
lovelace@engine:~/lerolero$ git add README.md □
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~

```
lovelace@engine:~/lerolero$ vi README.md
lovelace@engine:~/lerolero$ 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")

```
lovelace@engine:~/lerolero$ git add README.md
lovelace@engine:~/lerolero$ git status
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~

```
lovelace@engine:~/lerolero$ vi README.md
lovelace@engine:~/lerolero$ 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")

```
lovelace@engine:~/lerolero$ git add README.md
lovelace@engine:~/lerolero$ 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
```

```
lovelace@engine:~/lerolero$ 
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~

```
lovelace@engine:~/lerolero$ vi README.md
lovelace@engine:~/lerolero$ 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")

```
lovelace@engine:~/lerolero$ git add README.md
lovelace@engine:~/lerolero$ 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
```

```
lovelace@engine:~/lerolero$ git commit[]
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~

```
# Please enter the commit message for your changes. Lines starting
# with '#' will be ignored, and an empty message aborts the commit.
#
# On branch main
# Your branch is up to date with 'origin/main'.
#
# Changes to be committed:
#       modified:   README.md
#
~
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~

Acrescenta descrição do projeto ao README

```
# Please enter the commit message for your changes. Lines starting
# with '#' will be ignored, and an empty message aborts the commit.
#
# On branch main
# Your branch is up to date with 'origin/main'.
#
# Changes to be committed:
#       modified:   README.md
#
~
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~

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")

lovelace@engine:~/lerolero\$ git add README.md

lovelace@engine:~/lerolero\$ 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

lovelace@engine:~/lerolero\$ git commit

[main 3df3233] Acrescenta descrição do projeto ao README

1 file changed, 3 insertions(+), 1 deletion(-)

lovelace@engine:~/lerolero\$

lovelace@drivethru: ~/lerolero

turing@drivethru: ~

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")

lovelace@engine:~/lerolero\$ git add README.md

lovelace@engine:~/lerolero\$ 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

lovelace@engine:~/lerolero\$ git commit

[main 3df3233] Acrescenta descrição do projeto ao README

1 file changed, 3 insertions(+), 1 deletion(-)

lovelace@engine:~/lerolero\$ git log

lovelace@drivethru: ~/lerolero

turing@drivethru: ~

Changes to be committed:

(use "git restore --staged <file>..." to unstage)
modified: README.md

lovelace@engine:~/lerolero\$ git commit

[main 3df3233] Acrescenta descrição do projeto ao README
1 file changed, 3 insertions(+), 1 deletion(-)

lovelace@engine:~/lerolero\$ git log

commit 3df3233c8cc6a81f0499ff1768d775ac9682f1bd (HEAD -> main)
Author: Ada Lovelace <ada@analyticalengine.com>
Date: Wed Nov 18 11:40:59 2020 -0300

Acrescenta descrição do projeto ao README

commit bc7de604e736c540ef06e71f1641b19c238ad3a0 (origin/main, origin/HEAD)

Author: Nelson Lago <lago@ime.usp.br>
Date: Mon Nov 16 13:53:13 2020 -0300

Initial commit

lovelace@engine:~/lerolero\$

lovelace@drivethru: ~/lerolero

turing@drivethru: ~

Changes to be committed:

(use "git restore --staged <file>..." to unstage)
modified: README.md

lovelace@engine:~/lerolero\$ git commit

[main 3df3233] Acrescenta descrição do projeto ao README
1 file changed, 3 insertions(+), 1 deletion(-)

lovelace@engine:~/lerolero\$ git log

commit 3df3233c8cc6a81f0499ff1768d775ac9682f1bd (HEAD -> main)
Author: Ada Lovelace <ada@analyticalengine.com>
Date: Wed Nov 18 11:40:59 2020 -0300

Acrescenta descrição do projeto ao README

commit bc7de604e736c540ef06e71f1641b19c238ad3a0 (origin/main, origin/HEAD)

Author: Nelson Lago <lago@ime.usp.br>
Date: Mon Nov 16 13:53:13 2020 -0300

Initial commit

lovelace@engine:~/lerolero\$ git status

lovelace@drivethru: ~/lerolero

turing@drivethru: ~

```
[main 3df3233] Acrescenta descrição do projeto ao README
 1 file changed, 3 insertions(+), 1 deletion(-)
lovelace@engine:~/lerolero$ git log
commit 3df3233c8cc6a81f0499ff1768d775ac9682f1bd (HEAD -> main)
Author: Ada Lovelace <ada@analyticalengine.com>
Date:   Wed Nov 18 11:40:59 2020 -0300
```

Acrescenta descrição do projeto ao README

```
commit bc7de604e736c540ef06e71f1641b19c238ad3a0 (origin/main, origin/HEAD)
Author: Nelson Lago <lago@ime.usp.br>
Date:   Mon Nov 16 13:53:13 2020 -0300
```

Initial commit

```
lovelace@engine:~/lerolero$ 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

```
lovelace@engine:~/lerolero$ 
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~

```
[main 3df3233] Acrescenta descrição do projeto ao README
 1 file changed, 3 insertions(+), 1 deletion(-)
lovelace@engine:~/lerolero$ git log
commit 3df3233c8cc6a81f0499ff1768d775ac9682f1bd (HEAD -> main)
Author: Ada Lovelace <ada@analyticalengine.com>
Date:   Wed Nov 18 11:40:59 2020 -0300
```

Acrescenta descrição do projeto ao README

```
commit bc7de604e736c540ef06e71f1641b19c238ad3a0 (origin/main, origin/HEAD)
Author: Nelson Lago <lago@ime.usp.br>
Date:   Mon Nov 16 13:53:13 2020 -0300
```

Initial commit

```
lovelace@engine:~/lerolero$ 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

```
lovelace@engine:~/lerolero$ git push
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~

Author: Nelson Lago <lago@ime.usp.br>
Date: Mon Nov 16 13:53:13 2020 -0300

Initial commit

lovelace@engine:~/lerolero\$ 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

lovelace@engine:~/lerolero\$ git push
Enter passphrase for key '/home/lovelace/.ssh/id_rsa':
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 8 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 363 bytes | 363.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To github.com:urrameu/lerolero.git
bc7de60..3df3233 main -> main

lovelace@engine:~/lerolero\$ □

lovelace@drivethru: ~/lerolero

turing@drivethru: ~

Author: Nelson Lago <lago@ime.usp.br>
Date: Mon Nov 16 13:53:13 2020 -0300

Initial commit

lovelace@engine:~/lerolero\$ 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

lovelace@engine:~/lerolero\$ git push
Enter passphrase for key '/home/lovelace/.ssh/id_rsa':
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 8 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 363 bytes | 363.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To github.com:urrameu/lerolero.git
bc7de60..3df3233 main -> main

lovelace@engine:~/lerolero\$ git status

lovelace@drivethru: ~/lerolero

turing@drivethru: ~

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

lovelace@engine:~/lerolero\$ git push

Enter passphrase for key '/home/lovelace/.ssh/id_rsa':

Enumerating objects: 5, done.

Counting objects: 100% (5/5), done.

Delta compression using up to 8 threads

Compressing objects: 100% (3/3), done.

Writing objects: 100% (3/3), 363 bytes | 363.00 KiB/s, done.

Total 3 (delta 0), reused 0 (delta 0), pack-reused 0

To github.com:urrameu/lerolero.git

bc7de60..3df3233 main -> main

lovelace@engine:~/lerolero\$ git status

On branch main

Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean

lovelace@engine:~/lerolero\$ □

Arquivo Editar Ver Pesquisar Terminal Abas Ajuda

lovelace@drivethru: ~/lerolero

turing@machine:~/lerolero\$ █

turing@drivethru: ~/lerolero

Arquivo Editar Ver Pesquisar Terminal Abas Ajuda

lovelace@drivethru: ~/lerolero

turing@machine:~/lerolero\$ ls -l

turing@drivethru: ~/lerolero

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
turing@machine:~/lerolero$ ls -l
total 40
-rw-r--r-- 1 turing turing 35149 nov 18 11:36 LICENSE
-rw-r--r-- 1 turing turing     10 nov 18 11:36 README.md
turing@machine:~/lerolero$ 
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

turing@machine:~/lerolero\$ ls -l

total 40

-rw-r--r-- 1 turing turing 35149 nov 18 11:36 LICENSE
-rw-r--r-- 1 turing turing 10 nov 18 11:36 README.md

turing@machine:~/lerolero\$ git log

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

turing@machine:~/lerolero\$ ls -l

total 40

-rw-r--r-- 1 turing turing 35149 nov 18 11:36 LICENSE
-rw-r--r-- 1 turing turing 10 nov 18 11:36 README.md**turing@machine:~/lerolero\$ git log**commit bc7de604e736c540ef06e71f1641b19c238ad3a0 (**HEAD -> main, origin/main, origin/HEAD**)

Author: Nelson Lago <lago@ime.usp.br>

Date: Mon Nov 16 13:53:13 2020 -0300

Initial commit

turing@machine:~/lerolero\$

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

turing@machine:~/lerolero\$ ls -l

total 40

-rw-r--r-- 1 turing turing 35149 nov 18 11:36 LICENSE
-rw-r--r-- 1 turing turing 10 nov 18 11:36 README.md**turing@machine:~/lerolero\$ git log**commit bc7de604e736c540ef06e71f1641b19c238ad3a0 (**HEAD -> main, origin/main, origin/HEAD**)

Author: Nelson Lago <lago@ime.usp.br>

Date: Mon Nov 16 13:53:13 2020 -0300

Initial commit

turing@machine:~/lerolero\$ git pull

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

gin/HEAD)

Author: Nelson Lago <lago@ime.usp.br>
Date: Mon Nov 16 13:53:13 2020 -0300

Initial commit

turing@machine:~/lerolero\$ git pull

Warning: Permanently added the RSA host key for IP address '140.82.113.3' to the list of known hosts.

Enter passphrase for key '/home/turing/.ssh/id_rsa':

remote: Enumerating objects: 5, done.

remote: Counting objects: 100% (5/5), done.

remote: Compressing objects: 100% (3/3), done.

Unpacking objects: 100% (3/3), 343 bytes | 171.00 KiB/s, done.

remote: Total 3 (delta 0), reused 3 (delta 0), pack-reused 0

From github.com:urrameu/lerolero

 bc7de60..3df3233 main -> origin/main

Updating bc7de60..3df3233

Fast-forward

 README.md | 4 +---

1 file changed, 3 insertions(+), 1 deletion(-)

turing@machine:~/lerolero\$

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

gin/HEAD)

Author: Nelson Lago <lago@ime.usp.br>
Date: Mon Nov 16 13:53:13 2020 -0300

Initial commit

turing@machine:~/lerolero\$ git pull

Warning: Permanently added the RSA host key for IP address '140.82.113.3' to the list of known hosts.

Enter passphrase for key '/home/turing/.ssh/id_rsa':

remote: Enumerating objects: 5, done.

remote: Counting objects: 100% (5/5), done.

remote: Compressing objects: 100% (3/3), done.

Unpacking objects: 100% (3/3), 343 bytes | 171.00 KiB/s, done.

remote: Total 3 (delta 0), reused 3 (delta 0), pack-reused 0

From github.com:urrameu/lerolero

 bc7de60..3df3233 main -> origin/main

Updating bc7de60..3df3233

Fast-forward

 README.md | 4 +---

1 file changed, 3 insertions(+), 1 deletion(-)

turing@machine:~/lerolero\$ git log

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
remote: Total 3 (delta 0), reused 3 (delta 0), pack-reused 0
From github.com:urrameu/lerolero
 bc7de60..3df3233  main      -> origin/main
Updating bc7de60..3df3233
Fast-forward
 README.md | 4 +---
 1 file changed, 3 insertions(+), 1 deletion(-)
```

```
turing@machine:~/lerolero$ git log
commit 3df3233c8cc6a81f0499ff1768d775ac9682f1bd (HEAD -> main, origin/main, origin/HEAD)
Author: Ada Lovelace <ada@analyticalengine.com>
Date:   Wed Nov 18 11:40:59 2020 -0300
```

Acrescenta descrição do projeto ao README

```
commit bc7de604e736c540ef06e71f1641b19c238ad3a0
Author: Nelson Lago <lago@ime.usp.br>
Date:   Mon Nov 16 13:53:13 2020 -0300
```

Initial commit

```
turing@machine:~/lerolero$ 
```

Arqueologia: olhando para o passado

O que mudou de uma versão para a outra?

git diff compara duas versões do projeto

- **git diff ID1 ID2**

- ▶ Mostra todas as alterações em todos os arquivos

- **git diff ID1 ID2 arquivo**

- ▶ Restringe a **arquivo**, mas ainda assim compara versões do projeto

- **git diff ID1 ID2** é diferente de **git diff ID2 ID1**

- ▶ Diferenças **de** uma versão **para** outra versão

O que mudou de uma versão para a outra?

- **git diff** (sem parâmetros) funciona!

- ▶ Diferenças da área montagem (*staging area/index*) para a área de trabalho (*workdir*)

- **git diff ID**

- ▶ Diferenças da *revision/commit ID* para o *workdir*

- **git diff --staged**

- ▶ Diferenças da última *revision/commit* para a *staging area*

- **git diff --staged ID**

- ▶ Diferenças da *revision/commit ID* para a *staging area*

Arquivo Editar Ver Pesquisar Terminal Abas Ajuda

lovelace@drivethru: ~/lerolero

turing@machine:~/lerolero\$ git log

turing@drivethru: ~/lerolero

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

turing@machine:~/lerolero\$ git log
commit 3df3233c8cc6a81f0499ff1768d775ac9682f1bd (**HEAD -> main, origin/main, origin/HEAD**)

Author: Ada Lovelace <ada@analyticalengine.com>
Date: Wed Nov 18 11:40:59 2020 -0300

Acrescenta descrição do projeto ao README

commit bc7de604e736c540ef06e71f1641b19c238ad3a0
Author: Nelson Lago <lago@ime.usp.br>
Date: Mon Nov 16 13:53:13 2020 -0300

Initial commit

turing@machine:~/lerolero\$ □

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
turing@machine:~/lerolero$ git log
commit 3df3233c8cc6a81f0499ff1768d775ac9682f1bd (HEAD -> main, origin/main, origin/HEAD)
Author: Ada Lovelace <ada@analyticalengine.com>
Date:   Wed Nov 18 11:40:59 2020 -0300
```

Acrescenta descrição do projeto ao README

```
commit bc7de604e736c540ef06e71f1641b19c238ad3a0
Author: Nelson Lago <lago@ime.usp.br>
Date:   Mon Nov 16 13:53:13 2020 -0300
```

Initial commit

```
turing@machine:~/lerolero$ git diff bc7de604 3df3233c
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

Date: Wed Nov 18 11:40:59 2020 -0300

Acrescenta descrição do projeto ao README

commit bc7de604e736c540ef06e71f1641b19c238ad3a0

Author: Nelson Lago <lago@ime.usp.br>

Date: Mon Nov 16 13:53:13 2020 -0300

Initial commit

```
turing@machine:~/lerolero$ git diff bc7de604 3df3233c
diff --git a/README.md b/README.md
index d913469..55f6404 100644
--- a/README.md
+++ b/README.md
@@ -1 +1,3 @@
-# lerolero
\ No newline at end of file
+# lerolero
+
+Um gerador de frases de efeito sem sentido.
turing@machine:~/lerolero$ 
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

