

Гит 1.1

Работа с Git

Установка имени и электронной почты

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop
$ git config --global user.name "Nikita Migunov"

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop
$ git config --global user.email "migunov_nikita95@bk.ru"

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop
$ |
```

Параметры окончаний строк

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop
$ git config --global core.autocrlf true

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop
$ git config --global core.safecrlf true

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop
$ |
```

Установка отображения Unicode

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop
$ git config --global core.quotePath off

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop
$ |
```

Создания каталога и файла

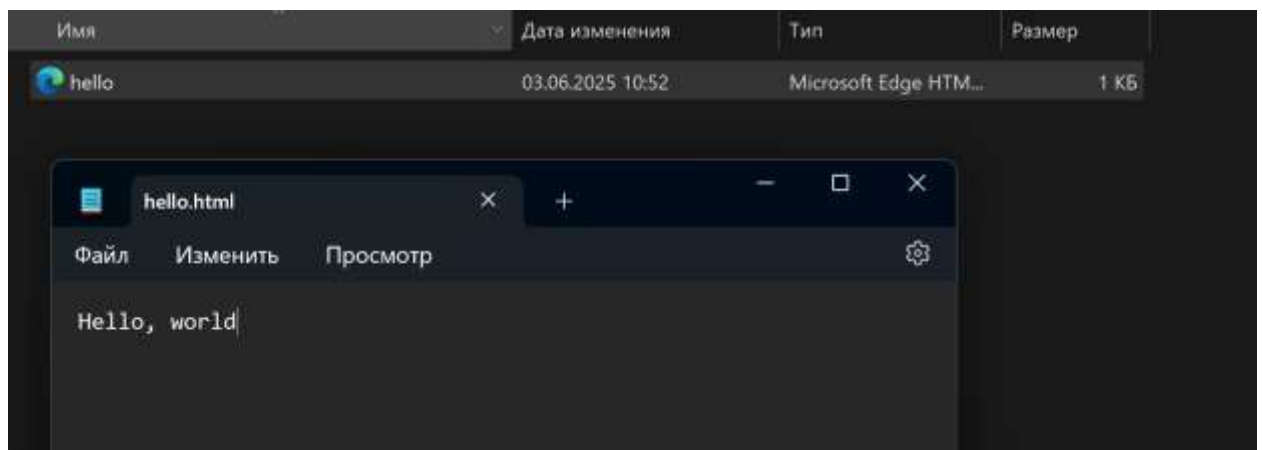
```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop
$ mkdir hello

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop
$ cd hello

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello
$ touch hello.html

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello
$ |
```

Содержание файла



Создание репозитория

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello
$ git init
Initialized empty git repository in C:/Users/Asus/Desktop/hello/.git/

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$
```

Добавление в репозиторий

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git add hello.html

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git commit -m "First Commit"
[master (root-commit) cb6ec63] First Commit
1 file changed, 1 insertion(+)
create mode 100644 hello.html

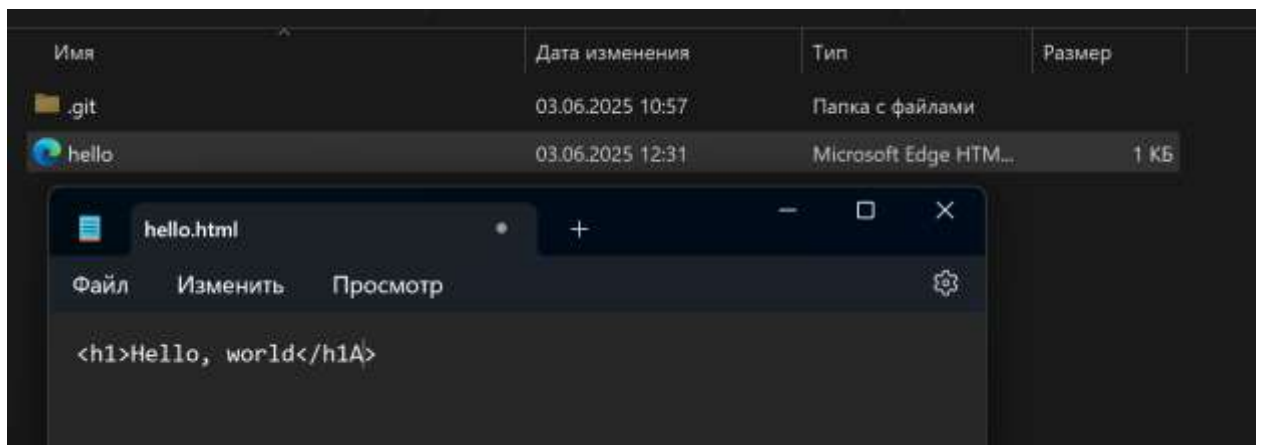
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$
```

Проверка состояния репозитория

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git status
On branch master
nothing to commit, working tree clean

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$
```

Внесение изменения в файл



Сообщение о незафиксированных изменениях

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ 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:   hello.html

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

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ |
```

Команды для индексации изменений

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git add hello.html

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        modified:   hello.html

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$
```

