```
cd desktop/ITMO/Scientific_Python

git clone https://github.com/Zubiriguitar/ITMO_ScientificPython_2024

cd ITMO_ScientificPython_2024/

git branch HW1

git checkout HW1

mkdir HW1

git add HW1 #adding directory to be tracked


<!--adding 3 .txt files to HW1 directory-->

git status
<!--On branch HW1
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    HW1/
    hw1.txt
    test_revert.txt
    test_revert_merge.txt

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

git add -A <!--adding all files in directory-->

git status
```

<!--On branch HW1

Changes to be committed:

  (use "git restore --staged <file>..." to unstage)

    new file: HW1/hw1.txt

    new file: HW1/test_revert.txt

    new file: HW1/test_revert_merge.txt-->

git commit -m 'Commit with original files'

<!--[HW1 cfad9fd] Commit with original files

 3 files changed, 3 insertions(+)

 create mode 100644 HW1/hw1.txt

 create mode 100644 HW1/test_revert.txt

 create mode 100644 HW1/test_revert_merge.txt-->

git log

<!--commit cfad9fda191dfd010ac9bb597417a33438318d4f (HEAD -> HW1)

Author: zubiriguitar <ponomarevpavel1995@gmail.com>

Date: Tue Mar 5 19:34:24 2024 +0700

    Commit with original files

commit 84354a2e2b7d6ada7e390f22fecc042aa984405f (origin/main, origin/HEAD, main)

Author: Zubiriguitar <64590799+Zubiriguitar@users.noreply.github.com>

Date: Mon Mar 4 18:33:19 2024 +0700

    Initial commit-->

git remote add itmo_sp_2024 https://github.com/Zubiriguitar/ITMO_ScientificPython_2024

git push itmo_sp_2024 HW1 -u

<!--Enumerating objects: 7, done.

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

Delta compression using up to 8 threads

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

Writing objects: 100% (6/6), 484 bytes | 484.00 KiB/s, done.

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

To https://github.com/Zubiriguitar/ITMO_ScientificPython_2024

   f081c09..e25b878 HW1 -> HW1

branch 'HW1' set up to track 'itmo_sp_2024/HW1'.-->

git branch testing

<!--Changing hw1.txt file-->

git add -A

git commit -m "Commit with hw1.txt change"

<!--[HW1 e0553f9] Commit whit hw1.txt change

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

git push itmo_sp_2024 -u

<!--Enumerating objects: 7, done.

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

Delta compression using up to 8 threads

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

Writing objects: 100% (4/4), 405 bytes | 405.00 KiB/s, done.

Total 4 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)

To https://github.com/Zubiriguitar/ITMO_ScientificPython_2024

   e25b878..e0553f9 HW1 -> HW1

branch 'HW1' set up to track 'itmo_sp_2024/HW1'.-->

git checkout testing

<!--Switched to branch 'testing'-->

<!--Changing test_revert.txt file-->

git add -A

git commit -m "Commit with test_revert.txt changed"

<!--[testing 4705231] Commit with test_revert.txt changed
 1 file changed, 3 insertions(+), 1 deletion(-)-->

git push itmo_sp_2024 -u

<!--Enumerating objects: 7, done.

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

Delta compression using up to 8 threads

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

Writing objects: 100% (4/4), 365 bytes | 365.00 KiB/s, done.

Total 4 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)

remote: Resolving deltas: 100% (1/1), completed with 1 local object.

remote:

remote: Create a pull request for 'testing' on GitHub by visiting:

remote: https://github.com/Zubiriguitar/ITMO_ScientificPython_2024/pull/new/testing

remote:

To https://github.com/Zubiriguitar/ITMO_ScientificPython_2024

 * [new branch]   testing -> testing

branch 'testing' set up to track 'itmo_sp_2024/testing'.-->

git checkout HW1

<!--Switched to branch 'HW1'

Your branch is up to date with 'itmo_sp_2024/HW1'.-->

git merge testing

<!--Merge made by the 'ort' strategy.
 HW1/test_revert.txt | 4 +++-
 1 file changed, 3 insertions(+), 1 deletion(-)
-->

git push itmo_sp_2024 -u

<!--Enumerating objects: 7, done.
Counting objects: 100% (7/7), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 337 bytes | 337.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/Zubiriguitar/ITMO_ScientificPython_2024
   e0553f9..956f515 HW1 -> HW1
branch 'HW1' set up to track 'itmo_sp_2024/HW1'.
-->

<!--Branches merged (testing to HW1). We can see changes in test_revert.txt.-->

git revert -m 1 HEAD

[HW1 02586c9] Revert "Merge branch 'testing' into HW1"
 1 file changed, 1 insertion(+), 3 deletions(-)

git checkout testing

cd HW1

git add test_revert_merge.txt

git commit -m 'Before merging with HW1'

<!--[testing 812d5be] Before merging with HW1

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

git push itmo_sp_2024 -u

<!--git push itmo_sp_2024 -u

Enumerating objects: 7, done.

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

Delta compression using up to 8 threads

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

Writing objects: 100% (4/4), 401 bytes | 401.00 KiB/s, done.

Total 4 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)

remote: Resolving deltas: 100% (1/1), completed with 1 local object.

To https://github.com/Zubiriguitar/ITMO_ScientificPython_2024

  57c4d98..812d5be testing -> testing

branch 'testing' set up to track 'itmo_sp_2024/testing'.-->

git checkout HW1

<!--Switched to branch 'HW1'

Your branch is ahead of 'itmo_sp_2024/HW1' by 1 commit.

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

git merge testing

<!--Merge made by the 'ort' strategy.

 HW1/test_revert_merge.txt | 4 +++-

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

<!--hw1.txt now is changed, test_revert.txt is original, test_revert_merge is from testing branch (changed)-->

git revert -m 1 HEAD

git checkout testing

git add test_revert_merge.txt

git add test_revert.txt

git commit -m 'All files are correct in testing'

<!--[testing 6528be3] All files are correct in testing

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

git push itmo_sp_2024 -u

<!--Enumerating objects: 11, done.

Counting objects: 100% (11/11), done.

Delta compression using up to 8 threads

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

Writing objects: 100% (8/8), 762 bytes | 762.00 KiB/s, done.

Total 8 (delta 3), reused 0 (delta 0), pack-reused 0 (from 0)

remote: Resolving deltas: 100% (3/3), completed with 2 local objects.

To https://github.com/Zubiriguitar/ITMO_ScientificPython_2024

  812d5be..6528be3 testing -> testing

branch 'testing' set up to track 'itmo_sp_2024/testing'.-->

git checkout HW1

<!--Switched to branch 'HW1'

Your branch is ahead of 'itmo_sp_2024/HW1' by 3 commits.

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

git push itmo_sp_2024 -u

<!--Enumerating objects: 19, done.

Counting objects: 100% (17/17), done.

Delta compression using up to 8 threads

Compressing objects: 100% (9/9), done.

Writing objects: 100% (10/10), 1.13 KiB | 1.13 MiB/s, done.

Total 10 (delta 2), reused 0 (delta 0), pack-reused 0 (from 0)

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

To https://github.com/Zubiriguitar/ITMO_ScientificPython_2024

  ec0f58b..acef078 HW1 -> HW1

branch 'HW1' set up to track 'itmo_sp_2024/HW1'.-->

Success! All files are correct!