

## Задание 2.1

1. Заходим в папку и создаем git-репозиторий

```
C:\Users\marin> cd reposit
```

```
C:\Users\marin\reposit>git init  
Initialized empty Git repository in C:/Users/marin/reposit/.git/
```

2. Отобразим список файлов, подкаталогов и скрытых файлов и подкаталогов

```
C:\Users\marin\reposit>dir /A:H  
Том в устройстве C имеет метку Windows  
Серийный номер тома: B052-935E  
  
Содержимое папки C:\Users\marin\reposit  
  
26.09.2022  19:39    <DIR>                .git  
                0 файлов                0 байт  
                1 папок   298 439 827 456 байт свободно
```

```
C:\Users\marin\reposit>dir  
Том в устройстве C имеет метку Windows  
Серийный номер тома: B052-935E  
  
Содержимое папки C:\Users\marin\reposit  
  
26.09.2022  19:39    <DIR>                .  
26.09.2022  19:38    <DIR>                ..  
                0 файлов                0 байт  
                2 папок   298 439 565 312 байт свободно
```

3. Отобразим статус репозитория

```
C:\Users\marin\reposit>git status  
On branch master  
  
No commits yet  
  
nothing to commit (create/copy files and use "git add" to track)
```

4. Создадим текстовый файл и добавим в него текст. Просмотрим статус репозитория

```
C:\Users\marin\reposit>copy con first_try.txt  
Hello!  
^Z
```

```
C:\Users\marin\reposit>git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
    new file:   first_try.txt
```

5. Добавим файл в отслеживание и посмотрим изменение статуса

```
C:\Users\marin\reposit>git status
On branch master

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    first_try.txt

nothing added to commit but untracked files present (use "git add" to track)
C:\Users\marin\reposit>git add first_try.txt
C:\Users\marin\reposit>git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
    new file:   first_try.txt
```

6. Зафиксируем файл

```
C:\Users\marin\reposit>git commit -m "First file"
[master (root-commit) ee5182a] First file
 1 file changed, 1 insertion(+)
 create mode 100644 first_try.txt
```

7. Откроем файл, добавим слово и посмотрим на изменения. Снова создадим КОММИТ

```
C:\Users\marin\reposit> first_try.txt
C:\Users\marin\reposit>git status
On branch master
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_try.txt

no changes added to commit (use "git add" and/or "git commit -a")
C:\Users\marin\reposit>git add first_try.txt
```

8. Создадим новые текстовые файлы с расширением txt, отследим и закомитим их

```

C:\Users\marin\reposit>git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        modified:   first_try.txt

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        second_try.txt
        third_try.txt

C:\Users\marin\reposit>git add "*.txt"

C:\Users\marin\reposit>git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        modified:   first_try.txt
        new file:   second_try.txt
        new file:   third_try.txt

C:\Users\marin\reposit>git commit -m "All files with txt extension were added"
[master 7f53fea] All files with txt extension were added
 3 files changed, 3 insertions(+), 1 deletion(-)
 create mode 100644 second_try.txt
 create mode 100644 third_try.txt

```

9. Просмотр истории коммитов (краткой и расширенной)

```

C:\Users\marin\reposit>git log
commit 7f53feaa653e2fdeb2f1472f39fe246a7bbc6b71 (HEAD -> master)
Author: Marina <marinetttsan@mail.ru>
Date:   Mon Sep 26 19:54:23 2022 +0300

    All files with txt extension were added

commit ee5182ae594209ac0913e65a9d8f3a4dc89dd2b2
Author: Marina <marinetttsan@mail.ru>
Date:   Mon Sep 26 19:46:39 2022 +0300

    First file

C:\Users\marin\reposit>git log --summary
commit 7f53feaa653e2fdeb2f1472f39fe246a7bbc6b71 (HEAD -> master)
Author: Marina <marinetttsan@mail.ru>
Date:   Mon Sep 26 19:54:23 2022 +0300

    All files with txt extension were added

    create mode 100644 second_try.txt
    create mode 100644 third_try.txt

commit ee5182ae594209ac0913e65a9d8f3a4dc89dd2b2
Author: Marina <marinetttsan@mail.ru>
Date:   Mon Sep 26 19:46:39 2022 +0300

    First file

    create mode 100644 first_try.txt