Индексация и коммит для 2 файлов

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git add a.html

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git add b.html

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git commit -m "Changes for a and b"
[master 266dc47] Changes for a and b
3 files changed, 1 insertion(+), 1 deletion(-)
create mode 100644 a.html
create mode 100644 b.html

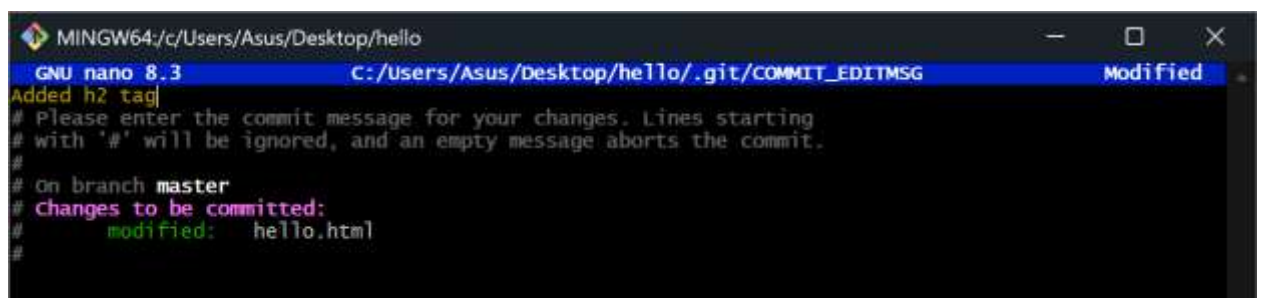
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$
```

Индексация и коммит для третьего файла

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git commit -m "Unrelated change for v"
[master d3d9239] Unrelated change for v
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 v.html

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ |
```

Ввод комментария



```
MINGW64/c:/Users/Asus/Desktop/hello
GNU nano 8.3 C:/Users/Asus/Desktop/hello/.git/COMMIT_EDITMSG Modified
Added h2 tag
# Please enter the commit message for your changes. Lines starting
# with '#' will be ignored, and an empty message aborts the commit.
#
# On branch master
#
# Changes to be committed:
#   modified:   hello.html
#
```

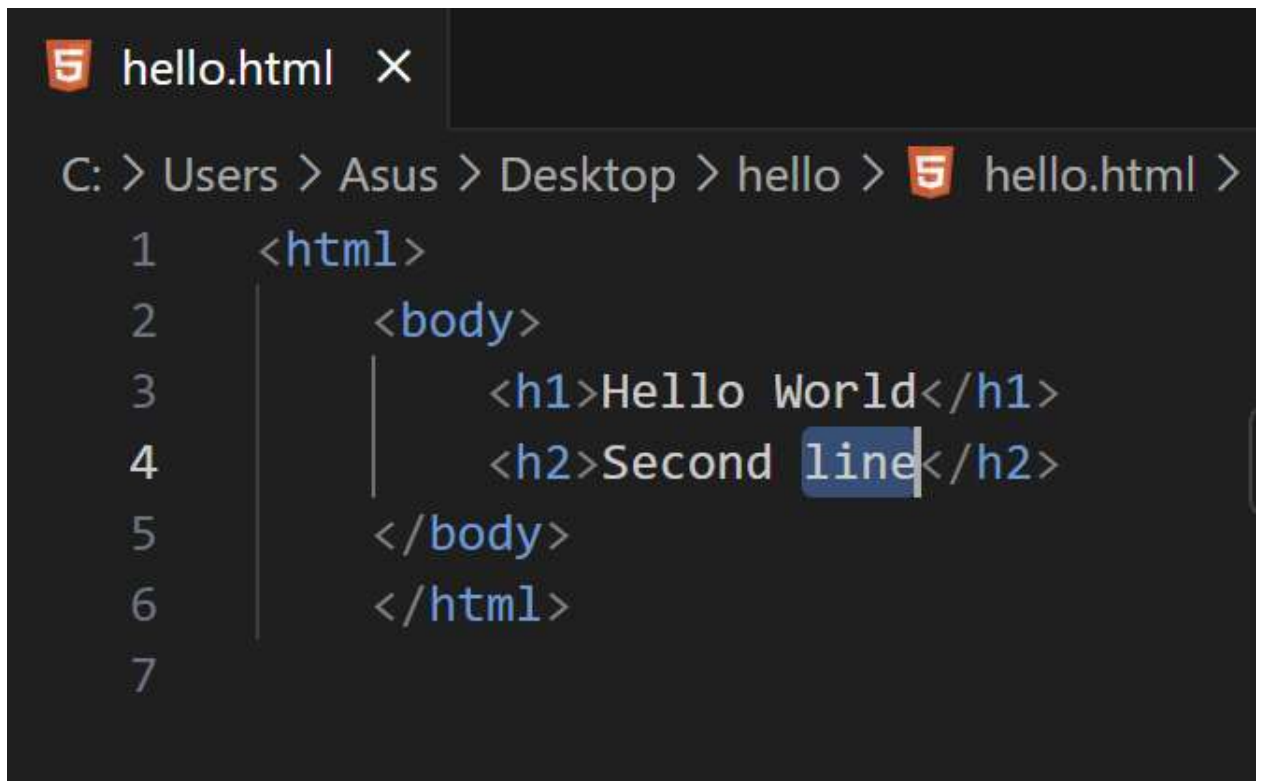
Коммит сообщения

```
$ git commit
hint: Waiting for your editor to close the file...
[main 2021-01-31T08:05:41.046Z] update#setState idle
[main 2021-01-31T08:06:11.084Z] update#setState checking for updates
[main 2021-01-31T08:06:11.304Z] update#setState idle
[master c8f53f9] Added h2 tag
1 file changed, 2 insertions(+), 1 deletion(-)
```

