

To complete the first homework, I performed the following commands after installing the Git:

- 1) git clone [git@github.com:DolohovZonya/ITMO\\_ScientificPython\\_2024](https://github.com/DolohovZonya/ITMO_ScientificPython_2024).git
- 2) mkdir 'HW1'
- 3) cd HW1
- 4) git checkout -b HW1
- 5) nano hw1.txt
- 6) nano test\_revert.txt
- 7) nano test\_revert\_merge.txt
- 8) git add hw1.txt test\_revert.txt test\_revert\_merge.txt
- 9) git commit -m 'in the HW1 directory'
- 10) git push origin -u HW1
- 11) git branch testing
- 12) nano hw1.txt
- 13) git add hw1.txt
- 14) git commit -m 'changed hw1.txt file'
- 15) git push origin -u HW1
- 16) git checkout testing
- 17) nano test\_revert.txt
- 18) git add test\_revert.txt
- 19) git commit -m 'testing HW1'
- 20) git push origin -u testing
- 21) git checkout HW1
- 22) git merge testing -m 'Merge branch testing into HW1'
- 23) git push origin -u HW1
- 24) git revert -m1 HW1
- 25) git checkout testing
- 26) nano test\_revert\_merge.txt
- 27) git add test\_revert\_merge.txt
- 28) git commit -m 'changed 3rd file'
- 29) git checkout HW1
- 30) git merge testing

At this step we observe that the file 'test\_revert.txt' doesn't contain needed changes, however it used to. This has happened because after the reverting process Git has linked to the last common connected commit.

To fix this, I found the last commit that contained the right version- basically, I have reverted the "Revert "Merge branch 'testing' into HW1"" commit (I have identified it's id in GitHub and it's bae648e). After that, I pushed the changes and got a full HW1 branch with all changed files.

git push origin -u HW1