

git init – команда, которая используется для создания пустого репозитория Git

```
C:\GIT>git init
Initialized empty Git repository in C:/GIT/.git/
C:\GIT>_
```

Получения статуса репозитория на стандартной ветке master осуществляется при помощи команды «git status»

```
C:\GIT>git status
On branch master

No commits yet

nothing to commit (create/copy files and use "git add" to track)
```

Создание нового файла readme

```
C:\GIT>echo 'my project' > readme

C:\GIT>git status
On branch master

No commits yet

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

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

Отслеживание файла «git add readme»

```
C:\GIT>git add readme

C:\GIT>git status
On branch master

No commits yet

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

Фиксация изменений «git commit –m “комментарий”»

```
C:\GIT>git commit -m "first file"
[master (root-commit) c820228] first file
1 file changed, 1 insertion(+)
create mode 100644 readme

C:\GIT>git status
On branch master
nothing to commit, working tree clean
```

Далее создаем файлы и отслеживаем их

```
C:\GIT>git add "*.txt"

C:\GIT>git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:   readme after.txt
    new file:   readme now.txt
    modified:   readme.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)
```

Фиксируем и добавляем комментарий

```
C:\GIT>git commit -m "all files with txt extension were added"
[master 8a0fe8d] all files with txt extension were added
3 files changed, 1 insertion(+), 1 deletion(-)
create mode 100644 readme after.txt
create mode 100644 readme now.txt
```

git log (git log --summary) – git log команда, которая позволяет посмотреть историю всех фиксаций. git log --summary команда, которая помогает узнать более подробную информацию.

```
C:\GIT>git log
commit 8a0fe8dc84d4c5a5435cb0084d19ad78dd7a8608 (HEAD -> master)
Author: Aldar <xenovialq@gmail.com>
Date:   Wed Sep 27 02:15:57 2023 +0300

    all files with txt extension were added

commit ede7285e4ac45f90835962895177b77f65ad77b7
Author: Aldar <xenovialq@gmail.com>
Date:   Wed Sep 27 02:11:50 2023 +0300

    added

commit c820228cc429afb1388b2efd5b86664a5f44e512
Author: Aldar <xenovialq@gmail.com>
Date:   Wed Sep 27 02:04:13 2023 +0300

    first file
```

```

C:\GIT>git log --summary
commit 8a0fe8dc84d4c5a5435cb0084d19ad78dd7a8608 (HEAD -> master)
Author: Aldar <xenovialq@gmail.com>
Date:   Wed Sep 27 02:15:57 2023 +0300

    all files with txt extension were added

create mode 100644 readme after.txt
create mode 100644 readme now.txt

commit ede7285e4ac45f90835962895177b77f65ad77b7
Author: Aldar <xenovialq@gmail.com>
Date:   Wed Sep 27 02:11:50 2023 +0300

    added

create mode 100644 readme.txt

commit c820228cc429afb1388b2efd5b86664a5f44e512
Author: Aldar <xenovialq@gmail.com>
Date:   Wed Sep 27 02:04:13 2023 +0300


    first file

create mode 100644 readme

```

git remote add origin + ссылка на репозиторий – команда, которая позволяет добавлять удаленный репозиторий. Для этого необходимо зайти на сайт github, скопировать ссылку и вставить ее после рассматриваемой команды

Quick setup — if you've done this kind of thing before

 Set up in Desktop or ☐ HTTPS ☐ SSH

Get started by creating a new file or uploading an existing file. We recommend every repository include a README, LICENSE, and .gitignore.

```

C:\GIT>git remote add origin https://github.com/sakutaq/demo.git