Проверка состояния

```
$ git status
On branch master
nothing to commit, working tree clean
```

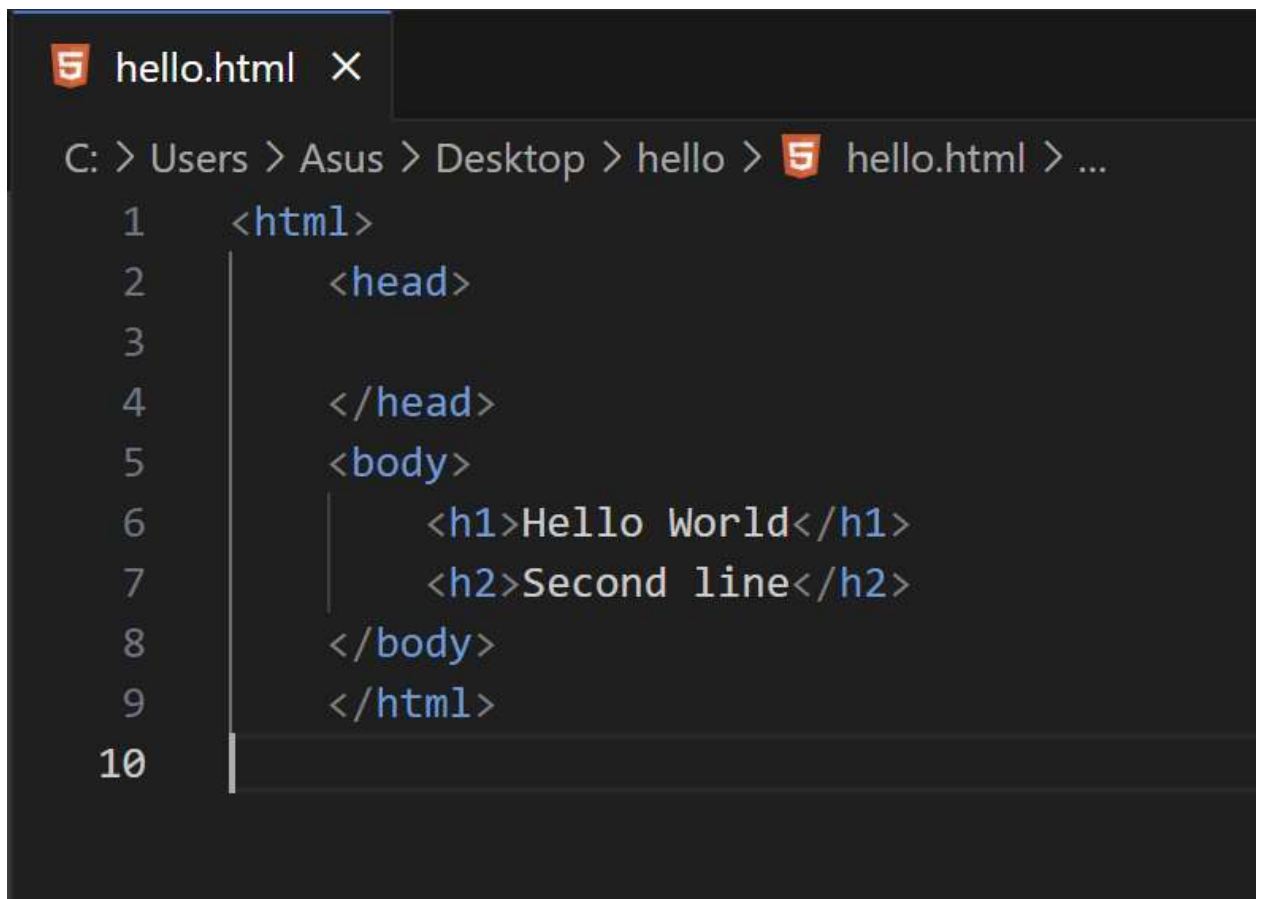
Добавление тегов html и body



A screenshot of a code editor window titled 'hello.html'. The editor shows the following HTML code:

```
1 <html>
2   <body>
3     <h1>Hello World</h1>
4     <h2>Second line</h2>
5   </body>
6 </html>
7
```

Добавление тега head



A screenshot of a code editor window titled 'hello.html'. The editor shows the following HTML code:

```
1 <html>
2   <head>
3
4   </head>
5   <body>
6     <h1>Hello World</h1>
7     <h2>Second line</h2>
8   </body>
9 </html>
10
```


Проверка состояния

```
$ git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        modified:   hello.html

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:   hello.html
```

Коммит 1 изменения и проверка состояния

```
$ git commit -m "Add standard HTML tags"
[master cab488a] Add standard HTML tags
1 file changed, 6 insertions(+), 2 deletions(-)
```

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ 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:   hello.html

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

Индексация 2 изменения и проверка состояния

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git add .

