

GitTaskPart2

Work with the repository of the first task.

!!! Don't change the content of the same file when you switch the branches to avoid file's conflict

1. on branch develop create a file food.txt, add some text to it

do 1 commit

```
abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (develop)
$ echo "pizza" > food.txt

abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (develop)
$ dir
file.log  file2.txt  food.txt  newfile1.txt

abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (develop)
$ cat food.txt
pizza

abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (develop)
$ git add .
warning: in the working copy of 'food.txt', LF will be replaced by CRLF the next time Git touches it

abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (develop)
$ git commit -m "added food file"
[develop 7ecacbc] added food file
Committer: Alexandra Belii <Alexandra.Belii@endava.com>
Your name and email address were configured automatically based
on your username and hostname. Please check that they are accurate.
You can suppress this message by setting them explicitly. Run the
following command and follow the instructions in your editor to edit
your configuration file:

    git config --global --edit

After doing this, you may fix the identity used for this commit with:

    git commit --amend --reset-author

2 files changed, 1 insertion(+)
create mode 100644 file.log
create mode 100644 food.txt

abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (develop)
$ git status
On branch develop
Your branch is ahead of 'origin/develop' by 1 commit.
  (use "git push" to publish your local commits)

nothing to commit, working tree clean

abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (develop)
$ git push
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 16 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (4/4), 350 bytes | 350.00 KiB/s, done.
Total 4 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/alexandrabelii/Git-Homework.git
   c7d107b..7ecacbc  develop -> develop
```

2. from branch develop create a new branch (with name - test),

!!!!!!(don't make any changes in food.txt on this step)!!!!!!

do 2 commits on it,

```
abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (develop)
$ git checkout -b test
Switched to a new branch 'test'

abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (test)
$ git status
On branch test
nothing to commit, working tree clean

abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (test)
$ git status
On branch test
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    first.txt

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

abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (test)
$ git add .

abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (test)
$ git commit -m "first commit"
[test b7286f6] first commit
Committer: Alexandra Belii <Alexandra.Belii@endava.com>
Your name and email address were configured automatically based
on your username and hostname. Please check that they are accurate.
You can suppress this message by setting them explicitly. Run the
following command and follow the instructions in your editor to edit
your configuration file:

    git config --global --edit

After doing this, you may fix the identity used for this commit with:

    git commit --amend --reset-author

1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 first.txt
```

```

abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (test)
$ echo "second commit" > "first.txt"

abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (test)
$ git status
On branch test
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:   first.txt

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

abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (test)
$ git commit -a -m "second commit"
warning: in the working copy of 'first.txt', LF will be replaced by CRLF the next time Git touches it
[test 01829c4] second commit
Committer: Alexandra Belii <Alexandra.Belii@endava.com>
Your name and email address were configured automatically based
on your username and hostname. Please check that they are accurate.
You can suppress this message by setting them explicitly. Run the
following command and follow the instructions in your editor to edit
your configuration file:

    git config --global --edit

After doing this, you may fix the identity used for this commit with:

    git commit --amend --reset-author

1 file changed, 1 insertion(+)

abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (test)
$ git status
On branch test
nothing to commit, working tree clean

```

then switch to develop,

do one more commit

merge branch test to develop

git log

```

abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (develop)
$ git log
commit 8fe8f1acfe43c6e15a2a54e99d3c7bd0247f32d4 (HEAD -> develop)
Merge: 756431f 01829c4
Author: Alexandra Belii <Alexandra.Belii@endava.com>
Date: Thu Sep 18 23:37:10 2025 +0300

    newadition

commit 756431fb15edb879a7ae78f830ec621ab258a00f
Author: Alexandra Belii <Alexandra.Belii@endava.com>
Date: Thu Sep 18 23:01:10 2025 +0300

    one more commit

commit 01829c44a84201a73a0bce023639995e35b1073c (test)
Author: Alexandra Belii <Alexandra.Belii@endava.com>
Date: Thu Sep 18 22:55:18 2025 +0300

    second commit