Date: Wed Nov 18 11:40:59 2020 -0300

Acrescenta descrição do projeto ao README

commit bc7de604e736c540ef06e71f1641b19c238ad3a0

Author: Nelson Lago <lago@ime.usp.br>

Date: Mon Nov 16 13:53:13 2020 -0300

Initial commit

```
turing@machine:~/lerolero$ git diff bc7de604 3df3233c
diff --git a/README.md b/README.md
index d913469..55f6404 100644
--- a/README.md
+++ b/README.md
@@ -1 +1,3 @@
-# lerolero
\ No newline at end of file
+# lerolero
+
+Um gerador de frases de efeito sem sentido.
turing@machine:~/lerolero$ git diff 3df3233c bc7de604
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
index d913469..55f6404 100644
--- a/README.md
+++ b/README.md
@@ -1 +1,3 @@
-# lerolero
\ No newline at end of file
+# lerolero
+
+Um gerador de frases de efeito sem sentido.
turing@machine:~/lerolero$ git diff 3df3233c bc7de604
diff --git a/README.md b/README.md
index 55f6404..d913469 100644
--- a/README.md
+++ b/README.md
@@ -1,3 +1 @@
-# lerolero
-
-Um gerador de frases de efeito sem sentido.
+# lerolero
\ No newline at end of file
turing@machine:~/lerolero$ 
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
index d913469..55f6404 100644
--- a/README.md
+++ b/README.md
@@ -1 +1,3 @@
-# lerolero
\ No newline at end of file
+# lerolero
+
+Um gerador de frases de efeito sem sentido.
turing@machine:~/lerolero$ git diff 3df3233c bc7de604
diff --git a/README.md b/README.md
index 55f6404..d913469 100644
--- a/README.md
+++ b/README.md
@@ -1,3 +1 @@
-# lerolero
-
-Um gerador de frases de efeito sem sentido.
+# lerolero
\ No newline at end of file
turing@machine:~/lerolero$ vi lerolero.py
```

Arquivo Editar Ver Pesquisar Terminal Abas Ajuda

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

0 , 0 - 1

Tudo

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
#!/usr/bin/python3
"""Gerador de lero-lero.
```

```
Gera frases de efeito sem significado real."""
```

```
~  
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~  
~  
~
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
--- a/README.md
+++ b/README.md
@@ -1 +1,3 @@
-# lerolero
\ No newline at end of file
+# lerolero
+
+Um gerador de frases de efeito sem sentido.
turing@machine:~/lerolero$ git diff 3df3233c bc7de604
diff --git a/README.md b/README.md
index 55f6404..d913469 100644
--- a/README.md
+++ b/README.md
@@ -1,3 +1 @@
-# lerolero
-
-Um gerador de frases de efeito sem sentido.
+# lerolero
\ No newline at end of file
turing@machine:~/lerolero$ vi lerolero.py
turing@machine:~/lerolero$ git status
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
diff --git a/README.md b/README.md
index 55f6404..d913469 100644
--- a/README.md
+++ b/README.md
@@ -1,3 +1 @@
-# lerolero
-
-Um gerador de frases de efeito sem sentido.
+# lerolero
\ No newline at end of file
turing@machine:~/lerolero$ vi lerolero.py
turing@machine:~/lerolero$ git status
On branch main
Your branch is up to date with 'origin/main'.
```

Untracked files:

(use "git add <file>..." to include in what will be committed)

lerolero.py

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

turing@machine:~/lerolero\$

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
diff --git a/README.md b/README.md
index 55f6404..d913469 100644
--- a/README.md
+++ b/README.md
@@ -1,3 +1 @@
-# lerolero
-
-Um gerador de frases de efeito sem sentido.
+# lerolero
```

\ No newline at end of file

turing@machine:~/lerolero\$ vi lerolero.py**turing@machine:**~/lerolero\$ git status

On branch main

Your branch is up to date with 'origin/main'.

Untracked files:

(use "git add <file>..." to include in what will be committed)
 lerolero.py

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

turing@machine:~/lerolero\$ git add lerolero.py □

Arquivo Editar Ver Pesquisar Terminal Abas Ajuda

lovelace@drivethru: ~/lerolero

```
index 55f6404..d913469 100644
--- a/README.md
+++ b/README.md
@@ -1,3 +1 @@
-# lerolero
-
-Um gerador de frases de efeito sem sentido.
+# lerolero
\ No newline at end of file
turing@machine:~/lerolero$ vi lerolero.py
turing@machine:~/lerolero$ git status
On branch main
Your branch is up to date with 'origin/main'.
```

Untracked files:

(use "git add <file>..." to include in what will be committed)
lerolero.py

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

turing@machine:~/lerolero\$ git add lerolero.py
turing@machine:~/lerolero\$ git commit

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
# Please enter the commit message for your changes. Lines starting
# with '#' will be ignored, and an empty message aborts the commit.
#
# On branch main
# Your branch is up to date with 'origin/main'.
#
# Changes to be committed:
#       new file:   lerolero.py
#
~
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
Cria arquivo inicial do programa
# Please enter the commit message for your changes. Lines starting
# with '#' will be ignored, and an empty message aborts the commit.
#
# On branch main
# Your branch is up to date with 'origin/main'.
#
# Changes to be committed:
#       new file:    lerolero.py
#
~
~
~
~
~
~
~
~
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
-# lerolero
-
-Um gerador de frases de efeito sem sentido.
+# lerolero
\ No newline at end of file
turing@machine:~/lerolero$ vi lerolero.py
turing@machine:~/lerolero$ git status
On branch main
Your branch is up to date with 'origin/main'.
```

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

nothing added to commit but untracked files present (use "git add" to track)
turing@machine:~/lerolero\$ git add lerolero.py
turing@machine:~/lerolero\$ git commit
[main 7e749a8] Cria arquivo inicial do programa
 1 file changed, 4 insertions(+)
 create mode 100644 lerolero.py
turing@machine:~/lerolero\$

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
-# lerolero
-
-Um gerador de frases de efeito sem sentido.
+# lerolero
\ No newline at end of file
turing@machine:~/lerolero$ vi lerolero.py
turing@machine:~/lerolero$ git status
On branch main
Your branch is up to date with 'origin/main'.
```

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

nothing added to commit but untracked files present (use "git add" to track)
turing@machine:~/lerolero\$ git add lerolero.py
turing@machine:~/lerolero\$ git commit
[main 7e749a8] Cria arquivo inicial do programa
 1 file changed, 4 insertions(+)
 create mode 100644 lerolero.py
turing@machine:~/lerolero\$ git log

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
1 file changed, 4 insertions(+)
```

```
create mode 100644 lerolero.py
```

```
turing@machine:~/lerolero$ git log
```

```
commit 7e749a8a2c040a91d644f05f895568129b622241 (HEAD -> main)
```

```
Author: Alan Turing <turing@machine.com>
```

```
Date: Wed Nov 18 12:00:50 2020 -0300
```

Cria arquivo inicial do programa

```
commit 3df3233c8cc6a81f0499ff1768d775ac9682f1bd (origin/main, origin/HEAD)
```

```
Author: Ada Lovelace <ada@analyticalengine.com>
```

```
Date: Wed Nov 18 11:40:59 2020 -0300
```

Acrescenta descrição do projeto ao README

```
commit bc7de604e736c540ef06e71f1641b19c238ad3a0
```

```
Author: Nelson Lago <lago@ime.usp.br>
```

```
Date: Mon Nov 16 13:53:13 2020 -0300
```

Initial commit

```
turing@machine:~/lerolero$ 
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
1 file changed, 4 insertions(+)
```

```
create mode 100644 lerolero.py
```

```
turing@machine:~/lerolero$ git log
```

```
commit 7e749a8a2c040a91d644f05f895568129b622241 (HEAD -> main)
```

```
Author: Alan Turing <turing@machine.com>
```

```
Date: Wed Nov 18 12:00:50 2020 -0300
```

Cria arquivo inicial do programa

```
commit 3df3233c8cc6a81f0499ff1768d775ac9682f1bd (origin/main, origin/HEAD)
```

```
Author: Ada Lovelace <ada@analyticalengine.com>
```

```
Date: Wed Nov 18 11:40:59 2020 -0300
```

Acrescenta descrição do projeto ao README

```
commit bc7de604e736c540ef06e71f1641b19c238ad3a0
```

```
Author: Nelson Lago <lago@ime.usp.br>
```

```
Date: Mon Nov 16 13:53:13 2020 -0300
```

Initial commit

```
turing@machine:~/lerolero$ git status
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

Cria arquivo inicial do programa

```
commit 3df3233c8cc6a81f0499ff1768d775ac9682f1bd (origin/main, origin/HEAD)
Author: Ada Lovelace <ada@analyticalengine.com>
Date:   Wed Nov 18 11:40:59 2020 -0300
```

Acrescenta descrição do projeto ao README

```
commit bc7de604e736c540ef06e71f1641b19c238ad3a0
Author: Nelson Lago <lago@ime.usp.br>
Date:   Mon Nov 16 13:53:13 2020 -0300
```

Initial commit

```
turing@machine:~/lerolero$ 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

```
turing@machine:~/lerolero$ 
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

Cria arquivo inicial do programa

```
commit 3df3233c8cc6a81f0499ff1768d775ac9682f1bd (origin/main, origin/HEAD)
Author: Ada Lovelace <ada@analyticalengine.com>
Date:   Wed Nov 18 11:40:59 2020 -0300
```

Acrescenta descrição do projeto ao README

```
commit bc7de604e736c540ef06e71f1641b19c238ad3a0
Author: Nelson Lago <lago@ime.usp.br>
Date:   Mon Nov 16 13:53:13 2020 -0300
```

Initial commit

```
turing@machine:~/lerolero$ 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

```
turing@machine:~/lerolero$ vi lerolero.py □
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
#!/usr/bin/python3
"""Gerador de lero-lero.
```

```
Gera frases de efeito sem significado real."""
```

```
~  
~  
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~  
~  
~  
~  
~
```

"lerolero.py" 4L, 92C

4,46

Tudo

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
#!/usr/bin/python3
"""Gerador de lero-lero.

Gera frases de efeito sem significado real."""

import random

# Cada frase é composta por três partes aleatórias; aqui,
# listas de possibilidades para cada uma das partes.

parte1 = []
parte2 = []
parte3 = []

# Combina as partes aleatoriamente
print (random.choice(partel), random.choice(parte2), random.choice(parte3))
```

Arquivo Editar Ver Pesquisar Terminal Abas Ajuda

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

Cria arquivo inicial do programa

```
commit 3df3233c8cc6a81f0499ff1768d775ac9682f1bd (origin/main, origin/HEAD)
Author: Ada Lovelace <ada@analyticalengine.com>
Date:   Wed Nov 18 11:40:59 2020 -0300
```

Acrescenta descrição do projeto ao README

```
commit bc7de604e736c540ef06e71f1641b19c238ad3a0
Author: Nelson Lago <lago@ime.usp.br>
Date:   Mon Nov 16 13:53:13 2020 -0300
```

Initial commit

```
turing@machine:~/lerolero$ 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

```
turing@machine:~/lerolero$ vi lerolero.py
turing@machine:~/lerolero$ git status
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

Initial commit

turing@machine:~/lerolero\$ 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

turing@machine:~/lerolero\$ vi lerolero.py

turing@machine:~/lerolero\$ git status

On branch main

Your branch is ahead of 'origin/main' by 1 commit.
(use "git push" to publish your local commits)

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: lerolero.py

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

turing@machine:~/lerolero\$

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

Initial commit

turing@machine:~/lerolero\$ 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

turing@machine:~/lerolero\$ vi lerolero.py

turing@machine:~/lerolero\$ git status

On branch main

Your branch is ahead of 'origin/main' by 1 commit.
(use "git push" to publish your local commits)

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: lerolero.py

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

turing@machine:~/lerolero\$ git diff

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
diff --git a/lerolero.py b/lerolero.py
index d845a8c..2af78d8 100644
--- a/lerolero.py
+++ b/lerolero.py
@@ -2,3 +2,15 @@
 """Gerador de lero-lero.
```

```
Gera frases de efeito sem significado real."""
```

```
+
+import random
+
+# Cada frase é composta por três partes aleatórias; aqui,
+# listas de possibilidades para cada uma das partes.
+
+parte1 = []
+parte2 = []
+parte3 = []
+
+# Combina as partes aleatoriamente
+print (random.choice(partel), random.choice(part2), random.choice(part3))
:[]
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
diff --git a/lerolero.py b/lerolero.py
index d845a8c..2af78d8 100644
--- a/lerolero.py
+++ b/lerolero.py
@@ -2,3 +2,15 @@
 """Gerador de lero-lero.
```

```
Gera frases de efeito sem significado real."""
```

```
+
+import random
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+# Cada frase é composta por três partes aleatórias; aqui,
+# listas de possibilidades para cada uma das partes.
+
+parte1 = []
+parte2 = []
+parte3 = []
+
+# Combina as partes aleatoriamente
+print (random.choice(parte1), random.choice(parte2), random.choice(parte3))
turing@machine:~/lerolero$ git add lerolero.py
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

--- a/lerolero.py

+++ b/lerolero.py

@@ -2,3 +2,15 @@

"""Gerador de lero-lero.

Gera frases de efeito sem significado real."""

+
+import random
++# Cada frase é composta por três partes aleatórias; aqui,
+# listas de possibilidades para cada uma das partes.
++parte1 = []
+parte2 = []
+parte3 = []
+

+# Combina as partes aleatoriamente

+print (random.choice(partel), random.choice(partel2), random.choice(partel3))

turing@machine:~/lerolero\$ git add lerolero.py

turing@machine:~/lerolero\$ git diff

turing@machine:~/lerolero\$

Arquivo Editar Ver Pesquisar Terminal Abas Ajuda

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
--- a/lerolero.py
+++ b/lerolero.py
@@ -2,3 +2,15 @@
 """Gerador de lero-lero.

 Gera frases de efeito sem significado real."""

+
+import random
+
+# Cada frase é composta por três partes aleatórias; aqui,
+# listas de possibilidades para cada uma das partes.
+
+parte1 = []
+parte2 = []
+parte3 = []
+
+# Combina as partes aleatoriamente
+print (random.choice(parte1), random.choice(parte2), random.choice(parte3))
turing@machine:~/lerolero$ git add lerolero.py
turing@machine:~/lerolero$ git diff
turing@machine:~/lerolero$ git diff --staged
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
diff --git a/lerolero.py b/lerolero.py
index d845a8c..2af78d8 100644
--- a/lerolero.py
+++ b/lerolero.py
@@ -2,3 +2,15 @@
 """Gerador de lero-lero.
```

```
Gera frases de efeito sem significado real."""
```

```
+
+import random
+
+# Cada frase é composta por três partes aleatórias; aqui,
+# listas de possibilidades para cada uma das partes.
+
+parte1 = []
+parte2 = []
+parte3 = []
+
+# Combina as partes aleatoriamente
+print (random.choice(partel), random.choice(part2), random.choice(part3))
:[]
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
diff --git a/lerolero.py b/lerolero.py
index d845a8c..2af78d8 100644
--- a/lerolero.py
+++ b/lerolero.py
@@ -2,3 +2,15 @@
 """Gerador de lero-lero.
```

```
Gera frases de efeito sem significado real."""
```

```
+
+import random
+
+# Cada frase é composta por três partes aleatórias; aqui,
+# listas de possibilidades para cada uma das partes.
+
+parte1 = []
+parte2 = []
+parte3 = []
+
+# Combina as partes aleatoriamente
+print (random.choice(parte1), random.choice(parte2), random.choice(parte3))
turing@machine:~/lerolero$ git commit
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
Implementa esqueleto do programa
# Please enter the commit message for your changes. Lines starting
# with '#' will be ignored, and an empty message aborts the commit.
#
# On branch main
# Your branch is ahead of 'origin/main' by 1 commit.
#   (use "git push" to publish your local commits)
#
# Changes to be committed:
#       modified:   lerolero.py
#
~
~
~
~
~
~
~
~
~
~
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
+++ b/lerolero.py
@@ -2,3 +2,15 @@
 """Gerador de lero-lero.

 Gera frases de efeito sem significado real."""

+
+import random
+
+# Cada frase é composta por três partes aleatórias; aqui,
+# listas de possibilidades para cada uma das partes.
+
+parte1 = []
+parte2 = []
+parte3 = []
+
+# Combina as partes aleatoriamente
+print (random.choice(parte1), random.choice(parte2), random.choice(parte3))
turing@machine:~/lerolero$ git commit
[main 45caee3] Implementa esqueleto do programa
 1 file changed, 12 insertions(+)
turing@machine:~/lerolero$ 
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
+++ b/lerolero.py
@@ -2,3 +2,15 @@
 """Gerador de lero-lero.

 Gera frases de efeito sem significado real."""

+
+import random
+
+# Cada frase é composta por três partes aleatórias; aqui,
+# listas de possibilidades para cada uma das partes.
+
+parte1 = []
+parte2 = []
+parte3 = []
+
+# Combina as partes aleatoriamente
+print (random.choice(parte1), random.choice(parte2), random.choice(parte3))
turing@machine:~/lerolero$ git commit
[main 45caee3] Implementa esqueleto do programa
 1 file changed, 12 insertions(+)
turing@machine:~/lerolero$ git diff
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

@@ -2,3 +2,15 @@

"""Gerador de lero-lero.

