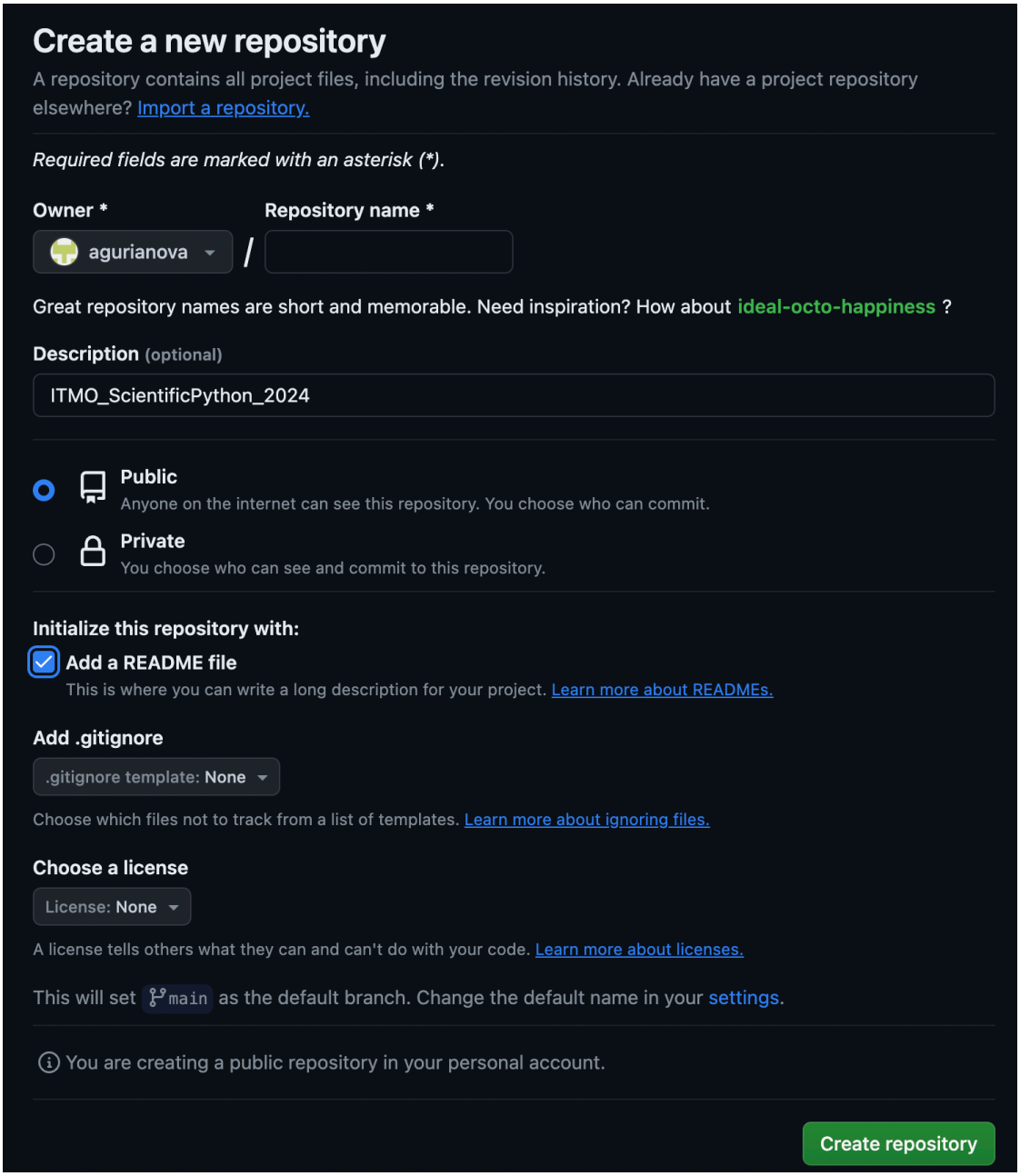
1. Create and clone repo



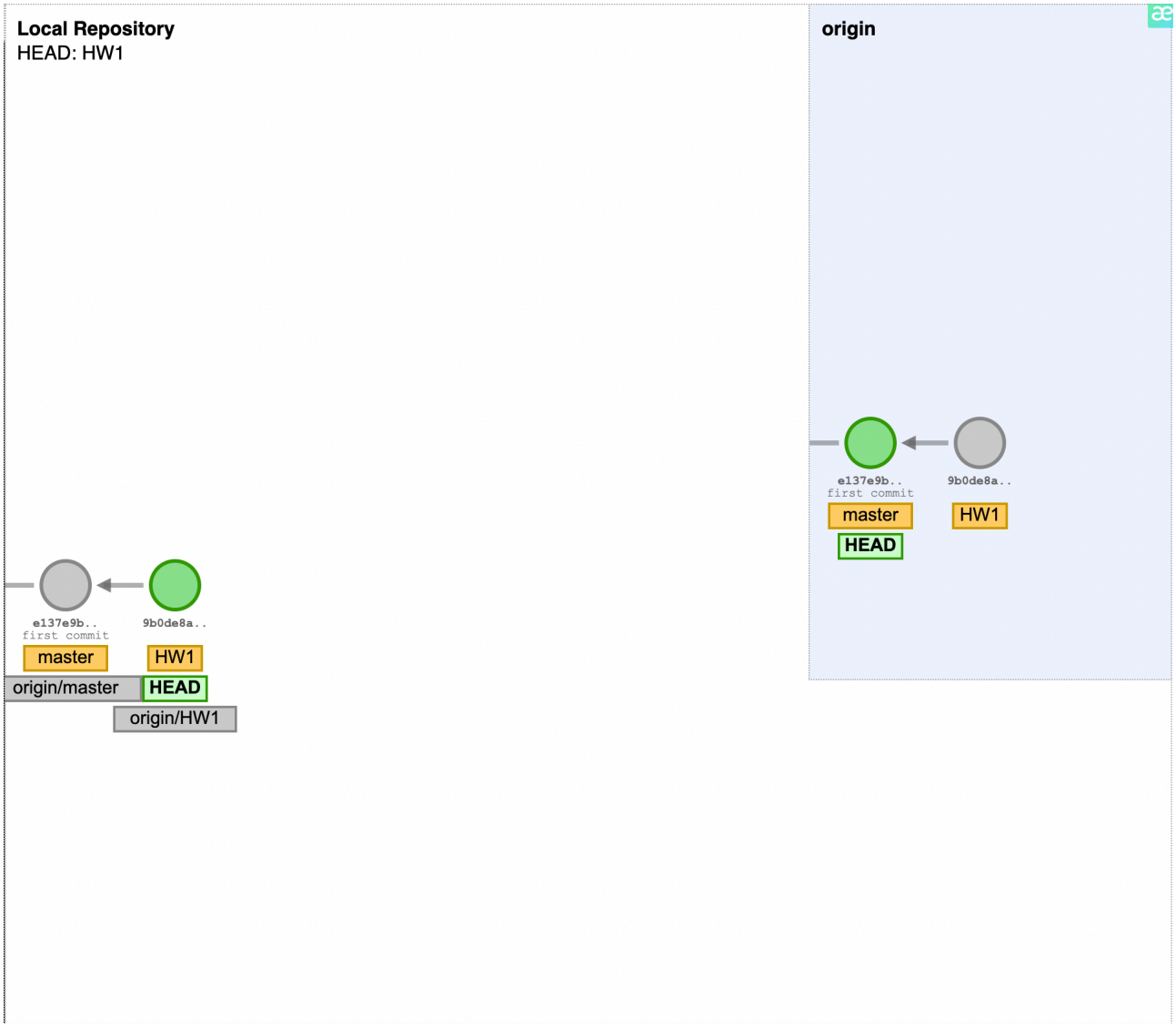

```
git clone https://github.com/agurianova/ITMO_ScientificPython_2024
```