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        modified:   hello.html
```

Коммит 2 изменения

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git commit -m "Add HTML header"
[master 4e4b107] Add HTML header
1 file changed, 1 insertion(+), 1 deletion(-)

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$
```

Гит 1.2

Просмотр истории изменений


```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git log
commit 4e4b107da70717ff5135c459fa6faced1415caf6 (HEAD -> master)
Author: Nikita Migunov <migunov_nikita95@bk.ru>
Date: Tue Jun 3 15:10:21 2025 +0300

    Add HTML header

commit e82a9c13da97f0c3d35ec33940ce91cc047f66a6
Author: Nikita Migunov <migunov_nikita95@bk.ru>
Date: Tue Jun 3 14:18:37 2025 +0300

    Добавлен новый файл hello.html с базовой структурой HTML

commit 9a9d12666198e6d31990bbbdb4dc3c74c72be55b
Author: Nikita Migunov <migunov_nikita95@bk.ru>
Date: Tue Jun 3 13:30:45 2025 +0300

    Восстановлен hello.html

commit ddafd0af9074141e28f43aa02fdeeb41e755e3b1
Author: Nikita Migunov <migunov_nikita95@bk.ru>
Date: Tue Jun 3 12:50:33 2025 +0300

    Added h2 tag

commit d3d9239a13dd0cea6f78a28a122c497ed6b560cb
Author: Nikita Migunov <migunov_nikita95@bk.ru>
Date: Tue Jun 3 12:41:01 2025 +0300

    Unrelated change for v

commit 266dc47ca00647d848a954f92fd33d666d4d3f6e
Author: Nikita Migunov <migunov_nikita95@bk.ru>
Date: Tue Jun 3 12:39:44 2025 +0300

    Changes for a and b

commit cb6ec636f1a694c439e4846936ee6ba5e7d8307e
Author: Nikita Migunov <migunov_nikita95@bk.ru>
Date: Tue Jun 3 10:57:04 2025 +0300

    First Commit
```

Однострочный формат ввода

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git log --pretty=oneline
4e4b107da70717ff5135c459fa6faced1415caf6 (HEAD -> master) Add HTML header
e82a9c13da97f0c3d35ec33940ce91cc047f66a6 добавлен новый файл hello.html с базовой структурой HTML
9a9d12666198e6d31990bbdb4dc3c74c72be55b Восстановлен hello.html
ddafd0af9074141e28f43aa02fdeeb41e755e3b1 Added h2 tag
d3d9239a13dd0cea6f78a28a122c497ed6b560cb Unrelated change for v
266dc47ca00647d848a954f92fd33d666d4d3f6e Changes for a and b
cb6ec636f1a694c439e4846936ee6ba5e7d8307e First Commit

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$

```

Ввод 2 последних изменений

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git log --pretty=oneline --max-count=2
4e4b107da70717ff5135c459fa6faced1415caf6 (HEAD -> master) Add HTML header
e82a9c13da97f0c3d35ec33940ce91cc047f66a6 добавлен новый файл hello.html с базовой структурой HTML

```

Вывод изменений начиная с определенного времени

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git log --pretty=oneline --since='10 days ago'
4e4b107da70717ff5135c459fa6faced1415caf6 (HEAD -> master) Add HTML header
e82a9c13da97f0c3d35ec33940ce91cc047f66a6 добавлен новый файл hello.html с базовой структурой HTML
9a9d12666198e6d31990bbdb4dc3c74c72be55b Восстановлен hello.html
ddafd0af9074141e28f43aa02fdeeb41e755e3b1 Added h2 tag
d3d9239a13dd0cea6f78a28a122c497ed6b560cb Unrelated change for v
266dc47ca00647d848a954f92fd33d666d4d3f6e Changes for a and b
cb6ec636f1a694c439e4846936ee6ba5e7d8307e First Commit