Gera frases de efeito sem significado real."""

+
+import random
++## Cada frase é composta por três partes aleatórias; aqui,
+## listas de possibilidades para cada uma das partes.
++parte1 = []
+parte2 = []
+parte3 = []
+

+## Combina as partes aleatoriamente

+print (random.choice(parte1), random.choice(parte2), random.choice(parte3))

turing@machine:~/lerolero\$ git commit

[main 45caee3] Implementa esqueleto do programa

1 file changed, 12 insertions(+)

turing@machine:~/lerolero\$ git diff**turing@machine:~/lerolero\$ git diff --staged**

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
"""Gerador de lero-lero.
```

```
Gera frases de efeito sem significado real."""
```

```
+  
+import random  
+  
+# Cada frase é composta por três partes aleatórias; aqui,  
+# listas de possibilidades para cada uma das partes.  
+  
+parte1 = []  
+parte2 = []  
+parte3 = []  
+  
+# Combina as partes aleatoriamente  
+print (random.choice(parte1), random.choice(parte2), random.choice(parte3))  
turing@machine:~/lerolero$ git commit  
[main 45caee3] Implementa esqueleto do programa  
 1 file changed, 12 insertions(+)  
turing@machine:~/lerolero$ git diff  
turing@machine:~/lerolero$ git diff --staged  
turing@machine:~/lerolero$ 
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
"""Gerador de lero-lero.
```

```
Gera frases de efeito sem significado real."""
```

```
+  
+import random  
+  
+# Cada frase é composta por três partes aleatórias; aqui,  
+# listas de possibilidades para cada uma das partes.  
+  
+parte1 = []  
+parte2 = []  
+parte3 = []  
+  
+# Combina as partes aleatoriamente  
+print (random.choice(parte1), random.choice(parte2), random.choice(parte3))  
turing@machine:~/lerolero$ git commit  
[main 45caee3] Implementa esqueleto do programa  
1 file changed, 12 insertions(+)  
turing@machine:~/lerolero$ git diff  
turing@machine:~/lerolero$ git diff --staged  
turing@machine:~/lerolero$ git status
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
+# Cada frase é composta por três partes aleatórias; aqui,  
+# listas de possibilidades para cada uma das partes.  
+  
+parte1 = []  
+parte2 = []  
+parte3 = []  
+  
+# Combina as partes aleatoriamente  
+print (random.choice(parte1), random.choice(parte2), random.choice(parte3))  
turing@machine:~/lerolero$ git commit  
[main 45caee3] Implementa esqueleto do programa  
1 file changed, 12 insertions(+)  
turing@machine:~/lerolero$ git diff  
turing@machine:~/lerolero$ git diff --staged  
turing@machine:~/lerolero$ git status  
On branch main  
Your branch is ahead of 'origin/main' by 2 commits.  
(use "git push" to publish your local commits)  
  
nothing to commit, working tree clean  
turing@machine:~/lerolero$ 
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
+# Cada frase é composta por três partes aleatórias; aqui,  
+# listas de possibilidades para cada uma das partes.  
+  
+parte1 = []  
+parte2 = []  
+parte3 = []  
+  
+# Combina as partes aleatoriamente  
+print (random.choice(parte1), random.choice(parte2), random.choice(parte3))  
turing@machine:~/lerolero$ git commit  
[main 45caee3] Implementa esqueleto do programa  
1 file changed, 12 insertions(+)  
turing@machine:~/lerolero$ git diff  
turing@machine:~/lerolero$ git diff --staged  
turing@machine:~/lerolero$ git status  
On branch main  
Your branch is ahead of 'origin/main' by 2 commits.  
(use "git push" to publish your local commits)  
  
nothing to commit, working tree clean  
turing@machine:~/lerolero$ git push
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
1 file changed, 12 insertions(+)
```

```
turing@machine:~/lerolero$ git diff
```

```
turing@machine:~/lerolero$ git diff --staged
```

```
turing@machine:~/lerolero$ git status
```

```
On branch main
```

```
Your branch is ahead of 'origin/main' by 2 commits.
```

```
  (use "git push" to publish your local commits)
```

```
nothing to commit, working tree clean
```

```
turing@machine:~/lerolero$ git push
```

```
Enter passphrase for key '/home/turing/.ssh/id_rsa':
```

```
Enumerating objects: 7, done.
```

```
Counting objects: 100% (7/7), done.
```

```
Delta compression using up to 8 threads
```

```
Compressing objects: 100% (6/6), done.
```

```
Writing objects: 100% (6/6), 773 bytes | 386.00 KiB/s, done.
```

```
Total 6 (delta 2), reused 0 (delta 0), pack-reused 0
```

```
remote: Resolving deltas: 100% (2/2), done.
```

```
To github.com:urrameu/lerolero.git
```

```
 3df3233..45caeef main -> main
```

```
turing@machine:~/lerolero$ 
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
1 file changed, 12 insertions(+)
```

```
turing@machine:~/lerolero$ git diff
```

```
turing@machine:~/lerolero$ git diff --staged
```

```
turing@machine:~/lerolero$ git status
```

On branch main

Your branch is ahead of 'origin/main' by 2 commits.

(use "git push" to publish your local commits)

```
nothing to commit, working tree clean
```

```
turing@machine:~/lerolero$ git push
```

```
Enter passphrase for key '/home/turing/.ssh/id_rsa':
```

Enumerating objects: 7, done.

Counting objects: 100% (7/7), done.

Delta compression using up to 8 threads

Compressing objects: 100% (6/6), done.

Writing objects: 100% (6/6), 773 bytes | 386.00 KiB/s, done.

Total 6 (delta 2), reused 0 (delta 0), pack-reused 0

remote: Resolving deltas: 100% (2/2), done.

To github.com:urrameu/lerolero.git

3df3233..45caeef main -> main

```
turing@machine:~/lerolero$ git status
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

Your branch is ahead of 'origin/main' by 2 commits.
(use "git push" to publish your local commits)

nothing to commit, working tree clean

turing@machine:~/lerolero\$ git push

Enter passphrase for key '/home/turing/.ssh/id_rsa':

Enumerating objects: 7, done.

Counting objects: 100% (7/7), done.

Delta compression using up to 8 threads

Compressing objects: 100% (6/6), done.

Writing objects: 100% (6/6), 773 bytes | 386.00 KiB/s, done.

Total 6 (delta 2), reused 0 (delta 0), pack-reused 0

remote: Resolving deltas: 100% (2/2), done.

To github.com:urrameu/lerolero.git

 3df3233..45caeef main -> main

turing@machine:~/lerolero\$ git status

On branch main

Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean

turing@machine:~/lerolero\$

Arquivo Editar Ver Pesquisar Terminal Abas Ajuda

lovelace@drivethru: ~/lerolero

lovelace@engine:~/lerolero\$ █

turing@drivethru: ~/lerolero

Arquivo Editar Ver Pesquisar Terminal Abas Ajuda

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

lovelace@engine:~/lerolero\$ git log

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

lovelace@engine:~/lerolero\$ git log

commit 3df3233c8cc6a81f0499ff1768d775ac9682f1bd (**HEAD -> main, origin/main, origin/HEAD**)

Author: Ada Lovelace <ada@analyticalengine.com>

Date: Wed Nov 18 11:40:59 2020 -0300

Acrescenta descrição do projeto ao README

commit bc7de604e736c540ef06e71f1641b19c238ad3a0

Author: Nelson Lago <lago@ime.usp.br>

Date: Mon Nov 16 13:53:13 2020 -0300

Initial commit

lovelace@engine:~/lerolero\$

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

lovelace@engine:~/lerolero\$ git log

commit 3df3233c8cc6a81f0499ff1768d775ac9682f1bd (**HEAD -> main, origin/main, origin/HEAD**)

Author: Ada Lovelace <ada@analyticalengine.com>

Date: Wed Nov 18 11:40:59 2020 -0300

Acrescenta descrição do projeto ao README

commit bc7de604e736c540ef06e71f1641b19c238ad3a0

Author: Nelson Lago <lago@ime.usp.br>

Date: Mon Nov 16 13:53:13 2020 -0300

Initial commit

lovelace@engine:~/lerolero\$ git status

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

lovelace@engine:~/lerolero\$ git logcommit 3df3233c8cc6a81f0499ff1768d775ac9682f1bd (**HEAD -> main, origin/main, origin/HEAD**)

Author: Ada Lovelace <ada@analyticalengine.com>

Date: Wed Nov 18 11:40:59 2020 -0300

Acrescenta descrição do projeto ao README

commit bc7de604e736c540ef06e71f1641b19c238ad3a0

Author: Nelson Lago <lago@ime.usp.br>

Date: Mon Nov 16 13:53:13 2020 -0300

Initial commit

lovelace@engine:~/lerolero\$ git status

On branch main

Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean

lovelace@engine:~/lerolero\$

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
lovelace@engine:~/lerolero$ git log
commit 3df3233c8cc6a81f0499ff1768d775ac9682f1bd (HEAD -> main, origin/main, origin/HEAD)
Author: Ada Lovelace <ada@analyticalengine.com>
Date:   Wed Nov 18 11:40:59 2020 -0300
```

Acrescenta descrição do projeto ao README

```
commit bc7de604e736c540ef06e71f1641b19c238ad3a0
Author: Nelson Lago <lago@ime.usp.br>
Date:   Mon Nov 16 13:53:13 2020 -0300
```

Initial commit

```
lovelace@engine:~/lerolero$ git status
On branch main
Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean
```

```
lovelace@engine:~/lerolero$ git pull
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

On branch main
Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean

lovelace@engine:~/lerolero\$ git pull

Warning: Permanently added the RSA host key for IP address '140.82.114.3' to the list of known hosts.

Enter passphrase for key '/home/lovelace/.ssh/id_rsa':

remote: Enumerating objects: 7, done.

remote: Counting objects: 100% (7/7), done.

remote: Compressing objects: 100% (4/4), done.

remote: Total 6 (delta 2), reused 6 (delta 2), pack-reused 0

Unpacking objects: 100% (6/6), 753 bytes | 150.00 KiB/s, done.

From github.com:urrameu/lerolero

3df3233..45caee3 main -> origin/main

Updating 3df3233..45caee3

Fast-forward

lerolero.py | 16 ++++++
1 file changed, 16 insertions(+)

create mode 100644 lerolero.py

lovelace@engine:~/lerolero\$

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

On branch main
Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean

lovelace@engine:~/lerolero\$ git pull

Warning: Permanently added the RSA host key for IP address '140.82.114.3' to the list of known hosts.

Enter passphrase for key '/home/lovelace/.ssh/id_rsa':

remote: Enumerating objects: 7, done.

remote: Counting objects: 100% (7/7), done.

remote: Compressing objects: 100% (4/4), done.

remote: Total 6 (delta 2), reused 6 (delta 2), pack-reused 0

Unpacking objects: 100% (6/6), 753 bytes | 150.00 KiB/s, done.

From github.com:urrameu/lerolero

3df3233..45caee3 main -> origin/main

Updating 3df3233..45caee3

Fast-forward

lerolero.py | 16 ++++++
1 file changed, 16 insertions(+)

create mode 100644 lerolero.py

lovelace@engine:~/lerolero\$ git log

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

commit 45caeef3b26815b513b0098878fea500e45793c30 (**HEAD -> main, origin/main, origin/HEAD**)

Author: Alan Turing <turing@machine.com>
Date: Wed Nov 18 12:05:19 2020 -0300

Implementa esqueleto do programa

commit 7e749a8a2c040a91d644f05f895568129b622241

Author: Alan Turing <turing@machine.com>
Date: Wed Nov 18 12:00:50 2020 -0300

Cria arquivo inicial do programa

commit 3df3233c8cc6a81f0499ff1768d775ac9682f1bd

Author: Ada Lovelace <ada@analyticalengine.com>
Date: Wed Nov 18 11:40:59 2020 -0300

Acrescenta descrição do projeto ao README

commit bc7de604e736c540ef06e71f1641b19c238ad3a0

:[]

Fluxo de trabalho

- Com várias pessoas trabalhando ao mesmo tempo...
 - ▶ Como salvar e compartilhar o trabalho em andamento?
 - ▶ Como discutir suas alterações?
 - ▶ Como testar suas alterações?
- A solução são ***branches*** (ramos)
- Um ***branch*** é uma derivação em um ponto do histórico
 - ▶ Do seu ponto de vista, ninguém está fazendo outras alterações no código
 - ▶ Todos podem trabalhar em paralelo sem “pisar no pé” um do outro
- Um ***branch*** para cada conserto ou nova funcionalidade
- Quando está pronto (e testado!)
 - ▶ Mescla alterações recentes do projeto principal ao seu *branch* e **testa novamente**
 - ▶ Mescla o *branch* ao projeto principal

Veja também www.atlassian.com/git/tutorials/comparing-workflows

Branches e merges

- **git branch <NOME>**

- ▶ Cria um novo *branch* (ramo) **NOME** a partir do *branch* atual

- **git switch <NOME> (antigamente: git checkout <NOME>)**

- ▶ Faz o *branch* **NOME** ser o *branch* atual
 - » Atualiza o *workdir* e a *staging area*
 - » O próximo **commit** atualiza o *branch* **NOME**

- **git branch**

- ▶ Lista os *branches*
 - » O repositório “nasce” com um *branch* pronto: **main** (antigamente, **master**)

Arquivo Editar Ver Pesquisar Terminal Abas Ajuda

lovelace@drivethru: ~/lerolero

lovelace@engine:~/lerolero\$ git status

turing@drivethru: ~/lerolero

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

lovelace@engine:~/lerolero\$ git status

On branch main

Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean

lovelace@engine:~/lerolero\$

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

lovelace@engine:~/lerolero\$ git status

On branch main

Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean

lovelace@engine:~/lerolero\$ git branch

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

lovelace@engine:~/lerolero\$ git status

On branch main

Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean

lovelace@engine:~/lerolero\$ git branch

* main

lovelace@engine:~/lerolero\$ git branch ingles □

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

lovelace@engine:~/lerolero\$ git status

On branch main

Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean

lovelace@engine:~/lerolero\$ git branch

* main

lovelace@engine:~/lerolero\$ git branch ingles

lovelace@engine:~/lerolero\$

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

lovelace@engine:~/lerolero\$ git status

On branch main

Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean

lovelace@engine:~/lerolero\$ git branch

* main

lovelace@engine:~/lerolero\$ git branch ingles

lovelace@engine:~/lerolero\$ git branch

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

lovelace@engine:~/lerolero\$ git status

On branch main

Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean

lovelace@engine:~/lerolero\$ git branch* **main****lovelace@engine:~/lerolero\$ git branch ingles****lovelace@engine:~/lerolero\$ git branch**

ingles

* **main****lovelace@engine:~/lerolero\$** □

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

lovelace@engine:~/lerolero\$ git status

On branch main

Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean

lovelace@engine:~/lerolero\$ git branch* **main****lovelace@engine:~/lerolero\$ git branch ingles****lovelace@engine:~/lerolero\$ git branch**

ingles

* **main****lovelace@engine:~/lerolero\$ git switch ingles** □

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

lovelace@engine:~/lerolero\$ git status

On branch main

Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean

lovelace@engine:~/lerolero\$ git branch* **main****lovelace@engine:~/lerolero\$ git branch ingles****lovelace@engine:~/lerolero\$ git branch**

ingles

* **main****lovelace@engine:~/lerolero\$ git switch ingles**

Switched to branch 'ingles'

lovelace@engine:~/lerolero\$ □

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

lovelace@engine:~/lerolero\$ git status

On branch main

Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean

lovelace@engine:~/lerolero\$ git branch* **main****lovelace@engine:~/lerolero\$ git branch ingles****lovelace@engine:~/lerolero\$ git branch**

ingles

* **main****lovelace@engine:~/lerolero\$ git switch ingles**

Switched to branch 'ingles'

lovelace@engine:~/lerolero\$ git branch □

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

lovelace@engine:~/lerolero\$ git status

On branch main

Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean

lovelace@engine:~/lerolero\$ git branch* **main****lovelace@engine:~/lerolero\$ git branch ingles****lovelace@engine:~/lerolero\$ git branch**

ingles

* **main****lovelace@engine:~/lerolero\$ git switch ingles**

Switched to branch 'ingles'

lovelace@engine:~/lerolero\$ git branch* **ingles**

main

lovelace@engine:~/lerolero\$ □

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

lovelace@engine:~/lerolero\$ git status

On branch main

Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean

lovelace@engine:~/lerolero\$ git branch* **main****lovelace@engine:~/lerolero\$ git branch ingles****lovelace@engine:~/lerolero\$ git branch**

ingles

* **main****lovelace@engine:~/lerolero\$ git switch ingles**

Switched to branch 'ingles'

lovelace@engine:~/lerolero\$ git branch* **ingles**

main

lovelace@engine:~/lerolero\$ vi lerolero.py □

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
#!/usr/bin/python3
"""Gerador de lero-lero.