2. Add changes into the HW1 branch

```
git checkout –b HW1
```

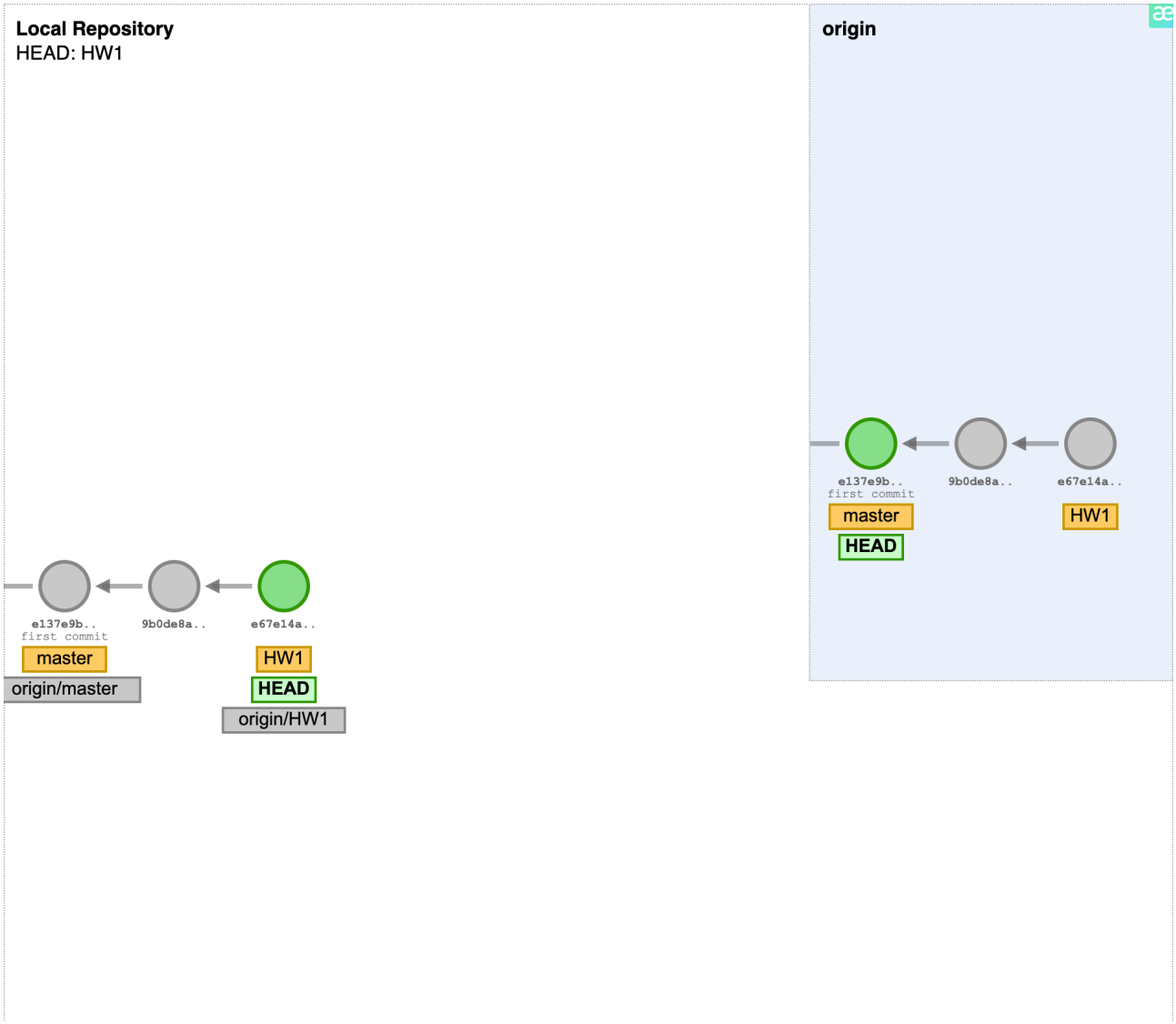
> Put files “hw1.txt”, “test_revert.txt” and “test_revert_merge.txt” into ITMO_ScientificPython_2024 directory on local computer

```
git add .
git status (to check changes)
git commit –m “Three txt files have been added”
git push –u origin HW1
```



> Organised files into HW1 folder

```
git add .
git status
git commit –m “Organized files into a new folder”
git push origin HW1
```

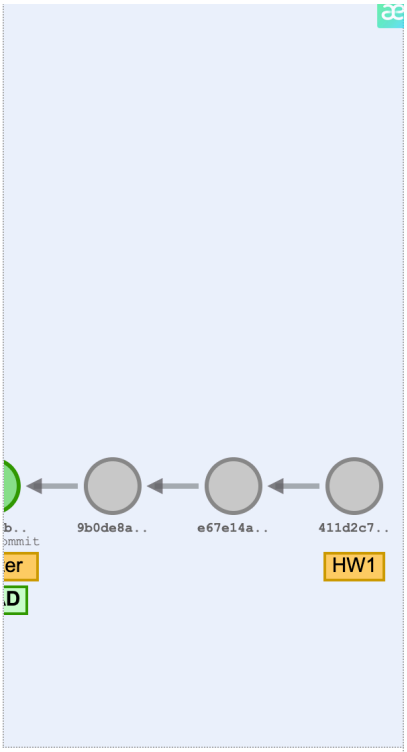


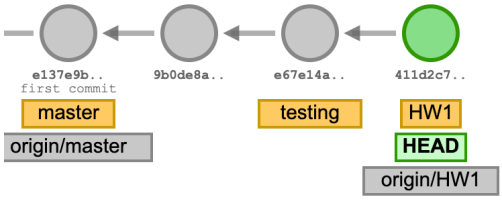
```
git branch testing
```

> Changed hw1.txt

```
git add .
git status
git commit –m “Added changes to the hw1.txt”
git push origin HW1
```