```

```

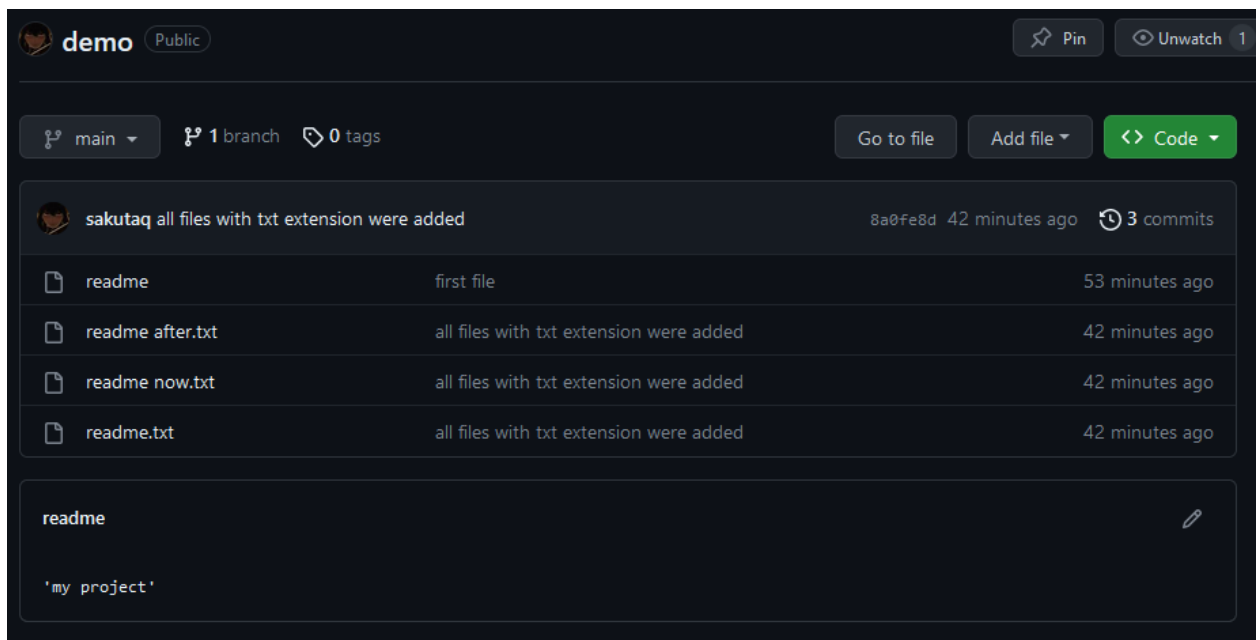
C:\GIT>git branch -M main

```

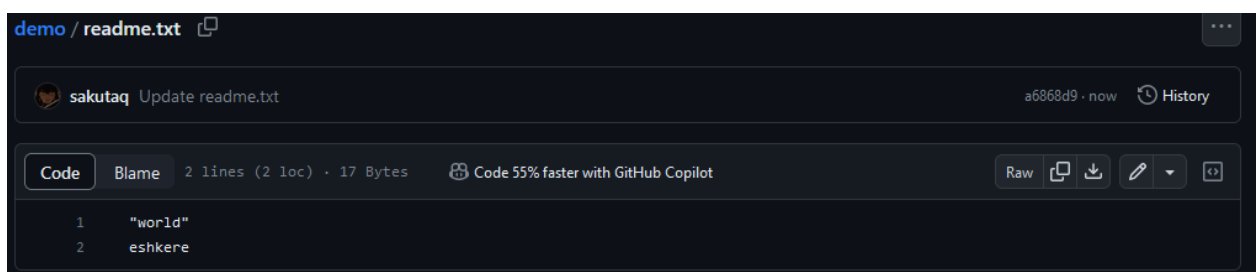
Для загрузки файлов из локального репозитория в удаленный, необходимо ввести команду: «git push -u (название удаленного репозитория) (ветку, которую надо загрузить)»

```
C:\GIT>git push -u origin main
Enumerating objects: 9, done.
Counting objects: 100% (9/9), done.
Delta compression using up to 4 threads
Compressing objects: 100% (5/5), done.
Writing objects: 100% (9/9), 725 bytes | 362.00 KiB/s, done.
Total 9 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/sakutaq/demo.git
 * [new branch]      main -> main
branch 'main' set up to track 'origin/main'.
```

Файлы из локального репозитория загрузились на гитхаб



git pull origin main – команда позволяет получить обратно файл, в котором были произведены изменения




```

C:\GIT>git pull origin main
remote: Enumerating objects: 5, done.
remote: Counting objects: 100% (5/5), done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 3 (delta 1), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (3/3), 648 bytes | 28.00 KiB/s, done.
From https://github.com/sakutag/demo
 * branch            main      -> FETCH_HEAD
   8a0fe8d..a6868d9  main      -> origin/main
Updating 8a0fe8d..a6868d9
Fast-forward
 readme.txt | 1 +
 1 file changed, 1 insertion(+)

```

git diff HEAD – просмотр изменений в файле

 readme – Блокнот

Файл Правка Формат Вид Справка

JUICE
eshkere

```

C:\GIT>git diff HEAD
diff --git a/readme b/readme
index cfd9beb..89497c6 100644
--- a/readme
+++ b/readme
@@ -1,1 @@
-'my project'
+'my project' after.txt
diff --git a/readme.txt b/readme.txt
index c74a6f6..799c188 100644
--- a/readme.txt
+++ b/readme.txt
@@ -1,2 +1,2 @@
-"world"
+JUICE
eshkere

```

Чтобы добавить каталог, нужно прописать `mkdir folder` (`mkdir` + название каталога) и добавим файл

```
C:\GIT>mkdir folder
C:\GIT>cd folder
C:\GIT\folder>echo > hi.txt
C:\GIT\folder>git status
On branch main
Your branch is up to date with 'origin/main'.

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:   ../readme
    modified:   ../readme.txt

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





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

Отслеживаем

```
C:\GIT\folder>git add hi.txt
C:\GIT\folder>git status
On branch main
Your branch is up to date with 'origin/main'.