```

10. Добавление удаленного репозитория. Выгружаем локальный репозиторий в удаленный

```

C:\Users\marin\reposit>git remote add origin https://github.com/MarinaVasilevaIVT/rep.git

```

11. Осуществим операцию выгрузки в удаленный репозиторий, а также обратную операцию

```
C:\Users\marin\reposit>git push -u origin master
info: please complete authentication in your browser...
Enumerating objects: 6, done.
Counting objects: 100% (6/6), done.
Delta compression using up to 8 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (6/6), 484 bytes | 484.00 KiB/s, done.
Total 6 (delta 0), reused 0 (delta 0), pack-reused 0
remote:
remote: Create a pull request for 'master' on GitHub by visiting:
remote:   https://github.com/MarinaVasilevaIVT/rep/pull/new/master
remote:
To https://github.com/MarinaVasilevaIVT/rep.git
 * [new branch]      master -> master
branch 'master' set up to track 'origin/master'.

C:\Users\marin\reposit>git pull origin master
remote: Enumerating objects: 5, done.
remote: Counting objects: 100% (5/5), done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (3/3), 692 bytes | 43.00 KiB/s, done.
From https://github.com/MarinaVasilevaIVT/rep
 * branch            master       -> FETCH_HEAD
   7f53fea..7dd64c2  master       -> origin/master
Updating 7f53fea..7dd64c2
Fast-forward
 first_try.txt | 2 ++
 1 file changed, 2 insertions(+)
```

12. Посмотрим изменения с предыдущими версиями в файле

```
C:\Users\marin\reposit>git diff HEAD
C:\Users\marin\reposit>first_try.txt
C:\Users\marin\reposit>git diff HEAD
diff --git a/first_try.txt b/first_try.txt
index c8db365..5a7e91f 100644
--- a/first_try.txt
+++ b/first_try.txt
@@ -1,3 +1,3 @@
-Hello, World!
-Hello, World!
-Hello, World!
+Hello, World
+Hello, World
+Hello, World
```

13. Создадим каталог и там новый файл, добавим их для отслеживания в репозиторий

```
C:\Users\marin\reposit>mkdir folder
```

```

C:\Users\marin\reposit>git add folder/last.txt
C:\Users\marin\reposit>cd
C:\Users\marin\reposit
C:\Users\marin\reposit>git status
On branch master
Your branch is up to date with 'origin/master'.

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        new file:   folder/last.txt

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_try.txt

```

14. Сравним репозиторий с тем, что было раньше

```

C:\Users\marin\reposit>git diff --staged
diff --git a/folder/last.txt b/folder/last.txt
new file mode 100644
index 0000000..e69de29

```

15. Создадим новую ветку

```

C:\Users\marin\reposit>git branch clean_up

```

16. Просмотр ветки, на которой мы сейчас находимся

```

C:\Users\marin\reposit>git branch
clean_up
* master

```

17. Переключение на другую ветку

```

C:\Users\marin\reposit>git checkout clean_up
Switched to branch 'clean_up'

C:\Users\marin\reposit>git branch
* clean_up
master

```

18. Удаление каталога и файлов. Для полного удаления файлов нужно сделать КОММИТ

```
C:\Users\marin\reposit>rd folder
```

```
C:\Users\marin\reposit>git rm second_try.txt  
rm 'second_try.txt'
```

```
C:\Users\marin\reposit>git rm third_try.txt  
rm 'third_try.txt'
```

```
C:\Users\marin\reposit>git status  
On branch clean_up  
Changes to be committed:  
  (use "git restore --staged <file>..." to unstage)  
       deleted:    second_try.txt  
       deleted:    third_try.txt
```

```
C:\Users\marin\reposit>git commit -m "Deleted folder and files"  
[clean_up 4179d82] Deleted folder and files  
2 files changed, 2 deletions(-)  
delete mode 100644 second_try.txt  
delete mode 100644 third_try.txt
```

#### 19. Слияние веток

```
C:\Users\marin\reposit>git merge clean_up  
Updating 7dd64c2..4179d82  
Fast-forward  
 second_try.txt | 1 -  
 third_try.txt  | 1 -  
2 files changed, 2 deletions(-)  
delete mode 100644 second_try.txt  
delete mode 100644 third_try.txt
```

#### 20. Удаление ветки

```
C:\Users\marin\reposit>git branch -d clean_up  
Deleted branch clean_up (was 4179d82).
```