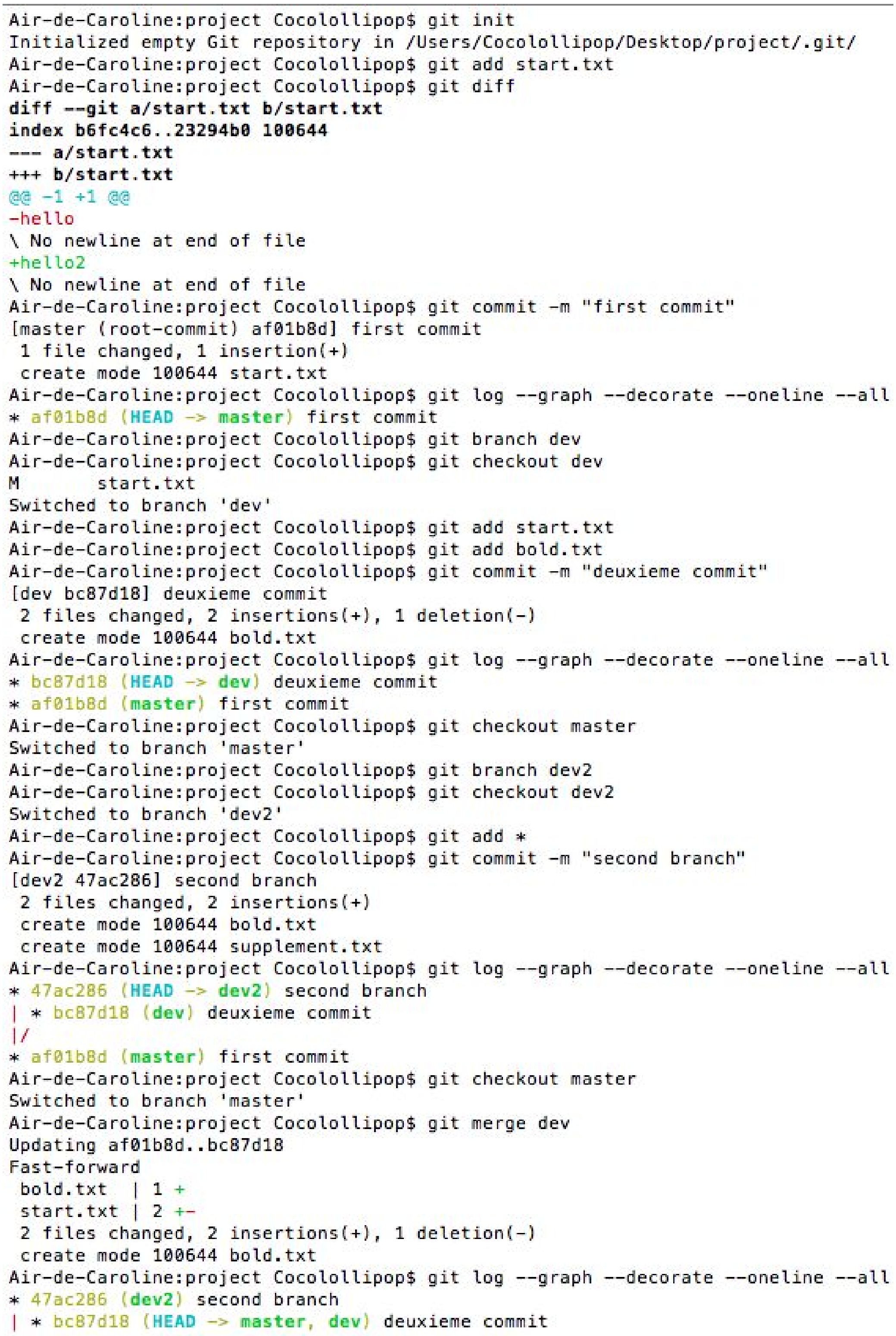
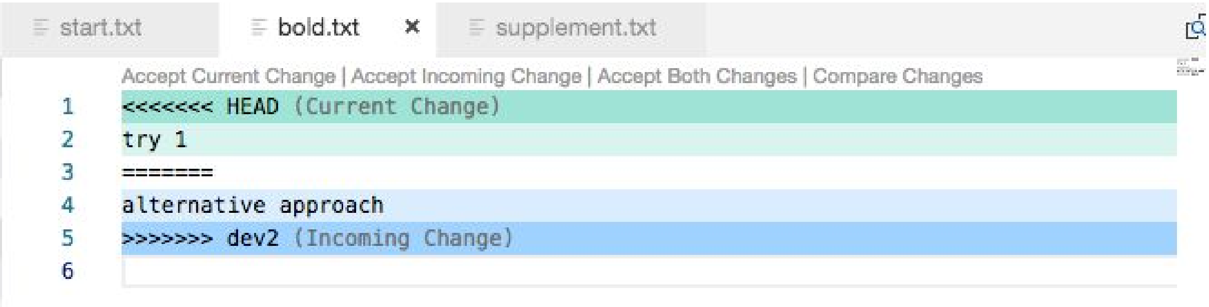
Local repository