Local Repository
HEAD: HW1





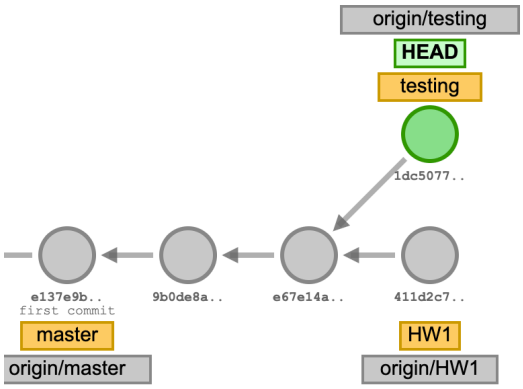
3. Add changes into the testing branch

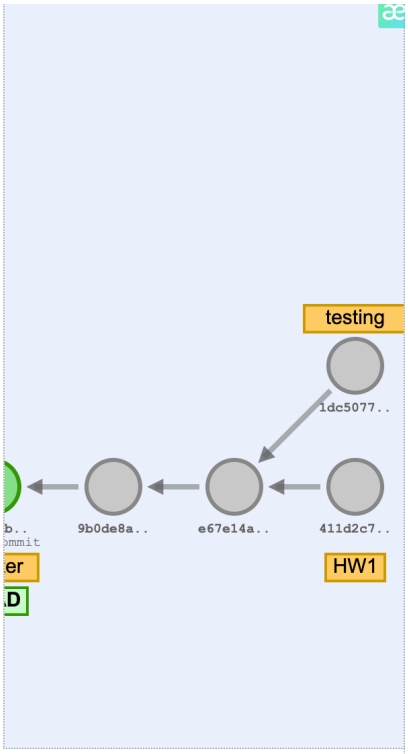
```
git checkout testing
```

> Changed test_revert.txt

```
git add .
git status
git commit –m “Added changes to the test_revert.txt”
git push –u origin testing
```