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git log --pretty=oneline --since='12 days ago'
4e4b107da70717ff5135c459fa6faced1415caf6 (HEAD -> master) Add HTML header
e82a9c13da97f0c3d35ec33940ce91cc047f66a6 добавлен новый файл hello.html с базовой структурой HTML
9a9d12666198e6d31990bbdb4dc3c74c72be55b Восстановлен hello.html
ddafd0af9074141e28f43aa02fdeeb41e755e3b1 Added h2 tag
d3d9239a13dd0cea6f78a28a122c497ed6b560cb Unrelated change for v
266dc47ca00647d848a954f92fd33d666d4d3f6e Changes for a and b
cb6ec636f1a694c439e4846936ee6ba5e7d8307e First Commit

```

Вывод изменений до определенного времени

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git log --pretty=oneline --until='5 minutes ago'
4e4b107da70717ff5135c459fa6faced1415caf6 (HEAD -> master) Add HTML header
e82a9c13da97f0c3d35ec33940ce91cc047f66a6 добавлен новый файл hello.html с базовой структурой HTML
9a9d12666198e6d31990bbdb4dc3c74c72be55b Восстановлен hello.html
ddafd0af9074141e28f43aa02fdeeb41e755e3b1 Added h2 tag
d3d9239a13dd0cea6f78a28a122c497ed6b560cb Unrelated change for v
266dc47ca00647d848a954f92fd33d666d4d3f6e Changes for a and b
cb6ec636f1a694c439e4846936ee6ba5e7d8307e First Commit

```

Вывод изменений, внесенных определенным автором

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git log --pretty=oneline --author='Nikita Migunov'
4e4b107da70717ff5135c459fa6faced1415caf6 (HEAD -> master) Add HTML header
e82a9c13da97f0c3d35ec33940ce91cc047f66a6 добавлен новый файл hello.html с базовой структурой HTML
9a9d12666198e6d31990bbdb4dc3c74c72be55b Восстановлен hello.html
ddafd0af9074141e28f43aa02fdeeb41e755e3b1 Added h2 tag
d3d9239a13dd0cea6f78a28a122c497ed6b560cb unrelated change for v
266dc47ca00647d848a954f92fd33d666d4d3f6e changes for a and b
cb6ec636f1a694c439e4846936ee6ba5e7d8307e First Commit

```

Вывод всех изменений

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git log --pretty=oneline --all
4e4b107da70717ff5135c459fa6faced1415caf6 (HEAD -> master) Add HTML header
e82a9c13da97f0c3d35ec33940ce91cc047f66a6 добавлен новый файл hello.html с базовой структурой HTML
9a9d12666198e6d31990bbdb4dc3c74c72be55b Восстановлен hello.html
ddafd0af9074141e28f43aa02fdeeb41e755e3b1 Added h2 tag
d3d9239a13dd0cea6f78a28a122c497ed6b560cb unrelated change for v
266dc47ca00647d848a954f92fd33d666d4d3f6e changes for a and b
cb6ec636f1a694c439e4846936ee6ba5e7d8307e First Commit

```

Использование нескольких параметров

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git log --all --pretty=format:"%h %cd %s (%an)" --since='12 days ago'
4e4b107 Tue Jun 3 15:10:21 2025 +0300 Add HTML header (Nikita Migunov)
e82a9c1 Tue Jun 3 14:18:37 2025 +0300 добавлен новый файл hello.html с базовой структурой HTML (Nikita Migunov)
9a9d126 Tue Jun 3 13:30:45 2025 +0300 Восстановлен hello.html (Nikita Migunov)
ddafd0a Tue Jun 3 12:50:33 2025 +0300 Added h2 tag (Nikita Migunov)
d3d9239 Tue Jun 3 12:41:01 2025 +0300 Unrelated change for v (Nikita Migunov)
266dc47 Tue Jun 3 12:39:44 2025 +0300 changes for a and b (Nikita Migunov)
cb6ec63 Tue Jun 3 10:57:04 2025 +0300 First commit (Nikita Migunov)

```

Настройка алиасов для некоторых команд

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git config --global alias.co checkout

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git config --global alias.ci commit

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git config --global alias.st status

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git config --global alias.br branch

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git config --global alias.hist "log --pretty=format:'%h %ad | %s%d [%an]' --graph --date=short"

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git config --global alias.type 'cat-file -t'

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git config --global alias.dump 'cat-file -p'

```

Выполнение алиаса hist

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git config --global alias.hist "log --pretty=format:'%h %ad | %s%d [%an]' --graph --date=short"

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git hist
* 4e4b107 2025-06-03 | Add HTML header (HEAD -> master) [Nikita Migunov]
* e82a9c1 2025-06-03 | добавлен новый файл hello.html с базовой структурой HTML [Nikita Migunov]
* 9a9d126 2025-06-03 | восстановлен hello.html [Nikita Migunov]
* ddafd0a 2025-06-03 | Added h2 tag [Nikita Migunov]
* d3d9239 2025-06-03 | Unrelated change for v [Nikita Migunov]
* 266dc47 2025-06-03 | Changes for a and b [Nikita Migunov]
* cb6ec63 2025-06-03 | First Commit [Nikita Migunov]
```

Установка и выполнение алиаса gs

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ alias gs='git status'

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ gs
On branch master
nothing to commit, working tree clean

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$
```

Просмотр хэшей предыдущих версий

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git hist
* 4e4b107 2025-06-03 | Add HTML header (HEAD -> master) [Nikita Migunov]
* e82a9c1 2025-06-03 | добавлен новый файл hello.html с базовой структурой HTML [Nikita Migunov]
* 9a9d126 2025-06-03 | восстановлен hello.html [Nikita Migunov]
* ddafd0a 2025-06-03 | Added h2 tag [Nikita Migunov]
* d3d9239 2025-06-03 | Unrelated change for v [Nikita Migunov]
* 266dc47 2025-06-03 | Changes for a and b [Nikita Migunov]
* cb6ec63 2025-06-03 | First Commit [Nikita Migunov]
```

Возвращение к нужной версии и просмотр содержимого файла


```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git checkout cb6ec63
Note: switching to 'cb6ec63'.