Gera frases de efeito sem significado real."""

import random

# Cada frase é composta por três partes aleatórias; aqui,
# listas de possibilidades para cada uma das partes.

parte1 = []
parte2 = []
parte3 = []

# Combina as partes aleatoriamente
print (random.choice(partel), random.choice(parte2), random.choice(parte3))
~  
~  
~  
~  
~  
"lerolero.py" 16L, 371C
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

Gera frases de efeito sem significado real."""

```
import random
```

```
# Cada frase é composta por três partes aleatórias; aqui,  
# listas de possibilidades para cada uma das partes.
```

```
parte1 = []  
parte2 = []  
parte3 = []
```

```
lingua = int(input("Escolha a língua: 1 - português; 2 - inglês\n"))
```

```
if lingua == 2:  
    parte1 = []  
    parte2 = []  
    parte3 = []
```

```
# Combina as partes aleatoriamente
```

```
print (random.choice(parte1), random.choice(parte2), random.choice(parte3))
```

```
7 more lines
```

14,0-1

Fim

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

lovelace@engine:~/lerolero\$ git status

On branch main

Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean

lovelace@engine:~/lerolero\$ git branch* **main****lovelace@engine:~/lerolero\$ git branch ingles****lovelace@engine:~/lerolero\$ git branch**

ingles

* **main****lovelace@engine:~/lerolero\$ git switch ingles**

Switched to branch 'ingles'

lovelace@engine:~/lerolero\$ git branch* **ingles**

main

lovelace@engine:~/lerolero\$ vi lerolero.py**lovelace@engine:~/lerolero\$ git add lerolero.py** □

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

lovelace@engine:~/lerolero\$ git status

On branch main

Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean

lovelace@engine:~/lerolero\$ git branch* **main****lovelace@engine:~/lerolero\$ git branch ingles****lovelace@engine:~/lerolero\$ git branch**

ingles

* **main****lovelace@engine:~/lerolero\$ git switch ingles**

Switched to branch 'ingles'

lovelace@engine:~/lerolero\$ git branch* **ingles**

main

lovelace@engine:~/lerolero\$ vi lerolero.py**lovelace@engine:~/lerolero\$ git add lerolero.py****lovelace@engine:~/lerolero\$ git commit** []

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

Cria esqueleto da versão multi-língua

```
# Please enter the commit message for your changes. Lines starting
# with '#' will be ignored, and an empty message aborts the commit.
```

#

On branch ingles

Changes to be committed:

modified: lerolero.py

#

~

~

~

~

~

~

~

~

~

~

~

~

~

~

~

~

~

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

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

```
nothing to commit, working tree clean
```

```
lovelace@engine:~/lerolero$ git branch
* main
```

```
lovelace@engine:~/lerolero$ git branch ingles
```

```
lovelace@engine:~/lerolero$ git branch
  ingles
* main
```

```
lovelace@engine:~/lerolero$ git switch ingles
```

```
Switched to branch 'ingles'
```

```
lovelace@engine:~/lerolero$ git branch
* ingles
  main
```

```
lovelace@engine:~/lerolero$ vi lerolero.py
```

```
lovelace@engine:~/lerolero$ git add lerolero.py
```

```
lovelace@engine:~/lerolero$ git commit
[ingles 1aaa004] Cria esqueleto da versão multi-línguas
 1 file changed, 7 insertions(+)
```

```
lovelace@engine:~/lerolero$ 
```

Arquivo Editar Ver Pesquisar Terminal Abas Ajuda

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

turing@machine:~/lerolero\$ vi lerolero.py □

lovelace@drivethru: -/herolerg

turing@drivethru: ~/kerolero

```
#!/usr/bin/python3
"""Gerador de lero-lero.

Gera frases de efeito sem significado real."""

import random

# Cada frase é composta por três partes aleatórias; aqui,
# listas de possibilidades para cada uma das partes.

parte1 = []
parte2 = []
parte3 = []
#
# Combina as partes aleatoriamente
print (random.choice(part1), random.choice(part2), random.choice(part3))
~  
~  
~  
~  
~lerolero.py" 16L, 371C
```

```
# listas de possibilidades para cada uma das partes.
```

```
parte1 = [  
    "0 sistema em desenvolvimento",  
    "0 novo protocolo de comunicação",  
    "0 algoritmo otimizado"  
]
```

```
parte2 = [  
    "possui excelente desempenho",  
    "oferece garantias de precisão acima da média",  
    "preenche uma lacuna significativa"  
]
```

```
parte3 = [  
    "nas aplicações a que se destina",  
    "em relação às opções disponíveis no mercado",  
    "e provê ampla vantagem competitiva a seus usuários"  
]
```

lovelace@drivethru: ~/lerolero

turing@machine:~/lerolero\$ vi lerolero.py

turing@machine:~/lerolero\$ git add lerolero.py □

turing@drivethru: ~/lerolero

lovelace@drivethru: ~/lerolero

```
turing@machine:~/lerolero$ vi lerolero.py
turing@machine:~/lerolero$ git add lerolero.py
turing@machine:~/lerolero$ git commit
```

turing@drivethru: ~/lerolero

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

Insere os trechos das frases

```
# Please enter the commit message for your changes. Lines starting
# with '#' will be ignored, and an empty message aborts the commit.
#
# On branch main
# Your branch is up to date with 'origin/main'.
#
# Changes to be committed:
#       modified:   lerolero.py
#
~
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
turing@machine:~/lerolero$ vi lerolero.py
turing@machine:~/lerolero$ git add lerolero.py
turing@machine:~/lerolero$ git commit
[main a46a562] Insere os trechos das frases
 1 file changed, 17 insertions(+), 3 deletions(-)
turing@machine:~/lerolero$ 
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
turing@machine:~/lerolero$ vi lerolero.py
turing@machine:~/lerolero$ git add lerolero.py
turing@machine:~/lerolero$ git commit
[main a46a562] Insere os trechos das frases
 1 file changed, 17 insertions(+), 3 deletions(-)
turing@machine:~/lerolero$ git log
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
commit a46a56226109f8793061d81736fa2a497907cdd4 (HEAD -> main)
```

Author: Alan Turing <turing@machine.com>

Date: Wed Nov 18 14:02:38 2020 -0300

Insere os trechos das frases

```
commit 45caeef3b26815b513b0098878fea500e45793c30 (origin/main, origin/HEAD)
```

Author: Alan Turing <turing@machine.com>

Date: Wed Nov 18 12:05:19 2020 -0300

Implementa esqueleto do programa

```
commit 7e749a8a2c040a91d644f05f895568129b622241
```

Author: Alan Turing <turing@machine.com>

Date: Wed Nov 18 12:00:50 2020 -0300

Cria arquivo inicial do programa

```
commit 3df3233c8cc6a81f0499ff1768d775ac9682f1bd
```

Author: Ada Lovelace <ada@analyticalengine.com>

:[]

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
commit a46a56226109f8793061d81736fa2a497907cdd4 (HEAD -> main)
```

Author: Alan Turing <turing@machine.com>

Date: Wed Nov 18 14:02:38 2020 -0300

Insere os trechos das frases

```
commit 45caeef3b26815b513b0098878fea500e45793c30 (origin/main, origin/HEAD)
```

Author: Alan Turing <turing@machine.com>

Date: Wed Nov 18 12:05:19 2020 -0300

Implementa esqueleto do programa

```
commit 7e749a8a2c040a91d644f05f895568129b622241
```

Author: Alan Turing <turing@machine.com>

Date: Wed Nov 18 12:00:50 2020 -0300

Cria arquivo inicial do programa

```
commit 3df3233c8cc6a81f0499ff1768d775ac9682f1bd
```

Author: Ada Lovelace <ada@analyticalengine.com>

turing@machine:~/lerolero\$ git push

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

Author: Alan Turing <turing@machine.com>
Date: Wed Nov 18 12:00:50 2020 -0300

Cria arquivo inicial do programa

commit 3df3233c8cc6a81f0499ff1768d775ac9682f1bd

Author: Ada Lovelace <ada@analyticalengine.com>

turing@machine:~/lerolero\$ git push

Warning: Permanently added the RSA host key for IP address '140.82.112.4' to the list of known hosts.

Enter passphrase for key '/home/turing/.ssh/id_rsa':

Enumerating objects: 5, done.

Counting objects: 100% (5/5), done.

Delta compression using up to 8 threads

Compressing objects: 100% (3/3), done.

Writing objects: 100% (3/3), 693 bytes | 693.00 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 github.com:urrameu/lerolero.git

 45caee3..a46a562 main -> main

turing@machine:~/lerolero\$

Branches e merges

- **git merge <NOME>**

- ▶ Mescla o *branch* **NOME** na área de trabalho
- ▶ Faz **commit** do resultado no *branch* atual

Arquivo Editar Ver Pesquisar Terminal Abas Ajuda

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

lovelace@engine:~/lerolero\$ git log

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

commit 1aaa00495786bd75d33b4510747da0b2ebd413ac (**HEAD -> ingles**)

Author: Ada Lovelace <ada@analyticalengine.com>

Date: Wed Nov 18 13:57:47 2020 -0300

Cria esqueleto da versão multi-línguas

commit 45caeef3b26815b513b0098878fea500e45793c30 (**origin/main, origin/HEAD, main**)

Author: Alan Turing <turing@machine.com>

Date: Wed Nov 18 12:05:19 2020 -0300

Implementa esqueleto do programa

commit 7e749a8a2c040a91d644f05f895568129b622241

Author: Alan Turing <turing@machine.com>

Date: Wed Nov 18 12:00:50 2020 -0300

Cria arquivo inicial do programa

commit 3df3233c8cc6a81f0499ff1768d775ac9682f1bd

:[]

Arquivo Editar Ver Pesquisar Terminal Abas Ajuda

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

commit 1aaa00495786bd75d33b4510747da0b2ebd413ac (**HEAD -> ingles**)

Author: Ada Lovelace <ada@analyticalengine.com>

Date: Wed Nov 18 13:57:47 2020 -0300

Cria esqueleto da versão multi-línguas

commit 45caeef3b26815b513b0098878fea500e45793c30 (**origin/main, origin/HEAD, main**)

Author: Alan Turing <turing@machine.com>

Date: Wed Nov 18 12:05:19 2020 -0300

Implementa esqueleto do programa

commit 7e749a8a2c040a91d644f05f895568129b622241

Author: Alan Turing <turing@machine.com>

Date: Wed Nov 18 12:00:50 2020 -0300

Cria arquivo inicial do programa

commit 3df3233c8cc6a81f0499ff1768d775ac9682f1bd

lovelace@engine:~/lerolero\$ git switch main

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

Cria esqueleto da versão multi-línguas

```
commit 45caeef3b26815b513b0098878fea500e45793c30 (origin/main, origin/HEAD, main)
Author: Alan Turing <turing@machine.com>
Date:   Wed Nov 18 12:05:19 2020 -0300
```

Implementa esqueleto do programa

```
commit 7e749a8a2c040a91d644f05f895568129b622241
Author: Alan Turing <turing@machine.com>
Date:   Wed Nov 18 12:00:50 2020 -0300
```

Cria arquivo inicial do programa

```
commit 3df3233c8cc6a81f0499ff1768d775ac9682f1bd
lovelace@engine:~/lerolero$ git switch main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.
lovelace@engine:~/lerolero$ 
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

Cria esqueleto da versão multi-línguas

```
commit 45caeef3b26815b513b0098878fea500e45793c30 (origin/main, origin/HEAD, main
)
Author: Alan Turing <turing@machine.com>
Date:   Wed Nov 18 12:05:19 2020 -0300
```

Implementa esqueleto do programa

```
commit 7e749a8a2c040a91d644f05f895568129b622241
Author: Alan Turing <turing@machine.com>
Date:   Wed Nov 18 12:00:50 2020 -0300
```

Cria arquivo inicial do programa

```
commit 3df3233c8cc6a81f0499ff1768d775ac9682f1bd
lovelace@engine:~/lerolero$ git switch main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.
lovelace@engine:~/lerolero$ git pull
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
commit 3df3233c8cc6a81f0499ff1768d775ac9682f1bd
```

```
lovelace@engine:~/lerolero$ git switch main
```

```
Switched to branch 'main'
```

```
Your branch is up to date with 'origin/main'.
```

```
lovelace@engine:~/lerolero$ git pull
```

```
Warning: Permanently added the RSA host key for IP address '140.82.113.3' to th  
e list of known hosts.
```

```
Enter passphrase for key '/home/lovelace/.ssh/id_rsa':
```

```
remote: Enumerating objects: 5, done.
```

```
remote: Counting objects: 100% (5/5), done.
```

```
remote: Compressing objects: 100% (2/2), done.
```

```
remote: Total 3 (delta 1), reused 3 (delta 1), pack-reused 0
```

```
Unpacking objects: 100% (3/3), 673 bytes | 336.00 KiB/s, done.
```

```
From github.com:urrameu/lerolero
```

```
 45caeef..a46a562 main      -> origin/main
```

```
Updating 45caeef..a46a562
```

```
Fast-forward
```

```
  lerolero.py | 20 ++++++-----
```

```
 1 file changed, 17 insertions(+), 3 deletions(-)
```

```
lovelace@engine:~/lerolero$ 
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
commit 3df3233c8cc6a81f0499ff1768d775ac9682f1bd
```

```
lovelace@engine:~/lerolero$ git switch main
```

```
Switched to branch 'main'
```

```
Your branch is up to date with 'origin/main'.
```

```
lovelace@engine:~/lerolero$ git pull
```

```
Warning: Permanently added the RSA host key for IP address '140.82.113.3' to th  
e list of known hosts.
```

```
Enter passphrase for key '/home/lovelace/.ssh/id_rsa':
```

```
remote: Enumerating objects: 5, done.
```

```
remote: Counting objects: 100% (5/5), done.
```

```
remote: Compressing objects: 100% (2/2), done.
```

```
remote: Total 3 (delta 1), reused 3 (delta 1), pack-reused 0
```

```
Unpacking objects: 100% (3/3), 673 bytes | 336.00 KiB/s, done.
```

```
From github.com:urrameu/lerolero
```

```
 45caeef..a46a562 main      -> origin/main
```

```
Updating 45caeef..a46a562
```

```
Fast-forward
```

```
  lerolero.py | 20 ++++++-----
```

```
 1 file changed, 17 insertions(+), 3 deletions(-)
```

```
lovelace@engine:~/lerolero$ git merge ingles □
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
Merge branch 'ingles' into main
# Please enter a commit message to explain why this merge is necessary,
# especially if it merges an updated upstream into a topic branch.
#
# Lines starting with '#' will be ignored, and an empty message aborts
# the commit.
```

~
~
~
~
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~
~
~
~

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

lovelace@engine:~/lerolero\$ git pull

Warning: Permanently added the RSA host key for IP address '140.82.113.3' to the list of known hosts.

Enter passphrase for key '/home/lovelace/.ssh/id_rsa':

remote: Enumerating objects: 5, done.

remote: Counting objects: 100% (5/5), done.

remote: Compressing objects: 100% (2/2), done.

remote: Total 3 (delta 1), reused 3 (delta 1), pack-reused 0

Unpacking objects: 100% (3/3), 673 bytes | 336.00 KiB/s, done.