```

```
commit b7286f6e578a49812f738a54c3237cea8b27e37c
Author: Alexandra Belii <Alexandra.Belii@endava.com>
Date: Thu Sep 18 22:54:24 2025 +0300
```

first commit

```
commit 7ecacbc5154148ee37dd22e6d29a2cd060858b67 (origin/develop)
Author: Alexandra Belii <Alexandra.Belii@endava.com>
Date: Thu Sep 18 22:50:48 2025 +0300
```

added food file

```
commit c7d107bd9ec6db4ae37a03d8e38dc20b0f2abd4d
Author: Alexandra Belii <Alexandra.Belii@endava.com>
Date: Thu Sep 18 21:05:19 2025 +0300
```

not added to index area issue solved

```
commit edbb97bc1d4c646606c8a276047e6467d5643311
Author: Alexandra Belii <Alexandra.Belii@endava.com>
Date: Thu Sep 18 20:39:52 2025 +0300
```

added new content to file2.txt

```
commit 400a7e7d1e9bda4153f1d3e0aee0799f9dd08982
Author: Alexandra Belii <Alexandra.Belii@endava.com>
Date: Thu Sep 18 20:27:47 2025 +0300
```

second comit

```
commit f75700af17e5c729c6930b5bb8ac3a0e34661cd8
Author: Alexandra Belii <Alexandra.Belii@endava.com>
Date: Thu Sep 18 20:21:34 2025 +0300
```

3. checkout on the first commit of the branch master

```
abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (develop)
$ git rev-list --max-parents=0 master
f75700af17e5c729c6930b5bb8ac3a0e34661cd8

abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (develop)
$ git checkout ^[[200~f75700af17e5c729c6930b5bb8ac3a0e34661cd8~
error: pathspec '?[200~f75700af17e5c729c6930b5bb8ac3a0e34661cd8~' did not match any file(s) known to git

abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (develop)
$ git checkout f75700af17e5c729c6930b5bb8ac3a0e34661cd8
Note: switching to 'f75700af17e5c729c6930b5bb8ac3a0e34661cd8'.

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

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

    git switch -c <new-branch-name>

Or undo this operation with:

    git switch -

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

HEAD is now at f75700a first commit

abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework ((f75700a...))
$ git status
HEAD detached at f75700a
nothing to commit, working tree clean
```

create a new branch (firstBr) from this commit

```
abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework ((f75700a...))
$ git checkout -b firstBr
Switched to a new branch 'firstBr'
```

do 2 more commits on this branch

```
abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (firstBr)
$ echo "this is text for the second commit" >> newfile.txt

abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (firstBr)
$ git status
On branch firstBr
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:   newfile.txt

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

abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (firstBr)
$ git commit -a -m "second commit done"
warning: in the working copy of 'newfile.txt', LF will be replaced by CRLF the next time Git touches it
[firstBr 334f76d] second commit done
Committer: Alexandra Belii <Alexandra.Belii@endava.com>
Your name and email address were configured automatically based
on your username and hostname. Please check that they are accurate.
You can suppress this message by setting them explicitly. Run the
following command and follow the instructions in your editor to edit
your configuration file:

    git config --global --edit

After doing this, you may fix the identity used for this commit with:

    git commit --amend --reset-author

1 file changed, 1 insertion(+)

abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (firstBr)
$ echo "I'll do 2 more commits" > newfile.txt

abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (firstBr)
$ git status
On branch firstBr
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        newfile.txt

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

abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (firstBr)
$ git add .
warning: in the working copy of 'newfile.txt', LF will be replaced by CRLF the next time Git touches it

abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (firstBr)
$ git commit -m "first one more commit"
[firstBr b368fb9] first one more commit
Committer: Alexandra Belii <Alexandra.Belii@endava.com>
Your name and email address were configured automatically based
on your username and hostname. Please check that they are accurate.
You can suppress this message by setting them explicitly. Run the
following command and follow the instructions in your editor to edit
your configuration file:

    git config --global --edit

After doing this, you may fix the identity used for this commit with:

    git commit --amend --reset-author

1 file changed, 1 insertion(+)
create mode 100644 newfile.txt
```