Le premier commit est envoyé en local



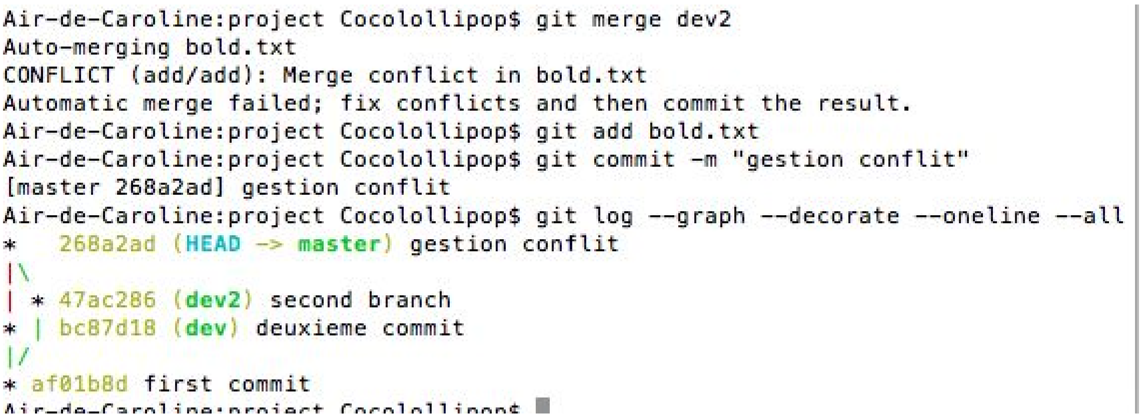
```
Air-de-Caroline:project Cocolollipop$ git init
Initialized empty Git repository in /Users/Cocolollipop/Desktop/project/.git/
Air-de-Caroline:project Cocolollipop$ git add start.txt
Air-de-Caroline:project Cocolollipop$ git diff
diff --git a/start.txt b/start.txt
index b6fc4c6..23294b0 100644
--- a/start.txt
+++ b/start.txt
@@ -1 +1 @@
-hello
\ No newline at end of file
+hello2
\ No newline at end of file
Air-de-Caroline:project Cocolollipop$ git commit -m "first commit"
[master (root-commit) af01b8d] first commit
 1 file changed, 1 insertion(+)
 create mode 100644 start.txt
Air-de-Caroline:project Cocolollipop$ git log --graph --decorate --oneline --all
* af01b8d (HEAD -> master) first commit
Air-de-Caroline:project Cocolollipop$ git branch dev
Air-de-Caroline:project Cocolollipop$ git checkout dev
M       start.txt
Switched to branch 'dev'
Air-de-Caroline:project Cocolollipop$ git add start.txt
Air-de-Caroline:project Cocolollipop$ git add bold.txt
Air-de-Caroline:project Cocolollipop$ git commit -m "deuxieme commit"
[dev bc87d18] deuxieme commit
 2 files changed, 2 insertions(+), 1 deletion(-)
 create mode 100644 bold.txt
Air-de-Caroline:project Cocolollipop$ git log --graph --decorate --oneline --all
* bc87d18 (HEAD -> dev) deuxieme commit
* af01b8d (master) first commit
Air-de-Caroline:project Cocolollipop$ git checkout master
Switched to branch 'master'
Air-de-Caroline:project Cocolollipop$ git branch dev2
Air-de-Caroline:project Cocolollipop$ git checkout dev2
Switched to branch 'dev2'
Air-de-Caroline:project Cocolollipop$ git add *
Air-de-Caroline:project Cocolollipop$ git commit -m "second branch"
[dev2 47ac286] second branch
 2 files changed, 2 insertions(+)
 create mode 100644 bold.txt
 create mode 100644 supplement.txt
Air-de-Caroline:project Cocolollipop$ git log --graph --decorate --oneline --all
* 47ac286 (HEAD -> dev2) second branch
| * bc87d18 (dev) deuxieme commit
|/
* af01b8d (master) first commit
Air-de-Caroline:project Cocolollipop$ git checkout master
Switched to branch 'master'
Air-de-Caroline:project Cocolollipop$ git merge dev
Updating af01b8d..bc87d18
Fast-forward
 bold.txt  | 1 +
 start.txt | 2 +-
 2 files changed, 2 insertions(+), 1 deletion(-)
 create mode 100644 bold.txt
Air-de-Caroline:project Cocolollipop$ git log --graph --decorate --oneline --all
* 47ac286 (dev2) second branch
| * bc87d18 (HEAD -> master, dev) deuxieme commit
```