From github.com:urrameu/lerolero

45caee3..a46a562 main -> origin/main

Updating 45caee3..a46a562

Fast-forward

lerolero.py | 20 ++++++-----

1 file changed, 17 insertions(+), 3 deletions(-)

lovelace@engine:~/lerolero\$ git merge ingles

Auto-merging lerolero.py

Merge made by the 'recursive' strategy.

lerolero.py | 7 ++++++

1 file changed, 7 insertions(+)

lovelace@engine:~/lerolero\$

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

lovelace@engine:~/lerolero\$ git pull

Warning: Permanently added the RSA host key for IP address '140.82.113.3' to the list of known hosts.

Enter passphrase for key '/home/lovelace/.ssh/id_rsa':

remote: Enumerating objects: 5, done.

remote: Counting objects: 100% (5/5), done.

remote: Compressing objects: 100% (2/2), done.

remote: Total 3 (delta 1), reused 3 (delta 1), pack-reused 0

Unpacking objects: 100% (3/3), 673 bytes | 336.00 KiB/s, done.

From github.com:urrameu/lerolero

45caeef..a46a562 main -> origin/main

Updating 45caeef..a46a562

Fast-forward

lerolero.py | 20 ++++++-----

1 file changed, 17 insertions(+), 3 deletions(-)

lovelace@engine:~/lerolero\$ git merge ingles

Auto-merging lerolero.py

Merge made by the 'recursive' strategy.

lerolero.py | 7 ++++++

1 file changed, 7 insertions(+)

lovelace@engine:~/lerolero\$ git log

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
commit b881c34ec250751bff927235b3634bb8d913a9cb (HEAD -> main)
```

```
Merge: a46a562 1aaa004
```

```
Author: Ada Lovelace <ada@analyticalengine.com>
```

```
Date: Wed Nov 18 14:07:57 2020 -0300
```

Merge branch 'ingles' into main

```
commit a46a56226109f8793061d81736fa2a497907cdd4 (origin/main, origin/HEAD)
```

```
Author: Alan Turing <turing@machine.com>
```

```
Date: Wed Nov 18 14:02:38 2020 -0300
```

Insere os trechos das frases

```
commit 1aaa00495786bd75d33b4510747da0b2ebd413ac (ingles)
```

```
Author: Ada Lovelace <ada@analyticalengine.com>
```

```
Date: Wed Nov 18 13:57:47 2020 -0300
```

Cria esqueleto da versão multi-línguas

```
commit 45caee3b26815b513b0098878fea500e45793c30
```

:[]

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
commit b881c34ec250751bff927235b3634bb8d913a9cb (HEAD -> main)
```

Merge: a46a562 1aaa004

Author: Ada Lovelace <ada@analyticalengine.com>

Date: Wed Nov 18 14:07:57 2020 -0300

Merge branch 'ingles' into main

```
commit a46a56226109f8793061d81736fa2a497907cdd4 (origin/main, origin/HEAD)
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Author: Alan Turing <turing@machine.com>

Date: Wed Nov 18 14:02:38 2020 -0300

Insere os trechos das frases

```
commit 1aaa00495786bd75d33b4510747da0b2ebd413ac (ingles)
```

Author: Ada Lovelace <ada@analyticalengine.com>

Date: Wed Nov 18 13:57:47 2020 -0300

Cria esqueleto da versão multi-línguas

```
commit 45caee3b26815b513b0098878fea500e45793c30
```

:[]

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
commit b881c34ec250751bff927235b3634bb8d913a9cb (HEAD -> main)
```

```
Merge: a46a562 1aaa004
```

```
Author: Ada Lovelace <ada@analyticalengine.com>
```

```
Date: Wed Nov 18 14:07:57 2020 -0300
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Merge branch 'ingles' into main

```
commit a46a56226109f8793061d81736fa2a497907cdd4 (origin/main, origin/HEAD)
```

```
Author: Alan Turing <turing@machine.com>
```

```
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Insere os trechos das frases

```
commit 1aaa00495786bd75d33b4510747da0b2ebd413ac (ingles)
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```
Author: Ada Lovelace <ada@analyticalengine.com>
```

```
Date: Wed Nov 18 13:57:47 2020 -0300
```

Cria esqueleto da versão multi-línguas

```
commit 45caeef3b26815b513b0098878fea500e45793c30
```

```
lovelace@engine:~/lerolero$ git status
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
commit a46a56226109f8793061d81736fa2a497907cdd4 (origin/main, origin/HEAD)
Author: Alan Turing <turing@machine.com>
Date:   Wed Nov 18 14:02:38 2020 -0300
```

Insere os trechos das frases

```
commit 1aaa00495786bd75d33b4510747da0b2ebd413ac (ingles)
Author: Ada Lovelace <ada@analyticalengine.com>
Date:   Wed Nov 18 13:57:47 2020 -0300
```

Cria esqueleto da versão multi-línguas

```
commit 45caee3b26815b513b0098878fea500e45793c30
lovelace@engine:~/lerolero$ git status
On branch main
Your branch is ahead of 'origin/main' by 2 commits.
  (use "git push" to publish your local commits)
```

nothing to commit, working tree clean

```
lovelace@engine:~/lerolero$ 
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
commit a46a56226109f8793061d81736fa2a497907cdd4 (origin/main, origin/HEAD)
Author: Alan Turing <turing@machine.com>
Date:   Wed Nov 18 14:02:38 2020 -0300
```

Insere os trechos das frases

```
commit 1aaa00495786bd75d33b4510747da0b2ebd413ac (ingles)
Author: Ada Lovelace <ada@analyticalengine.com>
Date:   Wed Nov 18 13:57:47 2020 -0300
```

Cria esqueleto da versão multi-línguas

```
commit 45caee3b26815b513b0098878fea500e45793c30
lovelace@engine:~/lerolero$ git status
On branch main
Your branch is ahead of 'origin/main' by 2 commits.
  (use "git push" to publish your local commits)
```

```
nothing to commit, working tree clean
lovelace@engine:~/lerolero$ git push
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

Cria esqueleto da versão multi-línguas

```
commit 45caeef3b26815b513b0098878fea500e45793c30
```

```
lovelace@engine:~/lerolero$ git status
```

```
On branch main
```

```
Your branch is ahead of 'origin/main' by 2 commits.
```

```
  (use "git push" to publish your local commits)
```

```
nothing to commit, working tree clean
```

```
lovelace@engine:~/lerolero$ git push
```

```
Enter passphrase for key '/home/lovelace/.ssh/id_rsa':
```

```
Enumerating objects: 10, done.
```

```
Counting objects: 100% (10/10), done.
```

```
Delta compression using up to 8 threads
```

```
Compressing objects: 100% (6/6), done.
```

```
Writing objects: 100% (6/6), 715 bytes | 715.00 KiB/s, done.
```

```
Total 6 (delta 4), reused 0 (delta 0), pack-reused 0
```

```
remote: Resolving deltas: 100% (4/4), completed with 2 local objects.
```

```
To github.com:urrameu/lerolero.git
```

```
  a46a562..b881c34 main -> main
```

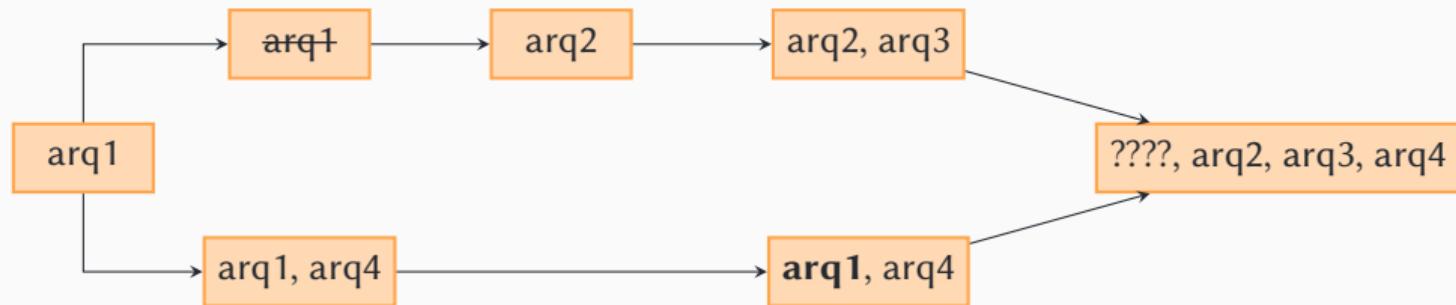
```
lovelace@engine:~/lerolero$ 
```

Branches e merges

- **git merge <NOME>**
 - ▶ Mescla o *branch* **NOME** na área de trabalho
 - ▶ Faz **commit** do resultado no *branch* atual

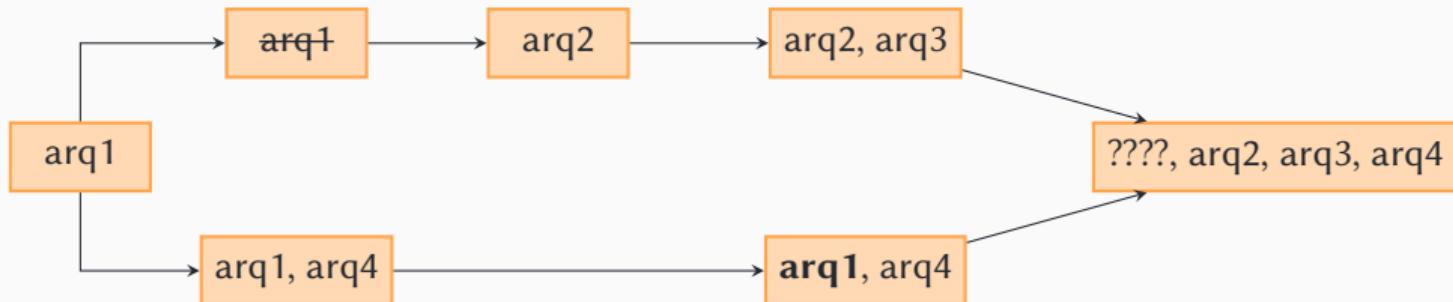
Branches e merges

- **git merge <NOME>**
 - Mescla o *branch* **NOME** na área de trabalho
 - Faz **commit** do resultado no *branch* atual
- E se dois *branches* fizerem modificações incompatíveis?



Branches e merges

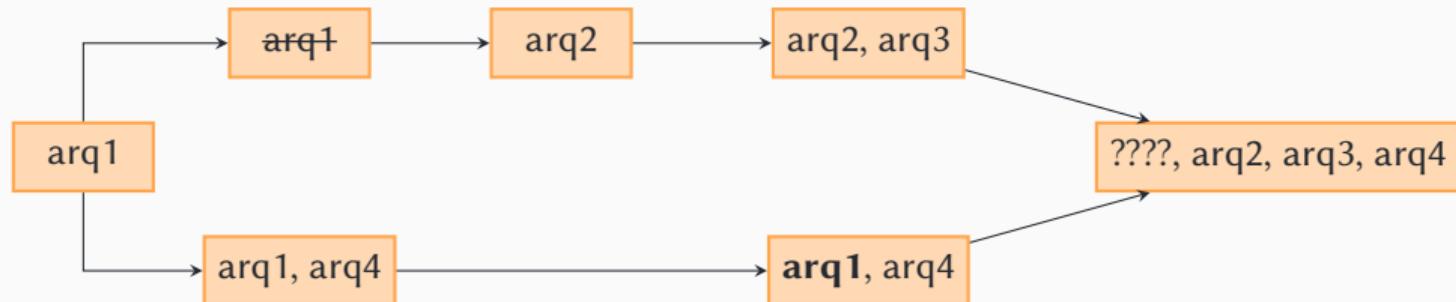
- **git merge <NOME>**
 - Mescla o *branch* **NOME** na área de trabalho
 - Faz **commit** do resultado no *branch* atual
- E se dois *branches* fizerem modificações incompatíveis?



- git vai indicar que houve um *conflito*

Branches e merges

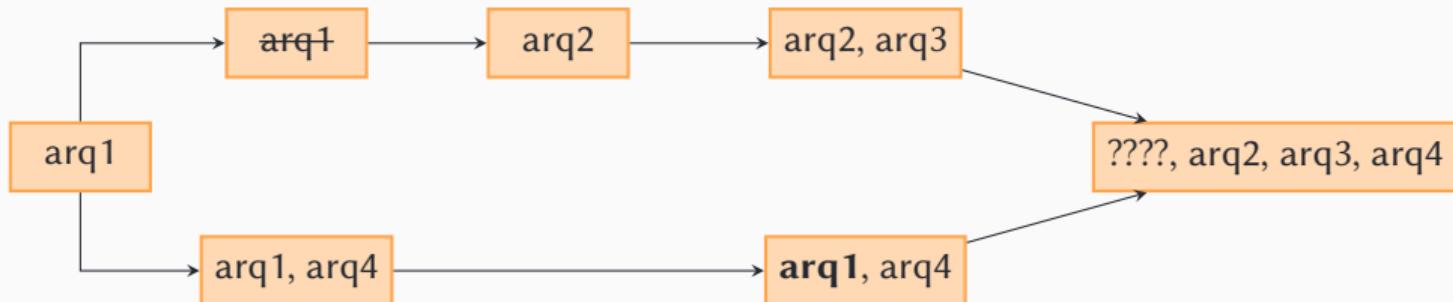
- **git merge <NOME>**
 - ▶ Mescla o *branch* **NOME** na área de trabalho
 - ▶ Faz **commit** do resultado no *branch* atual
- E se dois *branches* fizerem modificações incompatíveis?



- **git vai indicar que houve um *conflito***
 - ▶ git mescla o que é possível

Branches e merges

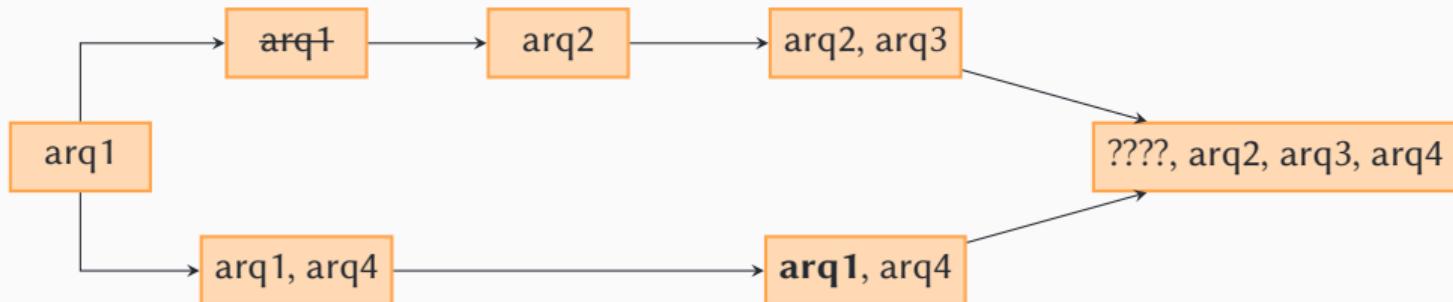
- **git merge <NOME>**
 - ▶ Mescla o *branch* **NOME** na área de trabalho
 - ▶ Faz **commit** do resultado no *branch* atual
- E se dois *branches* fizerem modificações incompatíveis?



- **git vai indicar que houve um conflito**
 - ▶ git mescla o que é possível
 - ▶ O usuário soluciona manualmente os conflitos restantes

Branches e merges

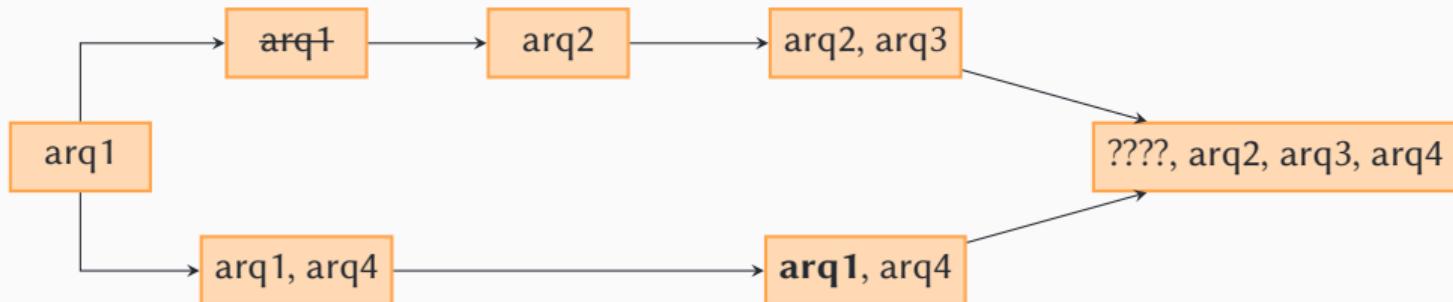
- **git merge <NOME>**
 - ▶ Mescla o *branch* **NOME** na área de trabalho
 - ▶ Faz **commit** do resultado no *branch* atual
- E se dois *branches* fizerem modificações incompatíveis?



- **git vai indicar que houve um *conflito***
 - ▶ git mescla o que é possível
 - ▶ O usuário soluciona manualmente os conflitos restantes
 - ▶ **git add** (informa que o conflito foi resolvido)

Branches e merges

- **git merge <NOME>**
 - ▶ Mescla o *branch* **NOME** na área de trabalho
 - ▶ Faz **commit** do resultado no *branch* atual
- E se dois *branches* fizerem modificações incompatíveis?



- git vai indicar que houve um *conflito*
 - ▶ git mescla o que é possível
 - ▶ O usuário soluciona manualmente os conflitos restantes
 - ▶ **git add** (informa que o conflito foi resolvido)
 - ▶ **git merge --continue / git merge --abort**

Arquivo Editar Ver Pesquisar Terminal Abas Ajuda

lovelace@drivethru: ~/lerolero

turing@machine:~/lerolero\$ git pull

turing@drivethru: ~/lerolero

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

turing@machine:~/lerolero\$ git pull

Warning: Permanently added the RSA host key for IP address '140.82.114.3' to the list of known hosts.

Enter passphrase for key '/home/turing/.ssh/id_rsa':

remote: Enumerating objects: 10, done.

remote: Counting objects: 100% (10/10), done.

remote: Compressing objects: 100% (2/2), done.

remote: Total 6 (delta 4), reused 6 (delta 4), pack-reused 0

Unpacking objects: 100% (6/6), 695 bytes | 173.00 KiB/s, done.

From github.com:urrameu/lerolero

a46a562..b881c34 main -> origin/main

Updating a46a562..b881c34

Fast-forward

lerolero.py | 7 +++++++

1 file changed, 7 insertions(+)

turing@machine:~/lerolero\$

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

turing@machine:~/lerolero\$ git pull

Warning: Permanently added the RSA host key for IP address '140.82.114.3' to the list of known hosts.

Enter passphrase for key '/home/turing/.ssh/id_rsa':

remote: Enumerating objects: 10, done.

remote: Counting objects: 100% (10/10), done.

remote: Compressing objects: 100% (2/2), done.

remote: Total 6 (delta 4), reused 6 (delta 4), pack-reused 0

Unpacking objects: 100% (6/6), 695 bytes | 173.00 KiB/s, done.

From github.com:urrameu/lerolero

a46a562..b881c34 main -> origin/main

Updating a46a562..b881c34

Fast-forward

lerolero.py | 7 +++++++

1 file changed, 7 insertions(+)

turing@machine:~/lerolero\$ git branch estilo

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

turing@machine:~/lerolero\$ git pull

Warning: Permanently added the RSA host key for IP address '140.82.114.3' to the list of known hosts.

Enter passphrase for key '/home/turing/.ssh/id_rsa':

remote: Enumerating objects: 10, done.

remote: Counting objects: 100% (10/10), done.

remote: Compressing objects: 100% (2/2), done.

remote: Total 6 (delta 4), reused 6 (delta 4), pack-reused 0

Unpacking objects: 100% (6/6), 695 bytes | 173.00 KiB/s, done.

From github.com:urrameu/lerolero

a46a562..b881c34 main -> origin/main

Updating a46a562..b881c34

Fast-forward

lerolero.py | 7 +++++++

1 file changed, 7 insertions(+)

turing@machine:~/lerolero\$ git branch estilo**turing@machine:~/lerolero\$ git switch estilo** □

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

turing@machine:~/lerolero\$ git pull

Warning: Permanently added the RSA host key for IP address '140.82.114.3' to the list of known hosts.

Enter passphrase for key '/home/turing/.ssh/id_rsa':

remote: Enumerating objects: 10, done.

remote: Counting objects: 100% (10/10), done.

remote: Compressing objects: 100% (2/2), done.

remote: Total 6 (delta 4), reused 6 (delta 4), pack-reused 0

Unpacking objects: 100% (6/6), 695 bytes | 173.00 KiB/s, done.

From github.com:urrameu/lerolero

a46a562..b881c34 main -> origin/main

Updating a46a562..b881c34

Fast-forward

lerolero.py | 7 +++++++

1 file changed, 7 insertions(+)

turing@machine:~/lerolero\$ git branch estilo**turing@machine:~/lerolero\$ git switch estilo**

Switched to branch 'estilo'

turing@machine:~/lerolero\$

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

turing@machine:~/lerolero\$ git pull

Warning: Permanently added the RSA host key for IP address '140.82.114.3' to the list of known hosts.

Enter passphrase for key '/home/turing/.ssh/id_rsa':

remote: Enumerating objects: 10, done.

remote: Counting objects: 100% (10/10), done.

remote: Compressing objects: 100% (2/2), done.

remote: Total 6 (delta 4), reused 6 (delta 4), pack-reused 0

Unpacking objects: 100% (6/6), 695 bytes | 173.00 KiB/s, done.

From github.com:urrameu/lerolero

a46a562..b881c34 main -> origin/main

Updating a46a562..b881c34

Fast-forward

lerolero.py | 7 +++++++

1 file changed, 7 insertions(+)

turing@machine:~/lerolero\$ git branch estilo**turing@machine:~/lerolero\$ git switch estilo**

Switched to branch 'estilo'

turing@machine:~/lerolero\$ vi lerolero.py

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
# Cada frase é composta por três partes aleatórias; aqui,  
# listas de possibilidades para cada uma das partes.
```

```
parte1 = [  
    "0 sistema em desenvolvimento",  
    "0 novo protocolo de comunicação",  
    "0 algoritmo otimizado"  
]
```

```
parte2 = [  
    "possui excelente desempenho",  
    "oferece garantias de precisão acima da média",  
    "preenche uma lacuna significativa"  
]
```

```
parte3 = [  
    "nas aplicações a que se destina",  
    "em relação às opções disponíveis no mercado",  
    "e provê ampla vantagem competitiva a seus usuários"  
]
```

```
# Cada frase é composta por três partes aleatórias; aqui,  
# listas de possibilidades para cada uma das partes.
```

```
parte1 = [  
    "0 sistema em desenvolvimento",  
    "0 novo protocolo de comunicação",  
    "0 algoritmo de otimização"  
]
```

```
parte2 = [  
    "possui excelente desempenho",  
    "oferece garantias de precisão acima da média",  
    "preenche uma lacuna significativa"  
]
```

```
parte3 = [  
    "nas aplicações a que se destina",  
    "em relação às opções disponíveis no mercado",  
    "e provê ampla vantagem competitiva a seus usuários"  
]
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

turing@machine:~/lerolero\$ git pull

Warning: Permanently added the RSA host key for IP address '140.82.114.3' to the list of known hosts.

Enter passphrase for key '/home/turing/.ssh/id_rsa':

remote: Enumerating objects: 10, done.

remote: Counting objects: 100% (10/10), done.

remote: Compressing objects: 100% (2/2), done.

remote: Total 6 (delta 4), reused 6 (delta 4), pack-reused 0

Unpacking objects: 100% (6/6), 695 bytes | 173.00 KiB/s, done.

From github.com:urrameu/lerolero

a46a562..b881c34 main -> origin/main

Updating a46a562..b881c34

Fast-forward

lerolero.py | 7 +++++++

1 file changed, 7 insertions(+)

turing@machine:~/lerolero\$ git branch estilo**turing@machine:~/lerolero\$ git switch estilo**

Switched to branch 'estilo'

turing@machine:~/lerolero\$ vi lerolero.py**turing@machine:~/lerolero\$ git add lerolero.py** □

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

turing@machine:~/lerolero\$ git pull

Warning: Permanently added the RSA host key for IP address '140.82.114.3' to the list of known hosts.

Enter passphrase for key '/home/turing/.ssh/id_rsa':

remote: Enumerating objects: 10, done.

remote: Counting objects: 100% (10/10), done.

remote: Compressing objects: 100% (2/2), done.

remote: Total 6 (delta 4), reused 6 (delta 4), pack-reused 0

Unpacking objects: 100% (6/6), 695 bytes | 173.00 KiB/s, done.

From github.com:urrameu/lerolero

a46a562..b881c34 main -> origin/main

Updating a46a562..b881c34

Fast-forward

lerolero.py | 7 +++++++

1 file changed, 7 insertions(+)

turing@machine:~/lerolero\$ git branch estilo**turing@machine:~/lerolero\$ git switch estilo**

Switched to branch 'estilo'

turing@machine:~/lerolero\$ vi lerolero.py**turing@machine:~/lerolero\$ git add lerolero.py****turing@machine:~/lerolero\$ git commit**

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

Melhora um dos textos