rebase it with branch test

```
abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (firstBr)
$ git rebase test
Current branch firstBr is up to date.
```

git log

```
abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (firstBr)
$ git log
commit 334f76d8c163f53cee26ed8ab33f5f32cdf14e (HEAD -> firstBr)
Author: Alexandra Belii <Alexandra.Belii@endava.com>
Date: Fri Sep 19 08:32:39 2025 +0300
```

second commit done

```
commit b368fb99746193879ca9f3799765003e6195d6d8
Author: Alexandra Belii <Alexandra.Belii@endava.com>
Date: Fri Sep 19 08:29:50 2025 +0300
```

first one more commit

```
commit 01829c44a84201a73a0bce023639995e35b1073c (test)
Author: Alexandra Belii <Alexandra.Belii@endava.com>
Date: Thu Sep 18 22:55:18 2025 +0300
```

second commit

reset hard last 2 commits

```
abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (firstBr)
$ git reset --hard HEAD~2
HEAD is now at 01829c4 second commit
```

```
abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (firstBr)
$ git log
commit 01829c44a84201a73a0bce023639995e35b1073c (HEAD -> firstBr, test)
Author: Alexandra Belii <Alexandra.Belii@endava.com>
Date: Thu Sep 18 22:55:18 2025 +0300
```

second commit

```
commit b7286f6e578a49812f738a54c3237cea8b27e37c
Author: Alexandra Belii <Alexandra.Belii@endava.com>
Date: Thu Sep 18 22:54:24 2025 +0300
```

first commit

git log

what happen with commit history?

Git moved the branch pointer and the 2 most recent commits were removed from the visibility history of the branch

4. search the commits that have been reset

```
abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (firstBr)
$ git reflog
01829c4 (HEAD -> firstBr, test) HEAD@{0}: reset: moving to HEAD~2
334f76d HEAD@{1}: commit: second commit done
b368fb9 HEAD@{2}: commit: first one more commit
```

The commits that have been reset

create a new branch (lost) from one of them

```
abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (firstBr)
$ git branch lost b368fb9
```

git log

```
abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (firstBr)
$ git checkout lost
Switched to branch 'lost'
```

```
abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (lost)
$ git log
commit b368fb99746193879ca9f3799765003e6195d6d8 (HEAD -> lost)
Author: Alexandra Belii <Alexandra.Belii@endava.com>
Date: Fri Sep 19 08:29:50 2025 +0300
```

first one more commit

```
commit 01829c44a84201a73a0bce023639995e35b1073c (test, firstBr)
Author: Alexandra Belii <Alexandra.Belii@endava.com>
Date: Thu Sep 18 22:55:18 2025 +0300
```

second commit

```
commit b7286f6e578a49812f738a54c3237cea8b27e37c
```

do some changes and then commit amend

```
abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (lost)
$ echo "I am doing some changes" >> food.txt
```



```
abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (lost)
$ git log
commit b368fb99746193879ca9f3799765003e6195d6d8 (HEAD -> lost)
Author: Alexandra Belii <Alexandra.Belii@endava.com>
Date:   Fri Sep 19 08:29:50 2025 +0300

    first one more commit
```

```
abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (lost)
$ git commit --amend -m "I've done some changes in the food.txt"
[lost 79d70be] I've done some changes in the food.txt
Date: Fri Sep 19 08:29:50 2025 +0300
Committer: Alexandra Belii <Alexandra.Belii@endava.com>
Your name and email address were configured automatically based
on your username and hostname. Please check that they are accurate.
You can suppress this message by setting them explicitly. Run the
following command and follow the instructions in your editor to edit
your configuration file:

    git config --global --edit

After doing this, you may fix the identity used for this commit with:

    git commit --amend --reset-author

2 files changed, 2 insertions(+)
create mode 100644 newfile.txt
```

git log

```
abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (lost)
$ git log
commit 79d70be495abe4d818d680c67120fbbddfa7a5f5 (HEAD -> lost)
Author: Alexandra Belii <Alexandra.Belii@endava.com>
Date:   Fri Sep 19 08:29:50 2025 +0300

    I've done some changes in the food.txt

commit 01829c44a84201a73a0bce023639995e35b1073c (test, firstBr)
Author: Alexandra Belii <Alexandra.Belii@endava.com>
Date:   Thu Sep 18 22:55:18 2025 +0300

    second commit
```

what happen with commit history?