You are in 'detached HEAD' state. You can look around, make experimental
changes and commit them, and you can discard any commits you make in this
state without impacting any branches by switching back to a branch.

If you want to create a new branch to retain commits you create, you may
do so (now or later) by using -c with the switch command. Example:

    git switch -c <new-branch-name>

Or undo this operation with:

    git switch -

Turn off this advice by setting config variable advice.detachedHead to false

HEAD is now at cb6ec63 First Commit
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello ((cb6ec63...))
$ cat hello.html
Hello, world
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello ((cb6ec63...))
$

```

Возвращение к последней версии в ветке master

```

Hello, world
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello ((cb6ec63...))
$ git checkout master
Previous HEAD position was cb6ec63 First Commit
Switched to branch 'master'

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ cat hello.html
<html>
  <head>

  </head>
  <body>
    <h1>Hello world</h1>
    <h2>Second line</h2>
  </body>
</html>

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ |

```

Задание тега

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git tag ver1

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$

```

Переход к предыдущей версии с помощью тега

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git checkout ver1^
Note: switching to 'ver1^'.

You are in 'detached HEAD' state. You can look around, make experimental
changes and commit them, and you can discard any commits you make in this
state without impacting any branches by switching back to a branch.

If you want to create a new branch to retain commits you create, you may
do so (now or later) by using -c with the switch command. Example:

    git switch -c <new-branch-name>

Or undo this operation with:

    git switch -

Turn off this advice by setting config variable advice.detachedhead to false

HEAD is now at e82a9c1 добавлен новый файл hello.html с базовой структурой HTML
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello ((e82a9c1...))
$ cat hello.html
<html>
  <head>

  </head>
  <body>
    <h1>Hello world</h1>
    <h2>Second line</h2>
  </body>
</html>
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello ((e82a9c1...))
$

```

Задание тега предыдущей версии

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello ((e82a9c1...))
$ git tag ver1-beta

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello ((ver1-beta))
$ |

```

Переключение между версиями с помощью тегов

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello ((ver1-beta))
$ git checkout ver1
Previous HEAD position was e82a9c1 добавлен новый файл hello.html с базовой структурой HTML
HEAD is now at 4e4b107 Add HTML header

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello ((ver1))
$ git checkout ver1-beta
Previous HEAD position was 4e4b107 Add HTML header
HEAD is now at e82a9c1 добавлен новый файл hello.html с базовой структурой HTML

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello ((ver1-beta))
$

```

Просмотр тегов

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello ((ver1-beta))
$ git tag
ver1
ver1-beta
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello ((ver1-beta))
$ |

```

Просмотр тегов в логе

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello ((ver1-beta))
$ git hist master --all
* 4e4b107 2025-06-03 | Add HTML header (tag: ver1, master) [Nikita Migunov]
* e82a9c1 2025-06-03 | добавлен новый файл hello.html с базовой структурой HTML (HEAD, tag: ver1-beta) [Nikita Migunov]
* 9a9d126 2025-06-03 | восстановлен hello.html [Nikita Migunov]
* ddafd0a 2025-06-03 | Added h2 tag [Nikita Migunov]
* d3d9239 2025-06-03 | Unrelated change for v [Nikita Migunov]
* 266dc47 2025-06-03 | changes for a and b [Nikita Migunov]
* cb6ec63 2025-06-03 | First commit [Nikita Migunov]
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello ((ver1-beta))
$

```

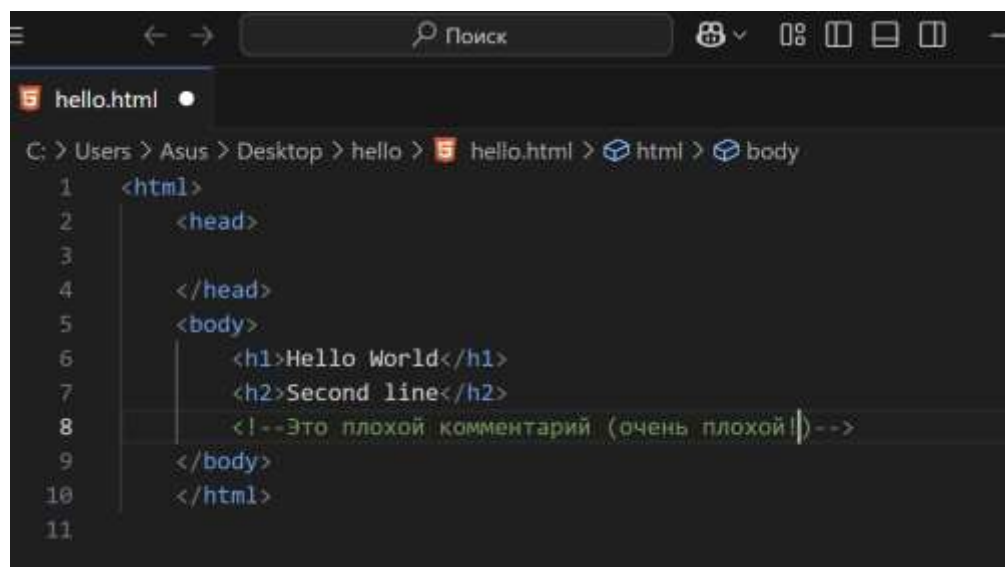
Переключение на последний коммит

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello ((ver1-beta))
$ git checkout master
Previous HEAD position was e82a9c1 добавлен новый файл hello.html с базовой структурой HTML
Switched to branch 'master'