```
# Please enter the commit message for your changes. Lines starting
# with '#' will be ignored, and an empty message aborts the commit.
```

```
#
```

```
# On branch estilo
```

```
# Changes to be committed:
```

```
#       modified:   lerolero.py
```

```
#
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```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
Enter passphrase for key '/home/turing/.ssh/id_rsa':  
remote: Enumerating objects: 10, done.  
remote: Counting objects: 100% (10/10), done.  
remote: Compressing objects: 100% (2/2), done.  
remote: Total 6 (delta 4), reused 6 (delta 4), pack-reused 0  
Unpacking objects: 100% (6/6), 695 bytes | 173.00 KiB/s, done.  
From github.com:urrameu/lerolero  
  a46a562..b881c34 main      -> origin/main  
Updating a46a562..b881c34  
Fast-forward  
  lerolero.py | 7 +++++++  
 1 file changed, 7 insertions(+)  
turing@machine:~/lerolero$ git branch estilo  
turing@machine:~/lerolero$ git switch estilo  
Switched to branch 'estilo'  
turing@machine:~/lerolero$ vi lerolero.py  
turing@machine:~/lerolero$ git add lerolero.py  
turing@machine:~/lerolero$ git commit  
[estilo b29477a] Melhora um dos textos  
 1 file changed, 1 insertion(+), 1 deletion(-)  
turing@machine:~/lerolero$ 
```

Arquivo Editar Ver Pesquisar Terminal Abas Ajuda

lovelace@drivethru: ~/lerolero

lovelace@engine:~/lerolero\$ git pull

turing@drivethru: ~/lerolero

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

lovelace@engine:~/lerolero\$ git pull

Warning: Permanently added the RSA host key for IP address '140.82.113.4' to the list of known hosts.

Enter passphrase for key '/home/lovelace/.ssh/id_rsa':

Already up to date.

lovelace@engine:~/lerolero\$ □

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

lovelace@engine:~/lerolero\$ git pull

Warning: Permanently added the RSA host key for IP address '140.82.113.4' to the list of known hosts.

Enter passphrase for key '/home/lovelace/.ssh/id_rsa':

Already up to date.

lovelace@engine:~/lerolero\$ git branch revisao

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

lovelace@engine:~/lerolero\$ git pull

Warning: Permanently added the RSA host key for IP address '140.82.113.4' to the list of known hosts.

Enter passphrase for key '/home/lovelace/.ssh/id_rsa':

Already up to date.

lovelace@engine:~/lerolero\$ git branch revisao

lovelace@engine:~/lerolero\$ git switch revisao □

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

lovelace@engine:~/lerolero\$ git pull

Warning: Permanently added the RSA host key for IP address '140.82.113.4' to the list of known hosts.

Enter passphrase for key '/home/lovelace/.ssh/id_rsa':

Already up to date.

lovelace@engine:~/lerolero\$ git branch revisao

lovelace@engine:~/lerolero\$ git switch revisao

Switched to branch 'revisao'

lovelace@engine:~/lerolero\$

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

lovelace@engine:~/lerolero\$ git pull

Warning: Permanently added the RSA host key for IP address '140.82.113.4' to the list of known hosts.

Enter passphrase for key '/home/lovelace/.ssh/id_rsa':

Already up to date.

lovelace@engine:~/lerolero\$ git branch revisao**lovelace@engine:~/lerolero\$ git switch revisao**

Switched to branch 'revisao'

lovelace@engine:~/lerolero\$ vi lerolero.py

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
#!/usr/bin/python3
"""Gerador de lero-lero.

Gera frases de efeito sem significado real."""

```

```
import random
```

```
# Cada frase é composta por três partes aleatórias; aqui,
# listas de possibilidades para cada uma das partes.
```

```
parte1 = [
    "0 sistema em desenvolvimento",
    "0 novo protocolo de comunicação",
    "0 algoritmo otimizado"
]
```

```
parte2 = [
    "possui excelente desempenho",
    "oferece garantias de precisão acima da média",
    "preenche uma lacuna significativa"
```

```
"lerolero.py" 37L, 918C
```

14,1

Topo

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
#!/usr/bin/python3
"""Gerador de lero-lero.

Gera frases de efeito sem significado real."""

```

```
import random
```

```
# Cada frase é composta por três partes aleatórias; aqui,
# listas de possibilidades para cada uma das partes.
```

```
parte1 = [
    "O sistema em desenvolvimento",
    "O novo protocolo de comunicação",
    "O algoritmo foi otimizado e"
]
```

```
parte2 = [
    "possui excelente desempenho",
    "oferece garantias de precisão acima da média",
    "preenche uma lacuna significativa"
]
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

lovelace@engine:~/lerolero\$ git pull

Warning: Permanently added the RSA host key for IP address '140.82.113.4' to the list of known hosts.

Enter passphrase for key '/home/lovelace/.ssh/id_rsa':

Already up to date.

lovelace@engine:~/lerolero\$ git branch revisao**lovelace@engine:~/lerolero\$ git switch revisao**

Switched to branch 'revisao'

lovelace@engine:~/lerolero\$ vi lerolero.py**lovelace@engine:~/lerolero\$ git add lerolero.py** □

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

lovelace@engine:~/lerolero\$ git pull

Warning: Permanently added the RSA host key for IP address '140.82.113.4' to the list of known hosts.

Enter passphrase for key '/home/lovelace/.ssh/id_rsa':

Already up to date.

lovelace@engine:~/lerolero\$ git branch revisao**lovelace@engine:~/lerolero\$ git switch revisao**

Switched to branch 'revisao'

lovelace@engine:~/lerolero\$ vi lerolero.py**lovelace@engine:~/lerolero\$ git add lerolero.py****lovelace@engine:~/lerolero\$** █

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

lovelace@engine:~/lerolero\$ git pull

Warning: Permanently added the RSA host key for IP address '140.82.113.4' to the list of known hosts.

Enter passphrase for key '/home/lovelace/.ssh/id_rsa':

Already up to date.

lovelace@engine:~/lerolero\$ git branch revisao**lovelace@engine:~/lerolero\$ git switch revisao**

Switched to branch 'revisao'

lovelace@engine:~/lerolero\$ vi lerolero.py**lovelace@engine:~/lerolero\$ git add lerolero.py****lovelace@engine:~/lerolero\$ git commit**

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

Modifica frase sobre otimização

```
# Please enter the commit message for your changes. Lines starting
# with '#' will be ignored, and an empty message aborts the commit.
```

#

On branch revisao

Changes to be committed:

```
#       modified:   lerolero.py
```

#

~

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lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

lovelace@engine:~/lerolero\$ git pull

Warning: Permanently added the RSA host key for IP address '140.82.113.4' to the list of known hosts.

Enter passphrase for key '/home/lovelace/.ssh/id_rsa':

Already up to date.

lovelace@engine:~/lerolero\$ git branch revisao**lovelace@engine:~/lerolero\$ git switch revisao**

Switched to branch 'revisao'

lovelace@engine:~/lerolero\$ vi lerolero.py**lovelace@engine:~/lerolero\$ git add lerolero.py****lovelace@engine:~/lerolero\$ git commit**

[revisao b4a4468] Modifica frase sobre otimização

1 file changed, 1 insertion(+), 1 deletion(-)

lovelace@engine:~/lerolero\$ █

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

lovelace@engine:~/lerolero\$ git pull

Warning: Permanently added the RSA host key for IP address '140.82.113.4' to the list of known hosts.