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:   hi.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:   ../readme
    modified:   ../readme.txt
```

 folder	27.09.2023
 readme	27.09.2023
 readme after	27.09.2023
 readme now	27.09.2023
 readme	27.09.2023

Команда `git diff --staged` позволяет сравнить состояние репозитория с тем, который был до этого момента

```
C:\GIT\folder>git diff --staged
diff --git a/folder/hi.txt b/folder/hi.txt
new file mode 100644
index 0000000..cf53638
--- /dev/null
+++ b/folder/hi.txt
@@ -0,0 +1 @@
+<90><A5><A6><A8><AC> <A2> <A4><A0> <AA><AE><AC><A0><AD><A4> <AD><A0> <ED><AA> (ECHO) <A2><AA><AB><EE> .
```

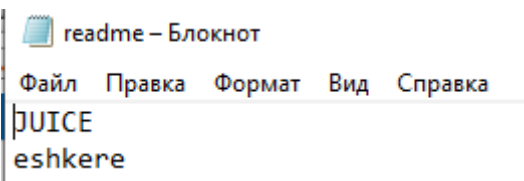
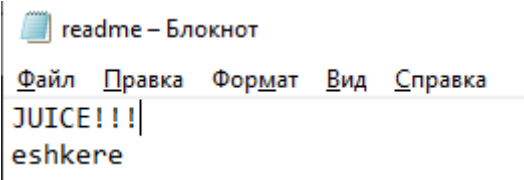
`Git reset hi.txt` – удаление файла из ветки

```
C:\GIT>git reset folder/hi.txt
Unstaged changes after reset:
M      readme
M      readme.txt
```

Сравнение состояний

```
C:\GIT>git diff
diff --git a/readme b/readme
index cfd9beb..89497c6 100644
--- a/readme
+++ b/readme
@@ -1,1 @@
- 'my project'
+ 'my project' after.txt
```

Чтобы отменить действие можно использовать команду `git checkout -- readme.txt`



The image shows two screenshots of a Notepad window titled 'readme - Блокнот'. The top screenshot shows the text 'JUICE!!!' on the first line and 'eshkere' on the second line. The bottom screenshot shows the text 'JUICE' on the first line and 'eshkere' on the second line, indicating that the '!!!' has been removed.

Для того, чтобы создать новую ветку, нужно написать `git branch` имя ветки

```
C:\GIT>git branch AYAYA
```

Просмотр ветки - git branch

```
C:\GIT>git branch
AYAYA
* main
```

git checkout название существующей ветки – переключение ветки

```
C:\GIT>git checkout AYAYA
Switched to branch 'AYAYA'
M      readme
M      readme.txt
```

```
C:\GIT>git branch
* AYAYA
main
```

Текущая ветка выделена зеленым цветом

git rm имя файла – удаление файла из отслеживаемых

```
C:\GIT>git rm "readme after.txt"
rm 'readme after.txt'

C:\GIT>git rm "readme now.txt"
rm 'readme now.txt'

C:\GIT>git status
On branch AYAYA
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        deleted:      readme after.txt
        deleted:      readme now.txt
```

git commit -m “deleted folder and files” – Фиксация изменений

```
C:\GIT>git commit -m "deleted folder and files"
[AYAYA 81bb0b1] deleted folder and files
 2 files changed, 0 insertions(+), 0 deletions(-)
 delete mode 100644 readme after.txt
 delete mode 100644 readme now.txt
```

git merge название ветки – слияние веток

```
C:\GIT>git merge AYAYA
Updating a6868d9..81bb0b1
Fast-forward
 readme after.txt | 0
 readme now.txt   | 0
 2 files changed, 0 insertions(+), 0 deletions(-)
 delete mode 100644 readme after.txt
 delete mode 100644 readme now.txt
```






git branch -d название ветки – Удаление ветки

```
C:\GIT>git branch -d AYAYA  
Deleted branch AYAYA (was 81bb0b1).
```

Загрузка изменённой ветки main

```
C:\GIT>git push  
Enumerating objects: 3, done.  
Counting objects: 100% (3/3), done.  
Delta compression using up to 4 threads  
Compressing objects: 100% (2/2), done.  
Writing objects: 100% (2/2), 262 bytes | 262.00 KiB/s, done.  
Total 2 (delta 0), reused 0 (delta 0), pack-reused 0  
To https://github.com/sakutaq/demo.git  
a6868d9..81bb0b1 main -> main
```

Итог – обновлённая ветка

	sakutaq deleted folder and files	81bb0b1 6 minutes ago	 5 commits
	readme	first file	1 hour ago
	readme.txt	Update readme.txt	40 minutes ago