Merge :
On va avoir un conflit car dans la version bold.txt de la branche dev on a “try 1” tandis qu’à la même ligne dans la version bold.txt de la branche dev2 on a “alternative approach”.
Par conséquent, git ne sait pas quelle modification apporter au fichier : il demande à l’utilisateur de gérer manuellement le confilt pour poursuivre


start.txt
bold.txt
supplement.txt
Accept Current Change | Accept Incoming Change | Accept Both Changes | Compare Changes

```
<<<<<<< HEAD (Current Change)
try 1
=======
alternative approach
>>>>>>> dev2 (Incoming Change)

```

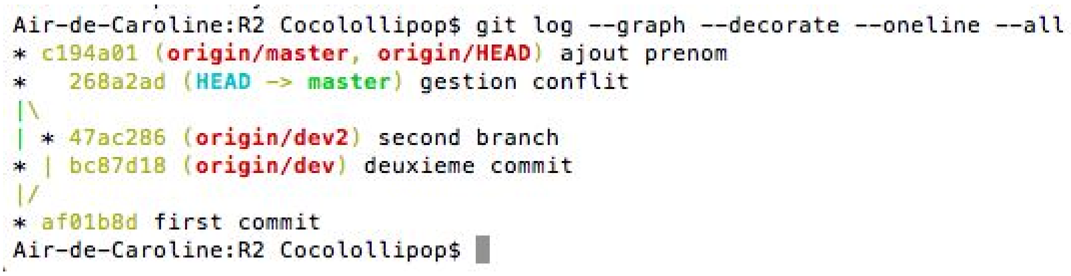


```
Air-de-Caroline:project Cocolollipop$ git merge dev2
Auto-merging bold.txt
CONFLICT (add/add): Merge conflict in bold.txt
Automatic merge failed; fix conflicts and then commit the result.
Air-de-Caroline:project Cocolollipop$ git add bold.txt
Air-de-Caroline:project Cocolollipop$ git commit -m "gestion conflit"
[master 268a2ad] gestion conflit
Air-de-Caroline:project Cocolollipop$ git log --graph --decorate --oneline --all
*   268a2ad (HEAD -> master) gestion conflit
|\
| * 47ac286 (dev2) second branch
* | bc87d18 (dev) deuxieme commit
|/
* af01b8d first commit
Air-de-Caroline:project Cocolollipop$
```

Remote repository

Predict what `master` and `origin/master` refer to in R2, and check. What is in the file `bold.txt` in R2? Why?

master et origin/master se réfèrent au commit “ajout prenom” dans R1

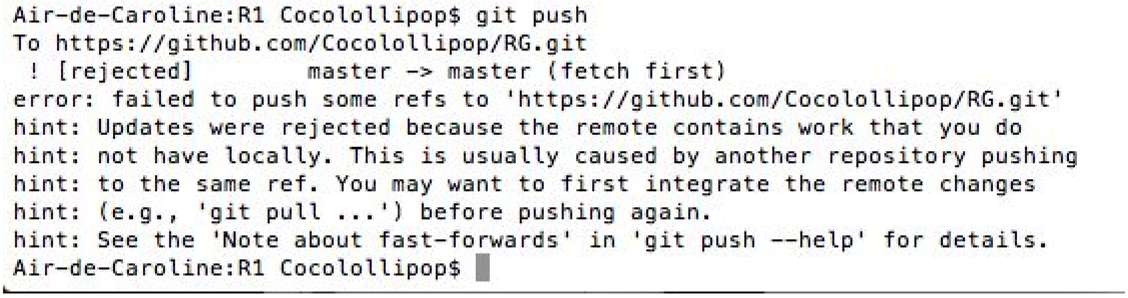


```
Air-de-Caroline:R2 Cocolollipop$ git log --graph --decorate --oneline --all
* c194a01 (origin/master, origin/HEAD) ajout prenom
*   268a2ad (HEAD -> master) gestion conflit
|\
| * 47ac286 (origin/dev2) second branch
* | bc87d18 (origin/dev) deuxieme commit
|/
* af01b8d first commit
Air-de-Caroline:R2 Cocolollipop$
```

Pourtant, dans bold.txt le prénom n’a pas été ajouté. En effet, R2 se réfère à R1 mais les modifications apportées ne sont pas répercutées directement : il faut utiliser git fetch pour apporter les modifications nécessaires

Remote repository on GitHub

Modify something in R1, commit. Try to send it to RG. Why is it refused? How can you effectively send your last modification online? Send it to your RG repository.



```
Air-de-Caroline:R1 Cocolollipop$ git push
To https://github.com/Cocolollipop/RG.git
 ! [rejected]        master -> master (fetch first)
error: failed to push some refs to 'https://github.com/Cocolollipop/RG.git'
hint: Updates were rejected because the remote contains work that you do
hint: not have locally. This is usually caused by another repository pushing
hint: to the same ref. You may want to first integrate the remote changes
hint: (e.g., 'git pull ...') before pushing again.
hint: See the 'Note about fast-forwards' in 'git push --help' for details.
Air-de-Caroline:R1 Cocolollipop$ 
```

Il refuse car il y a un décalage entre R1 et RG.
Pour envoyer les modifications il faut faire un commit, un fetch, pull et push