Enter passphrase for key '/home/lovelace/.ssh/id_rsa':

Already up to date.

lovelace@engine:~/lerolero\$ git branch revisao**lovelace@engine:~/lerolero\$ git switch revisao**

Switched to branch 'revisao'

lovelace@engine:~/lerolero\$ vi lerolero.py**lovelace@engine:~/lerolero\$ git add lerolero.py****lovelace@engine:~/lerolero\$ git commit**

[revisao b4a4468] Modifica frase sobre otimização

1 file changed, 1 insertion(+), 1 deletion(-)

lovelace@engine:~/lerolero\$ git switch main

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

lovelace@engine:~/lerolero\$ git pull

Warning: Permanently added the RSA host key for IP address '140.82.113.4' to the list of known hosts.

Enter passphrase for key '/home/lovelace/.ssh/id_rsa':

Already up to date.

lovelace@engine:~/lerolero\$ git branch revisao**lovelace@engine:~/lerolero\$ git switch revisao**

Switched to branch 'revisao'

lovelace@engine:~/lerolero\$ vi lerolero.py**lovelace@engine:~/lerolero\$ git add lerolero.py****lovelace@engine:~/lerolero\$ git commit**

[revisao b4a4468] Modifica frase sobre otimização

1 file changed, 1 insertion(+), 1 deletion(-)

lovelace@engine:~/lerolero\$ git switch main

Switched to branch 'main'

Your branch is up to date with 'origin/main'.

lovelace@engine:~/lerolero\$ git pull

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

lovelace@engine:~/lerolero\$ git pull

Warning: Permanently added the RSA host key for IP address '140.82.113.4' to the list of known hosts.

Enter passphrase for key '/home/lovelace/.ssh/id_rsa':

Already up to date.

lovelace@engine:~/lerolero\$ git branch revisao**lovelace@engine:~/lerolero\$ git switch revisao**

Switched to branch 'revisao'

lovelace@engine:~/lerolero\$ vi lerolero.py**lovelace@engine:~/lerolero\$ git add lerolero.py****lovelace@engine:~/lerolero\$ git commit**

[revisao b4a4468] Modifica frase sobre otimização

1 file changed, 1 insertion(+), 1 deletion(-)

lovelace@engine:~/lerolero\$ git switch main

Switched to branch 'main'

Your branch is up to date with 'origin/main'.

lovelace@engine:~/lerolero\$ git pull

Enter passphrase for key '/home/lovelace/.ssh/id_rsa':

Already up to date.

lovelace@engine:~/lerolero\$

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

lovelace@engine:~/lerolero\$ git pull

Warning: Permanently added the RSA host key for IP address '140.82.113.4' to the list of known hosts.

Enter passphrase for key '/home/lovelace/.ssh/id_rsa':

Already up to date.

lovelace@engine:~/lerolero\$ git branch revisao**lovelace@engine:~/lerolero\$ git switch revisao**

Switched to branch 'revisao'

lovelace@engine:~/lerolero\$ vi lerolero.py**lovelace@engine:~/lerolero\$ git add lerolero.py****lovelace@engine:~/lerolero\$ git commit**

[revisao b4a4468] Modifica frase sobre otimização

1 file changed, 1 insertion(+), 1 deletion(-)

lovelace@engine:~/lerolero\$ git switch main

Switched to branch 'main'

Your branch is up to date with 'origin/main'.

lovelace@engine:~/lerolero\$ git pull

Enter passphrase for key '/home/lovelace/.ssh/id_rsa':

Already up to date.

lovelace@engine:~/lerolero\$ git merge revisao □

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

Already up to date.

```
lovelace@engine:~/lerolero$ git branch revisao
```

```
lovelace@engine:~/lerolero$ git switch revisao
```

Switched to branch 'revisao'

```
lovelace@engine:~/lerolero$ vi lerolero.py
```

```
lovelace@engine:~/lerolero$ git add lerolero.py
```

```
lovelace@engine:~/lerolero$ git commit
```

[revisao b4a4468] Modifica frase sobre otimização

1 file changed, 1 insertion(+), 1 deletion(-)

```
lovelace@engine:~/lerolero$ git switch main
```

Switched to branch 'main'

Your branch is up to date with 'origin/main'.

```
lovelace@engine:~/lerolero$ git pull
```

Enter passphrase for key '/home/lovelace/.ssh/id_rsa':

Already up to date.

```
lovelace@engine:~/lerolero$ git merge revisao
```

Updating b881c34..b4a4468

Fast-forward

```
lerolero.py | 2 +-
```

1 file changed, 1 insertion(+), 1 deletion(-)

```
lovelace@engine:~/lerolero$ 
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

Already up to date.

```
lovelace@engine:~/lerolero$ git branch revisao
```

```
lovelace@engine:~/lerolero$ git switch revisao
```

Switched to branch 'revisao'

```
lovelace@engine:~/lerolero$ vi lerolero.py
```

```
lovelace@engine:~/lerolero$ git add lerolero.py
```

```
lovelace@engine:~/lerolero$ git commit
```

[revisao b4a4468] Modifica frase sobre otimização

1 file changed, 1 insertion(+), 1 deletion(-)

```
lovelace@engine:~/lerolero$ git switch main
```

Switched to branch 'main'

Your branch is up to date with 'origin/main'.

```
lovelace@engine:~/lerolero$ git pull
```

Enter passphrase for key '/home/lovelace/.ssh/id_rsa':

Already up to date.

```
lovelace@engine:~/lerolero$ git merge revisao
```

Updating b881c34..b4a4468

Fast-forward

```
lerolero.py | 2 +-
```

1 file changed, 1 insertion(+), 1 deletion(-)

```
lovelace@engine:~/lerolero$ git push
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

Your branch is up to date with 'origin/main'.

lovelace@engine:~/lerolero\$ git pull

Enter passphrase for key '/home/lovelace/.ssh/id_rsa':

Already up to date.

lovelace@engine:~/lerolero\$ git merge revisao

Updating b881c34..b4a4468

Fast-forward

lerolero.py | 2 +-

1 file changed, 1 insertion(+), 1 deletion(-)

lovelace@engine:~/lerolero\$ git push

Enter passphrase for key '/home/lovelace/.ssh/id_rsa':

Enumerating objects: 5, done.

Counting objects: 100% (5/5), done.

Delta compression using up to 8 threads

Compressing objects: 100% (3/3), done.

Writing objects: 100% (3/3), 329 bytes | 329.00 KiB/s, done.

Total 3 (delta 2), reused 0 (delta 0), pack-reused 0

remote: Resolving deltas: 100% (2/2), completed with 2 local objects.

To github.com:urrameu/lerolero.git

b881c34..b4a4468 main -> main

lovelace@engine:~/lerolero\$

Arquivo Editar Ver Pesquisar Terminal Abas Ajuda

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

turing@machine:~/lerolero\$ git status

lovelace@drivethru: ~/lerolero

```
turing@machine:~/lerolero$ git status
On branch estilo
nothing to commit, working tree clean
turing@machine:~/lerolero$ 
```

turing@drivethru: ~/lerolero

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

turing@machine:~/lerolero\$ git status

On branch estilo

nothing to commit, working tree clean

turing@machine:~/lerolero\$ git switch main

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
turing@machine:~/lerolero$ git status
On branch estilo
nothing to commit, working tree clean
turing@machine:~/lerolero$ git switch main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.
turing@machine:~/lerolero$ 
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
turing@machine:~/lerolero$ git status
On branch estilo
nothing to commit, working tree clean
turing@machine:~/lerolero$ git switch main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.
turing@machine:~/lerolero$ git pull
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
turing@machine:~/lerolero$ git status
On branch estilo
nothing to commit, working tree clean
turing@machine:~/lerolero$ git switch main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.
turing@machine:~/lerolero$ git pull
Enter passphrase for key '/home/turing/.ssh/id_rsa':
remote: Enumerating objects: 5, done.
remote: Counting objects: 100% (5/5), done.
remote: Compressing objects: 100% (1/1), done.
remote: Total 3 (delta 2), reused 3 (delta 2), pack-reused 0
Unpacking objects: 100% (3/3), 309 bytes | 154.00 KiB/s, done.
From github.com:urrameu/lerolero
  b881c34..b4a4468  main      -> origin/main
Updating b881c34..b4a4468
Fast-forward
  lerolero.py | 2 +-
  1 file changed, 1 insertion(+), 1 deletion(-)
turing@machine:~/lerolero$ 
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
turing@machine:~/lerolero$ git status
On branch estilo
nothing to commit, working tree clean
turing@machine:~/lerolero$ git switch main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.
turing@machine:~/lerolero$ git pull
Enter passphrase for key '/home/turing/.ssh/id_rsa':
remote: Enumerating objects: 5, done.
remote: Counting objects: 100% (5/5), done.
remote: Compressing objects: 100% (1/1), done.
remote: Total 3 (delta 2), reused 3 (delta 2), pack-reused 0
Unpacking objects: 100% (3/3), 309 bytes | 154.00 KiB/s, done.
From github.com:urrameu/lerolero
  b881c34..b4a4468  main      -> origin/main
Updating b881c34..b4a4468
Fast-forward
  lerolero.py | 2 +-
   1 file changed, 1 insertion(+), 1 deletion(-)
turing@machine:~/lerolero$ git switch estilo
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
On branch estilo
nothing to commit, working tree clean
turing@machine:~/lerolero$ git switch main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.
turing@machine:~/lerolero$ git pull
Enter passphrase for key '/home/turing/.ssh/id_rsa':
remote: Enumerating objects: 5, done.
remote: Counting objects: 100% (5/5), done.
remote: Compressing objects: 100% (1/1), done.
remote: Total 3 (delta 2), reused 3 (delta 2), pack-reused 0
Unpacking objects: 100% (3/3), 309 bytes | 154.00 KiB/s, done.
From github.com:urrameu/lerolero
  b881c34..b4a4468  main      -> origin/main
Updating b881c34..b4a4468
Fast-forward
  lerolero.py | 2 +-
  1 file changed, 1 insertion(+), 1 deletion(-)
turing@machine:~/lerolero$ git switch estilo
Switched to branch 'estilo'
turing@machine:~/lerolero$
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
On branch estilo
nothing to commit, working tree clean
turing@machine:~/lerolero$ git switch main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.
turing@machine:~/lerolero$ git pull
Enter passphrase for key '/home/turing/.ssh/id_rsa':
remote: Enumerating objects: 5, done.
remote: Counting objects: 100% (5/5), done.
remote: Compressing objects: 100% (1/1), done.
remote: Total 3 (delta 2), reused 3 (delta 2), pack-reused 0
Unpacking objects: 100% (3/3), 309 bytes | 154.00 KiB/s, done.
From github.com:urrameu/lerolero
  b881c34..b4a4468  main      -> origin/main
Updating b881c34..b4a4468
Fast-forward
  lerolero.py | 2 +-
  1 file changed, 1 insertion(+), 1 deletion(-)
turing@machine:~/lerolero$ git switch estilo
Switched to branch 'estilo'
turing@machine:~/lerolero$ git merge main
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

Your branch is up to date with 'origin/main'.

turing@machine:~/lerolero\$ git pull

Enter passphrase for key '/home/turing/.ssh/id_rsa':

remote: Enumerating objects: 5, done.

remote: Counting objects: 100% (5/5), done.

remote: Compressing objects: 100% (1/1), done.

remote: Total 3 (delta 2), reused 3 (delta 2), pack-reused 0

Unpacking objects: 100% (3/3), 309 bytes | 154.00 KiB/s, done.

From github.com:urrameu/lerolero

 b881c34..b4a4468 main -> origin/main

Updating b881c34..b4a4468

Fast-forward

 lerolero.py | 2 +-

 1 file changed, 1 insertion(+), 1 deletion(-)

turing@machine:~/lerolero\$ git switch estilo

Switched to branch 'estilo'

turing@machine:~/lerolero\$ git merge main

Auto-merging lerolero.py

CONFLICT (content): Merge conflict in lerolero.py

Automatic merge failed; fix conflicts and then commit the result.

turing@machine:~/lerolero\$

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

Your branch is up to date with 'origin/main'.

turing@machine:~/lerolero\$ git pull

Enter passphrase for key '/home/turing/.ssh/id_rsa':

remote: Enumerating objects: 5, done.

remote: Counting objects: 100% (5/5), done.

remote: Compressing objects: 100% (1/1), done.

remote: Total 3 (delta 2), reused 3 (delta 2), pack-reused 0

Unpacking objects: 100% (3/3), 309 bytes | 154.00 KiB/s, done.

From github.com:urrameu/lerolero

 b881c34..b4a4468 main -> origin/main

Updating b881c34..b4a4468

Fast-forward

 lerolero.py | 2 +-

 1 file changed, 1 insertion(+), 1 deletion(-)

turing@machine:~/lerolero\$ git switch estilo

Switched to branch 'estilo'

turing@machine:~/lerolero\$ git merge main

Auto-merging lerolero.py

CONFLICT (content): Merge conflict in lerolero.py

Automatic merge failed; fix conflicts and then commit the result.

turing@machine:~/lerolero\$ git status

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

Fast-forward

```
lerolero.py | 2 +-
1 file changed, 1 insertion(+), 1 deletion(-)
```

turing@machine:~/lerolero\$ git switch estilo

Switched to branch 'estilo'

turing@machine:~/lerolero\$ git merge main

Auto-merging lerolero.py

CONFLICT (content): Merge conflict in lerolero.py

Automatic merge failed; fix conflicts and then commit the result.

turing@machine:~/lerolero\$ git status

On branch estilo

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: lerolero.py

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

turing@machine:~/lerolero\$

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

Fast-forward

```
lerolero.py | 2 +-
1 file changed, 1 insertion(+), 1 deletion(-)
```

turing@machine:~/lerolero\$ git switch estilo

Switched to branch 'estilo'

turing@machine:~/lerolero\$ git merge main

Auto-merging lerolero.py

CONFLICT (content): Merge conflict in lerolero.py

Automatic merge failed; fix conflicts and then commit the result.

turing@machine:~/lerolero\$ git status

On branch estilo

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: lerolero.py

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

turing@machine:~/lerolero\$ vi lerolero.py □

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
#!/usr/bin/python3
"""Gerador de lero-lero.

Gera frases de efeito sem significado real."""

import random

# Cada frase é composta por três partes aleatórias; aqui,
# listas de possibilidades para cada uma das partes.

partel = [
    "O sistema em desenvolvimento",
    "O novo protocolo de comunicação",
<<<<< HEAD
    "O algoritmo de otimização"
=====
    "O algoritmo foi otimizado e"
>>>>> main
]
```

"lerolero.py" 41L, 992C

14,12

Topo

```
#!/usr/bin/python3
```

```
"""Gerador de lero-lero.
```

```
Gera frases de efeito sem significado real."""
```

```
import random
```

```
# Cada frase é composta por três partes aleatórias; aqui,  
# listas de possibilidades para cada uma das partes.
```

```
parte1 = [  
    "O sistema em desenvolvimento",  
    "O novo protocolo de comunicação",  
    "O algoritmo foi otimizado e"  
]
```

```
parte2 = [  
    "possui excelente desempenho",  
    "oferece garantias de precisão acima da média",  
    "preenche uma lacuna significativa"
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
lerolero.py | 2 +-
 1 file changed, 1 insertion(+), 1 deletion(-)
turing@machine:~/lerolero$ git switch estilo
Switched to branch 'estilo'
turing@machine:~/lerolero$ git merge main
Auto-merging lerolero.py
CONFLICT (content): Merge conflict in lerolero.py
Automatic merge failed; fix conflicts and then commit the result.
turing@machine:~/lerolero$ git status
On branch estilo
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:  lerolero.py

no changes added to commit (use "git add" and/or "git commit -a")
turing@machine:~/lerolero$ vi lerolero.py
turing@machine:~/lerolero$ 
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
lerolero.py | 2 +-
 1 file changed, 1 insertion(+), 1 deletion(-)
turing@machine:~/lerolero$ git switch estilo
Switched to branch 'estilo'
turing@machine:~/lerolero$ git merge main
Auto-merging lerolero.py
CONFLICT (content): Merge conflict in lerolero.py
Automatic merge failed; fix conflicts and then commit the result.
turing@machine:~/lerolero$ git status
On branch estilo
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:  lerolero.py

no changes added to commit (use "git add" and/or "git commit -a")
turing@machine:~/lerolero$ vi lerolero.py
turing@machine:~/lerolero$ git status
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
(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:  lerolero.py
```

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

```
turing@machine:~/lerolero$ vi lerolero.py
```

```
turing@machine:~/lerolero$ git status
```

On branch estilo

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:  lerolero.py
```

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

```
turing@machine:~/lerolero$ 
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
(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:  lerolero.py
```

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

```
turing@machine:~/lerolero$ vi lerolero.py
```

```
turing@machine:~/lerolero$ git status
```

On branch estilo

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:  lerolero.py
```

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

```
turing@machine:~/lerolero$ git add lerolero.py □
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

(use "git merge --abort" to abort the merge)

Unmerged paths:

(use "git add <file>..." to mark resolution)
both modified: lerolero.py

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

turing@machine:~/lerolero\$ vi lerolero.py

turing@machine:~/lerolero\$ git status

On branch estilo

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: lerolero.py

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

turing@machine:~/lerolero\$ git add lerolero.py

turing@machine:~/lerolero\$ git status

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

turing@machine:~/lerolero\$ git status

On branch estilo

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: lerolero.py

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

turing@machine:~/lerolero\$ git add lerolero.py**turing@machine:~/lerolero\$ git status**

On branch estilo

All conflicts fixed but you are still merging.