The last commit got rewritten instead of a new one being created.

5. checkout on the develop branch,

```
abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (lost)
$ git checkout develop
Switched to branch 'develop'
```

add new content in food.txt file, then commit them,

```
abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (develop)
$ echo "This is new content in food.txt" >> food.txt

abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (develop)
$ git status
On branch develop
Your branch is up to date with 'origin/develop'.

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:   food.txt

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

abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (develop)
$ git commit -a -m "added new content in food.txt"
warning: in the working copy of 'food.txt', LF will be replaced by CRLF the next time Git touches it
[develop 299bbdc] added new content in food.txt
Committer: Alexandra Belii <Alexandra.Belii@endava.com>
Your name and email address were configured automatically based
on your username and hostname. Please check that they are accurate.
You can suppress this message by setting them explicitly. Run the
following command and follow the instructions in your editor to edit
your configuration file:

    git config --global --edit

After doing this, you may fix the identity used for this commit with:

    git commit --amend --reset-author

1 file changed, 1 insertion(+)
```

add some new content to the same file, (don't make a commit)

git status

```
abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (develop)
$ echo "gonna aff some new content, yet not commit the changes" >> food.txt

abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (develop)
$ git status
On branch develop
Your branch is up to date with 'origin/develop'.

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:   food.txt

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

now switch to test branch

git status

```
abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (develop)
$ git checkout test
error: Your local changes to the following files would be overwritten by checkout:
    food.txt
Please commit your changes or stash them before you switch branches.
Aborting

abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (develop)
$ git status
On branch develop
Your branch is up to date with 'origin/develop'.

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:   food.txt

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

what you can see at this moment? why it happen? solve the problem!

Can't switch, because of the risk of loosing the changes I didn't commit

```
abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (develop)
$ git commit -a -m "solved the problem"
warning: in the working copy of 'food.txt', LF will be replaced by CRLF the next time Git
touches it
[develop 75fdcf7] solved the problem
Committer: Alexandra Belii <Alexandra.Belii@endava.com>
Your name and email address were configured automatically based
on your username and hostname. Please check that they are accurate.
You can suppress this message by setting them explicitly. Run the
following command and follow the instructions in your editor to edit
your configuration file:

    git config --global --edit

After doing this, you may fix the identity used for this commit with:

    git commit --amend --reset-author

1 file changed, 1 insertion(+)

abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (develop)
$ git status
On branch develop
Your branch is ahead of 'origin/develop' by 1 commit.
  (use "git push" to publish your local commits)

nothing to commit, working tree clean

abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (develop)
$ git checkout test
Switched to branch 'test'
```

6. switch to the branch firstBr

create a new file (color.txt), do commit

```
abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (test)
$ git checkout firstBr
Switched to branch 'firstBr'

abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (firstBr)
$ touch color.txt
```

add content to this new file, (don't make a commit)

```
abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (firstBr)
$ git commit -m "added color.txt"
[firstBr 0ddd503] added color.txt
Committer: Alexandra Belii <Alexandra.Belii@endava.com>
Your name and email address were configured automatically based
on your username and hostname. Please check that they are accurate.
You can suppress this message by setting them explicitly. Run the
following command and follow the instructions in your editor to edit
your configuration file:

    git config --global --edit

After doing this, you may fix the identity used for this commit with:

    git commit --amend --reset-author

1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 color.txt

abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (firstBr)
$ echo "blue" >> color.txt
```

switch to master

```
abelii@ENDAUTO397FMf3d MINGW64 ~/OneDrive - ENDAVA/Desktop/Git Homework (firstBr)
$ git checkout master
error: Your local changes to the following files would be overwritten by checkout:
    color.txt
Please commit your changes or stash them before you switch branches.
Aborting
```

what happen? why?

It is the same issue as in the last exercise, can't switch, because of the risk of losing the changes I didn't commit. Am I right ?