Local Repository
HEAD: testing

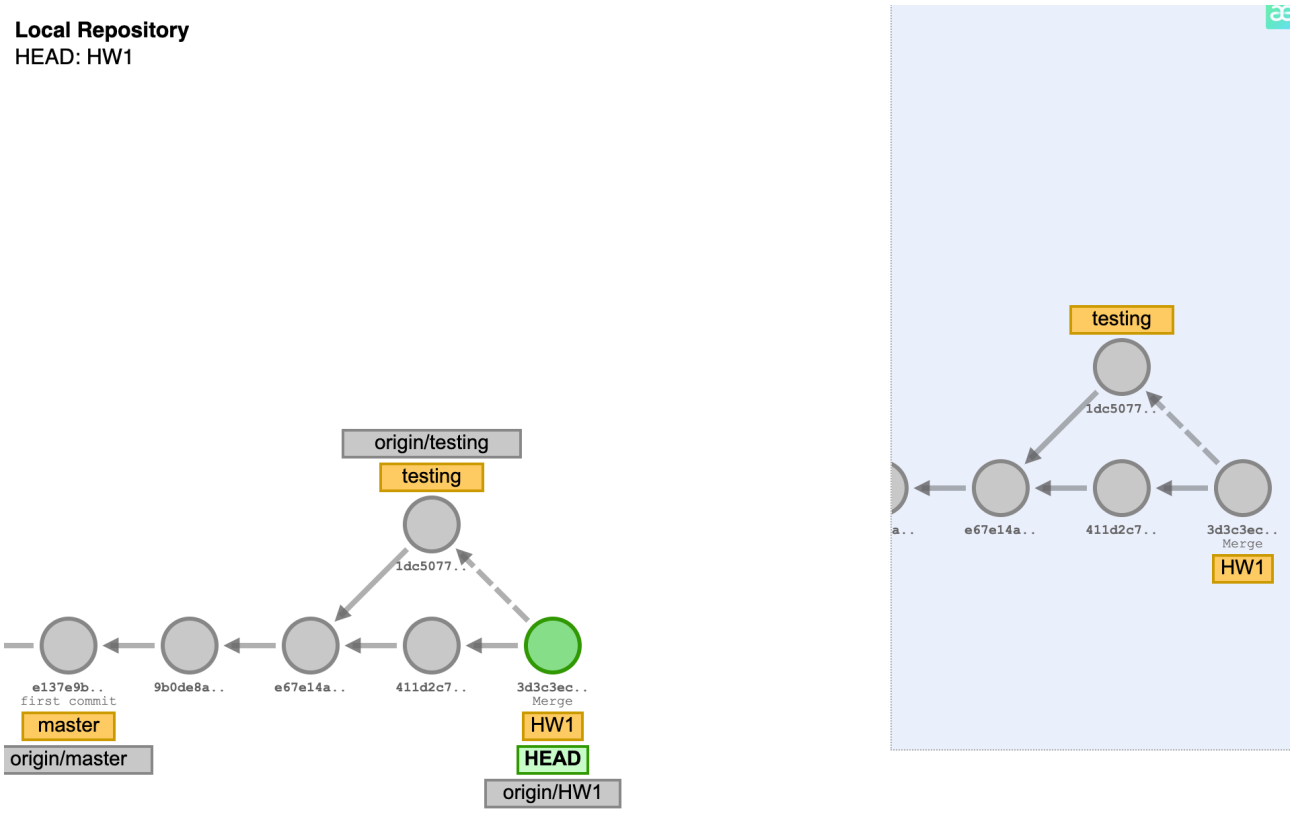




4. Merge branches (testing into the HW1)

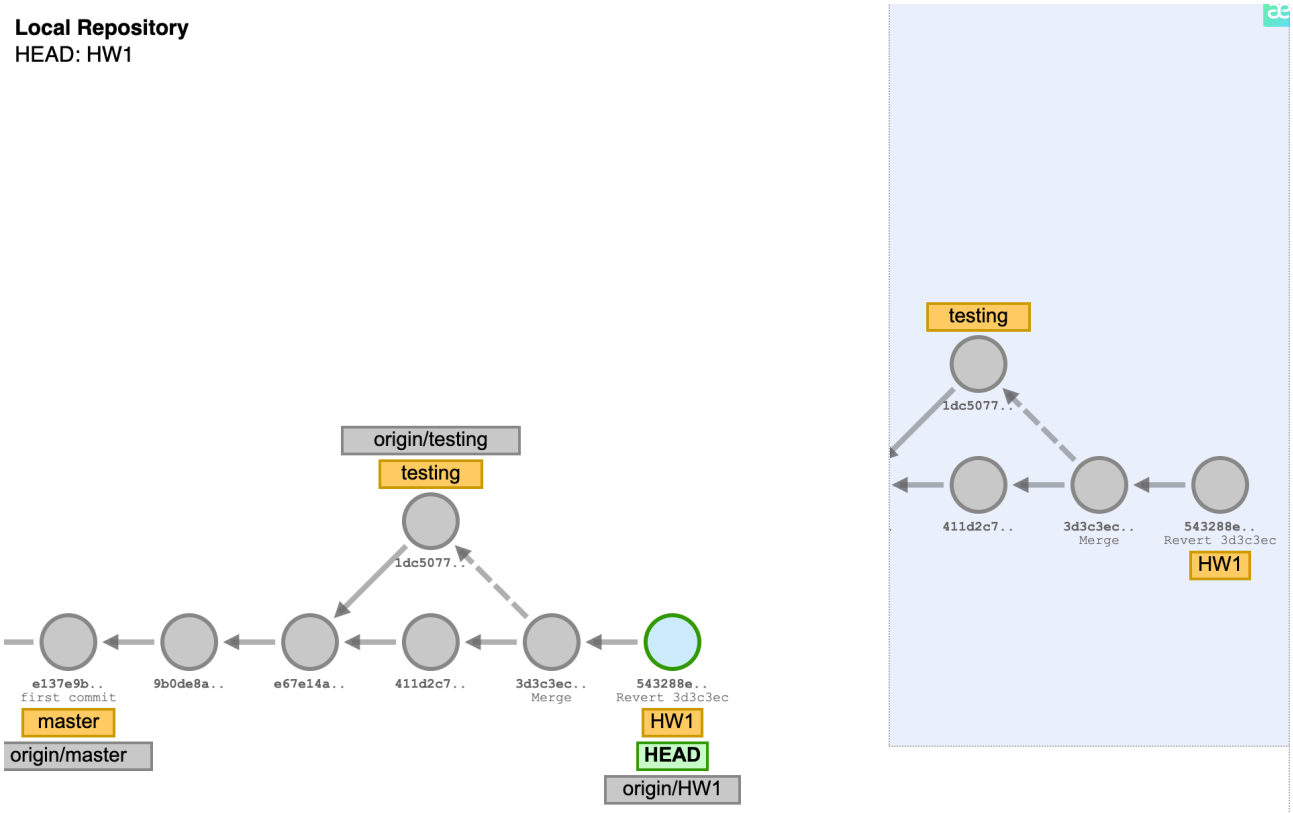
```
git checkout HW1
```

```
git merge testing

>> vim
i to insert “Merge branch 'testing' into HW1”
Ctrl+C to escape
:wq to write and quite text editor
```