(use "git commit" to conclude merge)

Changes to be committed:

modified: lerolero.py

turing@machine:~/lerolero\$

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

turing@machine:~/lerolero\$ git status

On branch estilo

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: lerolero.py

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

turing@machine:~/lerolero\$ git add lerolero.py**turing@machine:~/lerolero\$ git status**

On branch estilo

All conflicts fixed but you are still merging.

(use "git commit" to conclude merge)

Changes to be committed:

modified: lerolero.py

turing@machine:~/lerolero\$ git merge --continue

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
Merge branch 'main' into estilo
```

```
# Conflicts:  
#           lerolero.py  
#  
# It looks like you may be committing a merge.  
# If this is not correct, please remove the file  
#       .git/MERGE_HEAD  
# and try again.
```

```
# Please enter the commit message for your changes. Lines starting  
# with '#' will be ignored, and an empty message aborts the commit.  
#  
# On branch estilo  
# All conflicts fixed but you are still merging.  
#  
# Changes to be committed:  
#           modified:   lerolero.py  
#
```

```
"~/lerolero/.git/COMMIT_EDITMSG" 20L, 457C
```

```
1,1
```

```
Tudo
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

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: lerolero.py

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

turing@machine:~/lerolero\$ git add lerolero.py

turing@machine:~/lerolero\$ git status

On branch estilo

All conflicts fixed but you are still merging.

(use "git commit" to conclude merge)

Changes to be committed:

modified: lerolero.py

turing@machine:~/lerolero\$ git merge --continue

[estilo f14f2df] Merge branch 'main' into estilo

turing@machine:~/lerolero\$

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

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: **lerolero.py**

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

turing@machine:~/lerolero\$ git add lerolero.py

turing@machine:~/lerolero\$ git status

On branch estilo

All conflicts fixed but you are still merging.

(use "git commit" to conclude merge)

Changes to be committed:

 modified: **lerolero.py**

turing@machine:~/lerolero\$ git merge --continue

[estilo f14f2df] Merge branch 'main' into estilo

turing@machine:~/lerolero\$ git switch main □

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

Unmerged paths:

(use "git add <file>..." to mark resolution)
 both modified: lerolero.py

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

turing@machine:~/lerolero\$ git add lerolero.py

turing@machine:~/lerolero\$ git status

On branch estilo

All conflicts fixed but you are still merging.

(use "git commit" to conclude merge)

Changes to be committed:

 modified: lerolero.py

turing@machine:~/lerolero\$ git merge --continue

[estilo f14f2df] Merge branch 'main' into estilo

turing@machine:~/lerolero\$ git switch main

Switched to branch 'main'

Your branch is up to date with 'origin/main'.

turing@machine:~/lerolero\$

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

Unmerged paths:

(use "git add <file>..." to mark resolution)
 both modified: lerolero.py

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

turing@machine:~/lerolero\$ git add lerolero.py

turing@machine:~/lerolero\$ git status

On branch estilo

All conflicts fixed but you are still merging.

(use "git commit" to conclude merge)

Changes to be committed:

 modified: lerolero.py

turing@machine:~/lerolero\$ git merge --continue

[estilo f14f2df] Merge branch 'main' into estilo

turing@machine:~/lerolero\$ git switch main

Switched to branch 'main'

Your branch is up to date with 'origin/main'.

turing@machine:~/lerolero\$ git merge estilo □

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

both modified: lerolero.py

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

turing@machine:~/lerolero\$ git add lerolero.py

turing@machine:~/lerolero\$ git status

On branch estilo

All conflicts fixed but you are still merging.

(use "git commit" to conclude merge)

Changes to be committed:

modified: lerolero.py

turing@machine:~/lerolero\$ git merge --continue

[estilo f14f2df] Merge branch 'main' into estilo

turing@machine:~/lerolero\$ git switch main

Switched to branch 'main'

Your branch is up to date with 'origin/main'.

turing@machine:~/lerolero\$ git merge estilo

Updating b4a4468..f14f2df

Fast-forward

turing@machine:~/lerolero\$

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

both modified: lerolero.py

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

turing@machine:~/lerolero\$ git add lerolero.py

turing@machine:~/lerolero\$ git status

On branch estilo

All conflicts fixed but you are still merging.

(use "git commit" to conclude merge)

Changes to be committed:

modified: lerolero.py

turing@machine:~/lerolero\$ git merge --continue

[estilo f14f2df] Merge branch 'main' into estilo

turing@machine:~/lerolero\$ git switch main

Switched to branch 'main'

Your branch is up to date with 'origin/main'.

turing@machine:~/lerolero\$ git merge estilo

Updating b4a4468..f14f2df

Fast-forward

turing@machine:~/lerolero\$ git push

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
[estilo f14f2df] Merge branch 'main' into estilo
```

```
turing@machine:~/lerolero$ git switch main
```

```
Switched to branch 'main'
```

```
Your branch is up to date with 'origin/main'.
```

```
turing@machine:~/lerolero$ git merge estilo
```

```
Updating b4a4468..f14f2df
```

```
Fast-forward
```

```
turing@machine:~/lerolero$ git push
```

```
Warning: Permanently added the RSA host key for IP address '140.82.112.3' to the list of known hosts.
```

```
Enter passphrase for key '/home/turing/.ssh/id_rsa':
```

```
Enumerating objects: 8, done.
```

```
Counting objects: 100% (8/8), done.
```

```
Delta compression using up to 8 threads
```

```
Compressing objects: 100% (4/4), done.
```

```
Writing objects: 100% (4/4), 506 bytes | 506.00 KiB/s, done.
```

```
Total 4 (delta 2), reused 0 (delta 0), pack-reused 0
```

```
remote: Resolving deltas: 100% (2/2), completed with 2 local objects.
```

```
To github.com:urrameu/lerolero.git
```

```
 b4a4468..f14f2df main -> main
```

```
turing@machine:~/lerolero$ 
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
[estilo f14f2df] Merge branch 'main' into estilo
```

```
turing@machine:~/lerolero$ git switch main
```

```
Switched to branch 'main'
```

```
Your branch is up to date with 'origin/main'.
```

```
turing@machine:~/lerolero$ git merge estilo
```

```
Updating b4a4468..f14f2df
```

```
Fast-forward
```

```
turing@machine:~/lerolero$ git push
```

```
Warning: Permanently added the RSA host key for IP address '140.82.112.3' to the list of known hosts.
```

```
Enter passphrase for key '/home/turing/.ssh/id_rsa':
```

```
Enumerating objects: 8, done.
```

```
Counting objects: 100% (8/8), done.
```

```
Delta compression using up to 8 threads
```

```
Compressing objects: 100% (4/4), done.
```

```
Writing objects: 100% (4/4), 506 bytes | 506.00 KiB/s, done.
```

```
Total 4 (delta 2), reused 0 (delta 0), pack-reused 0
```

```
remote: Resolving deltas: 100% (2/2), completed with 2 local objects.
```

```
To github.com:urrameu/lerolero.git
```

```
 b4a4468..f14f2df main -> main
```

```
turing@machine:~/lerolero$ git log
```

lovelace@drivethru: ~/lerolero

turing@drivethru: ~/lerolero

```
commit f14f2df7a751e09c40eb133e2428af499277aac2 (HEAD -> main, origin/main, origin/HEAD, estilo)
```

Merge: b29477a b4a4468

Author: Alan Turing <turing@machine.com>

Date: Wed Nov 18 14:25:53 2020 -0300

Merge branch 'main' into estilo

```
commit b4a4468b1df6ac128d1c38a67167cff44ea7009f
```

Author: Ada Lovelace <ada@analyticalengine.com>

Date: Wed Nov 18 14:19:12 2020 -0300

Modifica frase sobre otimização

```
commit b29477a43216310d205e4927c2cb1a3ce52ff38c
```

Author: Alan Turing <turing@machine.com>

Date: Wed Nov 18 14:15:29 2020 -0300

Melhora um dos textos





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urrameu / lerolero

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Insights

Settings

main

1 branch

0 tags

Go to file

Add file

Code



Alan Turing Merge branch 'main' into estilo

f14f2df 2 minutes ago 10 commits

LICENSE

Initial commit

2 days ago

README.md

Acrescenta descrição do projeto ao README

3 hours ago

lerolero.py

Modifica frase sobre otimização

9 minutes ago

README.md



lerolero

Um gerador de frases de efeito sem sentido.

About



No description, website, or topics provided.

Readme

GPL-3.0 License

Releases

No releases published

Create a new release

Packages

No packages published

Publish your first package

Aplicativos ▾ Gitk ▾

qua 18 de nov 14:29

lerolero: --all - gith

pt ▾ 100% ▾

Arquivo Editar Exibir Ajuda

main remotes/origin/main Merge branch 'main' into estilo

Modifica frase sobre otimização
Melhora um dos textos
Merge branch 'ingles' into main
Cria esqueleto da versão multi-línguas
Insere os trechos das frases
Implementa esqueleto do programa
Cria arquivo inicial do programa
Acrescenta descrição do projeto ao README
Initial commit

Alan Turing <turing@machine.com> 2020-11-18 14:25:53
Ada Lovelace <ada@analyticalengin> 2020-11-18 14:19:12
Alan Turing <turing@machine.com> 2020-11-18 14:15:29
Ada Lovelace <ada@analyticalengin> 2020-11-18 14:07:57
Ada Lovelace <ada@analyticalengin> 2020-11-18 13:57:47
Alan Turing <turing@machine.com> 2020-11-18 14:02:38
Alan Turing <turing@machine.com> 2020-11-18 12:05:19
Alan Turing <turing@machine.com> 2020-11-18 12:00:50
Ada Lovelace <ada@analyticalengin> 2020-11-18 11:40:59
Nelson Lago <lago@ime.usp.br> 2020-11-16 13:53:13

SHA1 ID: f14f2df7a751e09c40eb133e2428af499277aac2 ↵ Linha 1/ 10 | Exatamente Todos os campos

Encontrar ↴ ↵ Revisão conteúdo: .

Buscar

• Diferenças • Versão antiga • Versão nova Número de

Autor: Alan Turing <turing@machine.com> 2020-11-18 14:25:53
Revisor: Alan Turing <turing@machine.com> 2020-11-18 14:25:53
Antecessor: b29477a43216310d205e4927c2cb1a3ce52
Antecessor: b4a4468b1df6ac128d1c38a67167cff44ea
Ramo: [main](#), [remotes/origin/main](#)

Segue:
Precede:

Merge branch 'main' into estilo

- **git possui *hooks* (“ganchos”)**

- ▶ *hooks* permitem que você “pendure” ações adicionais em algum comando
 - » *gitlab e github possuem outros mecanismos de automação, mas a ideia é similar*

- **Por exemplo, você pode “pendurar” um script em **git commit****

- ▶ Esse script pode notificar outros usuários sobre a nova versão, verificar se há erros etc.
 - » *Uma ideia interessante é garantir que todo **commit** execute os testes do programa*
 - » *Em caso de falha nos testes, o script pode notificar o usuário de diversas maneiras*

Recursos avançados: histórico de conteúdo

- **Você refatora seu código e**

- Renomeia um arquivo
- Divide o conteúdo de um arquivo em dois
- Mescla o conteúdo de dois arquivos em um só
- Muda uma função/método de lugar/classe/arquivo

- **Como entender esse histórico depois?**

- **git vê o histórico do repositório como um todo, não de arquivos individuais**

- `git blame -C`

- `git log --follow`

- Arquivos renomeados etc. são detectados pela similaridade entre arquivos, não armazenados como um “evento” parte de uma *revision*

- » *É por isso que o desempenho com muitos arquivos sofre*

Recursos avançados: *commits* parciais

- **Você está corrigindo um bug e encontra um outro defeito**
 - ▶ Como salvar suas alterações sem que ambas as correções estejam em uma única *revision*?
- **Você corrigiu um bug, mas acha que pode encontrar uma solução melhor**
 - ▶ Como salvar suas alterações entre um passo e o outro sem gerar duas *revisions* (uma com a correção “ruim”, outra com a correção “boa”)?
- **git add -p permite copiar apenas parte das modificações para a *staging area***
 - ▶ Permite dividir as modificações do workdir em mais de um **commit**
 - ▶ Permite guardar o estado atual do workdir temporariamente até o próximo **commit**

Recursos avançados: mocó (esconderijo)

- Você está corrigindo um bug complicado mas, no meio do caminho, surge um bug de segurança urgente
 - ▶ Como corrigir esse bug
 - » Sem perder suas alterações atuais do workdir
 - » Sem criar uma revision com a correção atual incompleta
 - » Sem criar uma revision misturando as duas correções?
- git permite “esconder” o estado atual da árvore de trabalho (**git stash**)
 - ▶ Com isso, a árvore volta à última versão do repositório (**HEAD**)
 - ▶ Após corrigir o bug de segurança e fazer **commit**, recupera o trabalho anterior (**git stash pop**)
 - » git mescla a versão escondida com a versão atual no workdir
- **git stash** é equivalente a
 - ▶ Gerar uma nova *revision* que não pertence a nenhum *branch*
 - ▶ **git restore --worktree --staged .**
- **git stash pop** é equivalente a mesclar essa *revision* com o workdir

Recursos avançados: dupla personalidade

- Você gostaria de compilar duas versões do seu projeto ao mesmo tempo
 - ▶ Ou compilar uma enquanto corrige um bug em outra
 - ▶ Ou trabalhar em dois *branches* ao mesmo tempo
 - ▶ Ou não quer usar **git stash**
 - ▶ ...
- **git worktree** permite ter duas áreas de trabalho simultâneas
 - ▶ Em dois diretórios diferentes, claro!

- Algum **commit** recente introduziu um bug, você quer saber qual
- git automatiza uma busca binária entre *revisions* (**git bisect**)
 - ▶ git faz **switch** para uma versão do histórico
 - ▶ Usuário indica se a versão inclui ou não o bug (**git bisect good/bad**)
 - » *Após compilar a versão ou rodar um teste etc.*
 - ▶ git faz **switch** para uma outra versão do histórico
 - ▶ ...
 - ▶ Até identificar a versão em que o problema aparece

Recursos avançados: limpeza de histórico

- Você fez vários commits
 - ▶ Alguns errados, outros irrelevantes, alguns merges...
- e gostaria que o histórico não incluísse todos os passos separadamente
 - ▶ mas agregasse o material nas etapas relevantes
- Você criou um novo *branch* e aplicou diversas modificações a ele
- Ao fazer **merge**, você acrescenta a informação sobre o *branch* ao histórico
 - ▶ O histórico fica mais complexo
 - » Pode haver vários branches em paralelo
- Entender a evolução do código fica mais difícil
 - ▶ Seria melhor se a história fosse linear
- git permite reescrever a história de um ramo (**git rebase**)

O livro com “tudo” sobre git (em inglês):

<https://git-scm.com/docs>

Uma boa introdução (em português):

<https://www.youtube.com/playlist?list=PLInBAd9OZCzzHBJjLFZzRl6DgUmOeG3H0>