```

Внесение изменения в файл



```

C: > Users > Asus > Desktop > hello > hello.html > html > body
1  <html>
2    <head>
3
4    </head>
5    <body>
6      <h1>Hello World</h1>
7      <h2>Second line</h2>
8      <!--Это плохой комментарий (очень плохой!)-->
9    </body>
10   </html>
11

```

Не проиндексированное изменение


```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git st
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:   hello.html

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

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ |
```

Возвращение к версии

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git checkout hello.html
Updated 1 path from the index

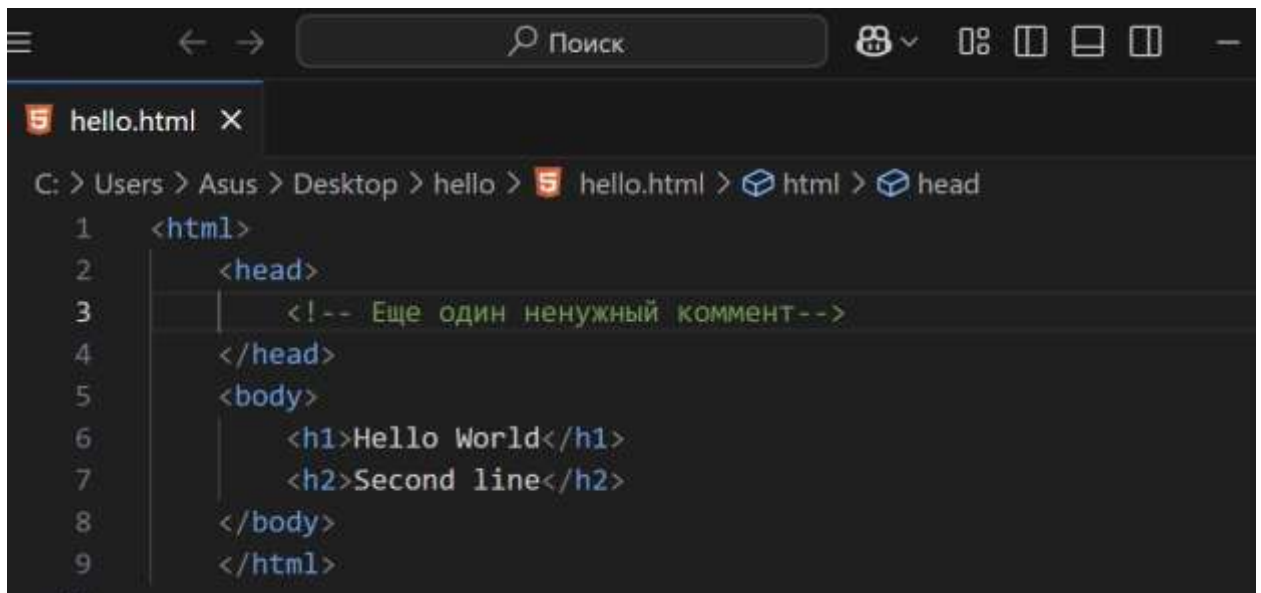
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git st
on branch master
nothing to commit, working tree clean

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ cat hello.html
<html>
  <head>

  </head>
  <body>
    <h1>Hello world</h1>
    <h2>Second line</h2>
  </body>
</html>

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$
```

Внесение ненужного изменения



```
hello.html X
C: > Users > Asus > Desktop > hello > hello.html > html > head
1 <html>
2   <head>
3     <!-- Еще один ненужный коммент-->
4   </head>
5   <body>
6     <h1>Hello World</h1>
7     <h2>Second line</h2>
8   </body>
9 </html>
```

Индексация изменения

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git add hello.html

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git st
on branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        modified:   hello.html
```

Очистка буферной зоны

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git reset HEAD hello.html
Unstaged changes after reset:
M       hello.html

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git st
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:   hello.html