5. Revert merging

```
git revert -m 1 a53054c4b9d7ce4aa2f8d4e704c92297876c765e

>> vim
i to insert “Revert “Merge branch 'testing' into HW1”
Ctrl+C to escape
:wq to write and quite text editor
```

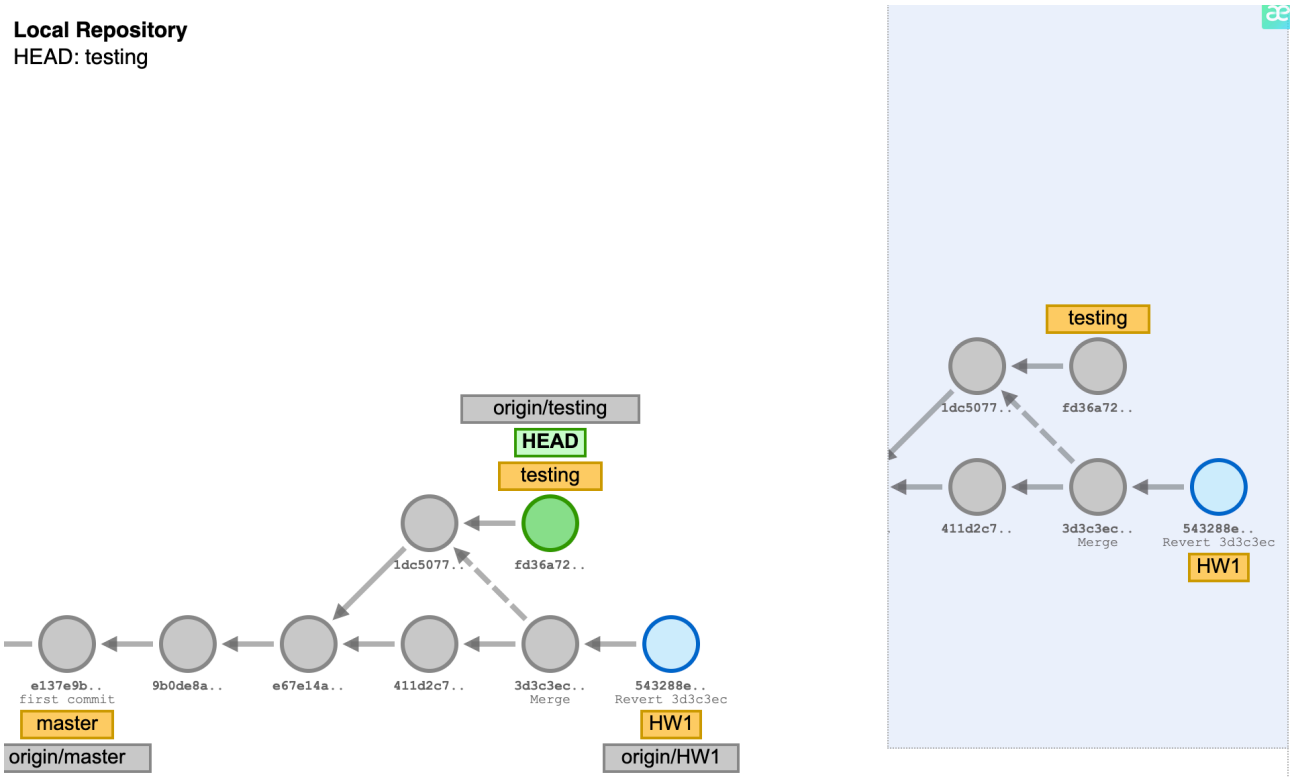


6. Add forgotten changes into the testing branch

```
git checkout testing
```

> Changed test_revert_merge.txt

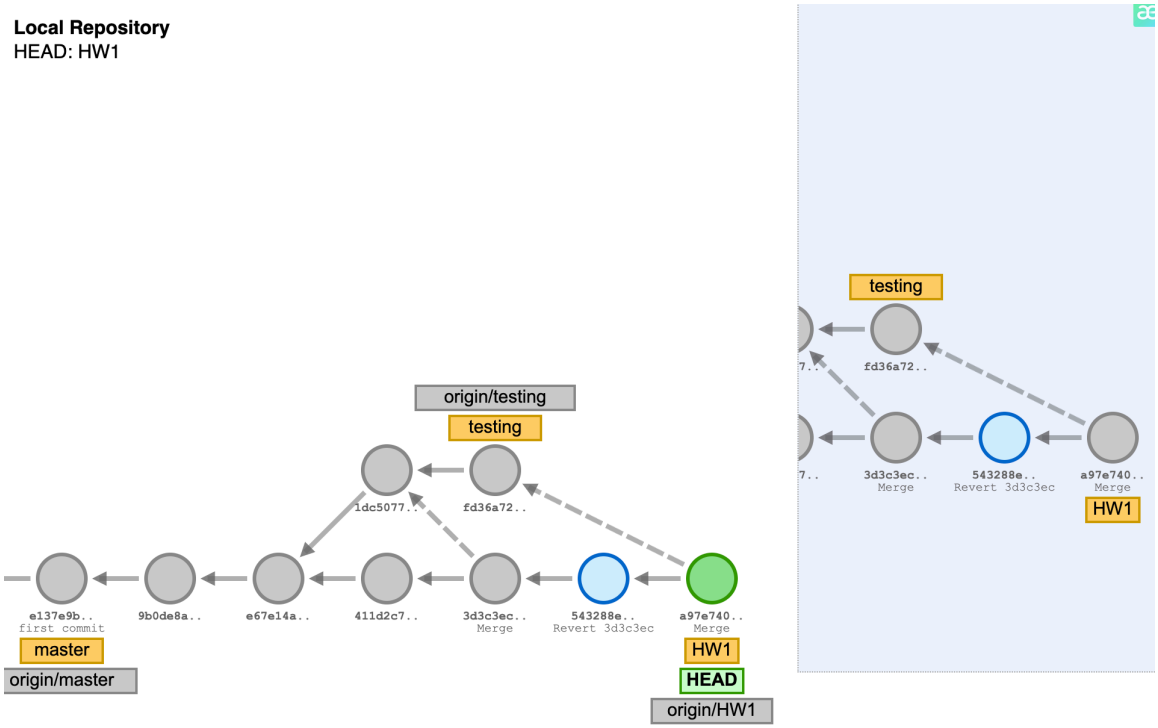
```
git add .
git status
git commit –m “Added forgotten changes to the test_revert_merge.txt”
git push origin testing
```



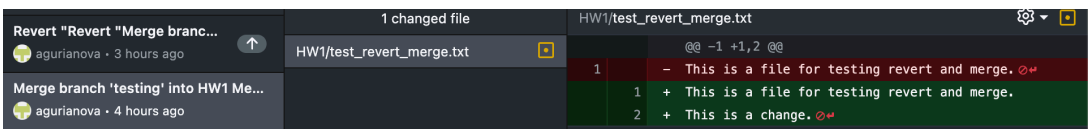
7. Merge branches (testing into the HW1) - last commit only!

```
git checkout HW1
```

```
git merge testing

>> vim
i to insert and write “Merge branch 'testing' into HW1 x2”
Ctrl+C to escape
```



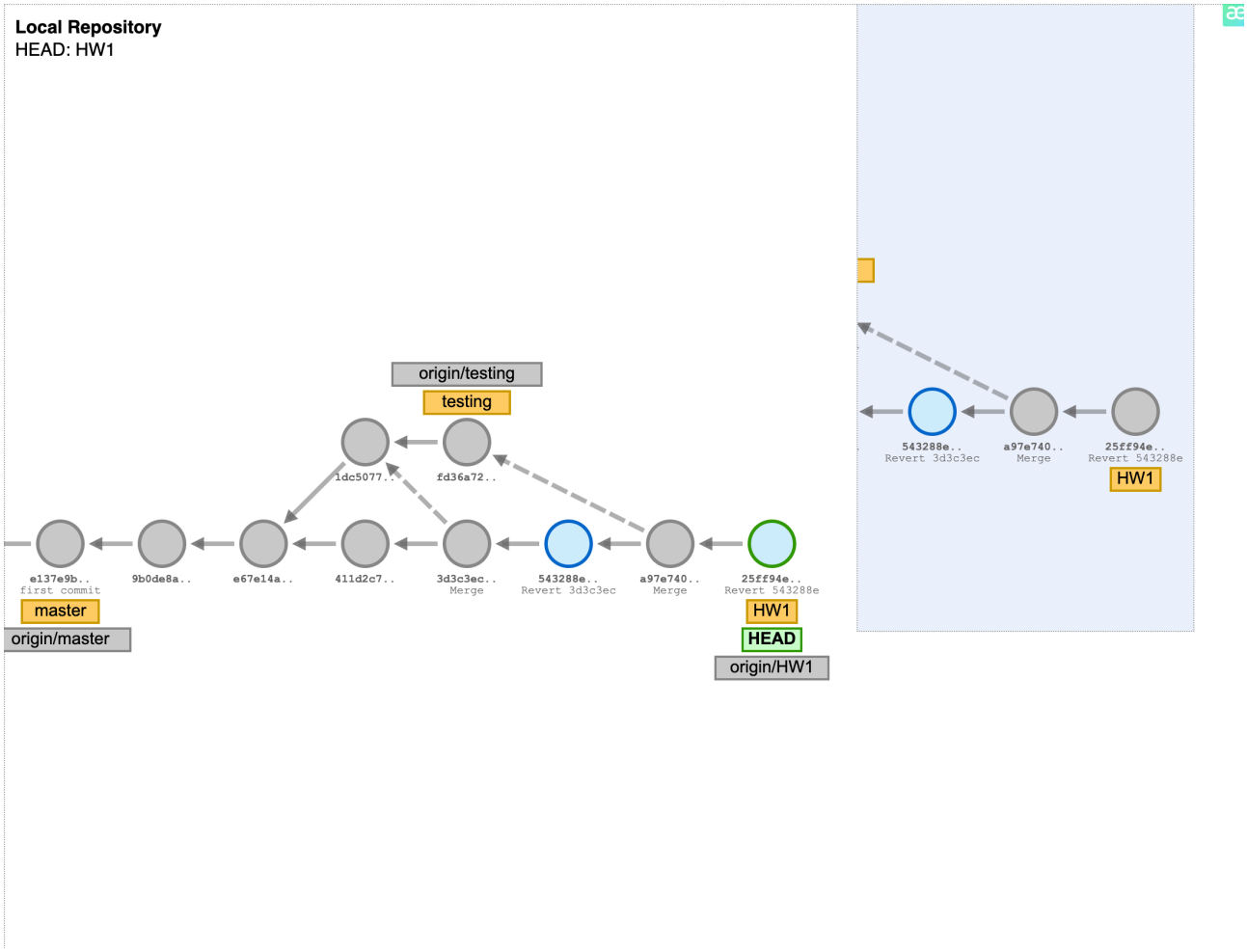
I’ve expected that both changes in test_revert.txt and test_revert_merge.txt will be added but only the last change in the test_revert_merge.txt file appeared.



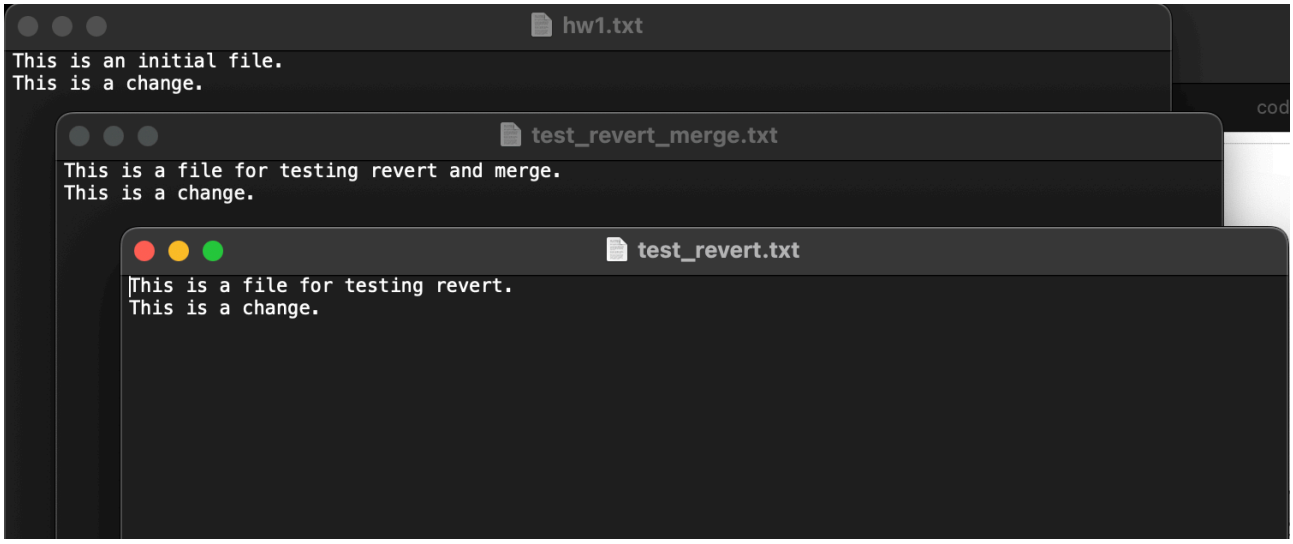
To add changes in test_revert.txt also we should use revert command one more time and re-applies the changes that were initially reverted.

8. Revert revert

```
git revert 22f3334ca3970987b302d189d1424a1d7525a39

>> vim
i to insert “Revert “Revert “Merge branch 'testing' into HW1””””
Ctrl+C to escape
:wq to write and quite text editor
```



Now all files contain changes.



And we can delete testing branch.

```
git branch -d testing
git push origin --delete testing
```