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

Удаление ненужных изменений

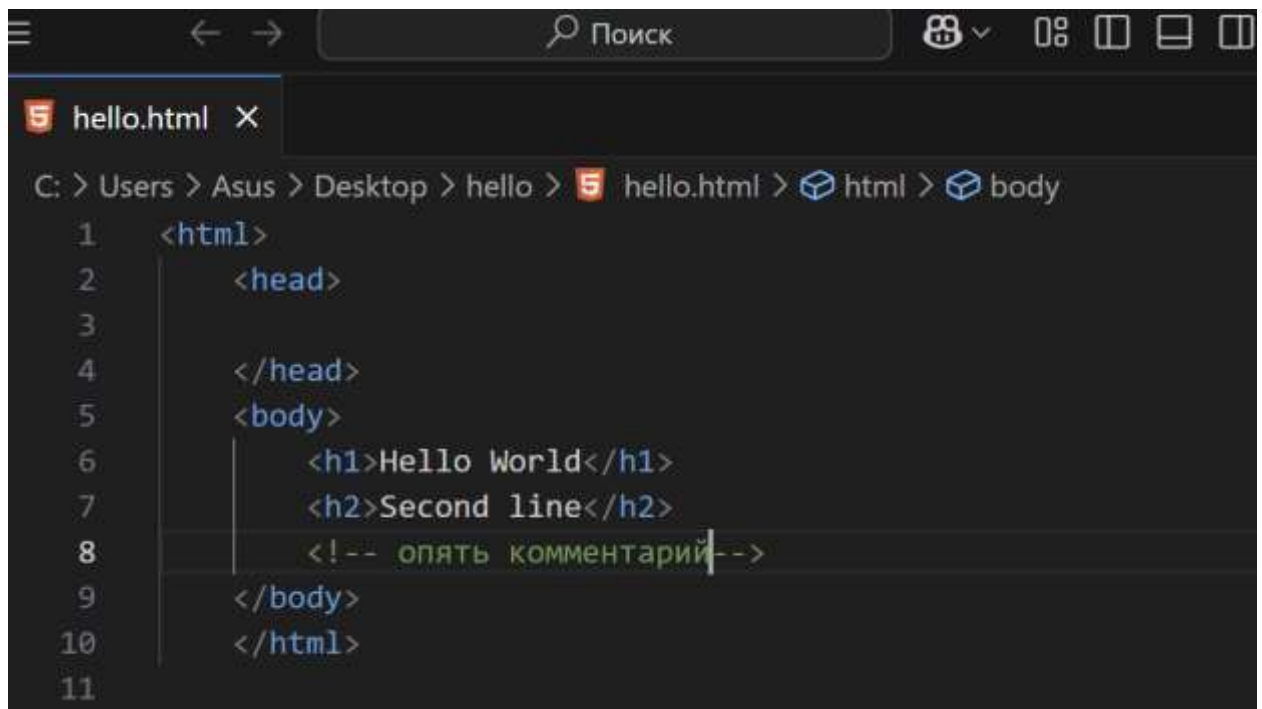
```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git checkout hello.html
Updated 1 path from the index

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git st
on branch master
nothing to commit, working tree clean

```

Внесение изменения в файл



```

C: > Users > Asus > Desktop > hello > hello.html > html > body
1  <html>
2      <head>
3
4      </head>
5      <body>
6          <h1>Hello World</h1>
7          <h2>Second line</h2>
8          <!-- опять комментарий -->
9      </body>
10 </html>
11

```

Индексация и коммит

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git add hello.html

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git commit -m "Oops, this is bad commit"
[master d0c4015] oops, this is bad commit
1 file changed, 1 insertion(+)

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ |

```

Коммит сообщение в редакторе

```
MINGW64:/c/Users/Asus/Desktop/hello
GNU nano 8.3 c:/Users/Asus/Desktop/hello/.git/COMMIT_EDITMSG
Revert "Oops, this is bad commit"

This reverts commit d0c4015bbb5f8fd7cee5523b3360d8ee61b305fc.

# Please enter the commit message for your changes. Lines starting
# with '#' will be ignored, and an empty message aborts the commit.
#
# On branch master
# Changes to be committed:
#   modified:   hello.html
#
```

Редактор закрыт

```
[master 6821e31] Revert "Oops, this is bad commit"
1 file changed, 1 deletion(-)

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ |
```

Все коммиты при просмотре лога

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git hist
* 6821e31 2025-06-03 | Revert "Oops, this is bad commit" (HEAD -> master) [Nikita Migunov]
* d0c4015 2025-06-03 | Oops, this is bad commit [Nikita Migunov]
* 4e4b107 2025-06-03 | Add HTML header (tag: ver1) [Nikita Migunov]
* e82a9c1 2025-06-03 | добавлен новый файл hello.html с базовой структурой HTML (tag: ver1-beta) [Nikita Migunov]
* 9a9d126 2025-06-03 | Восстановлен hello.html [Nikita Migunov]
* ddafd0a 2025-06-03 | Added h2 tag [Nikita Migunov]
* d3d9239 2025-06-03 | Unrelated change for v [Nikita Migunov]
* 266dc47 2025-06-03 | changes for a and b [Nikita Migunov]
* cb6ec63 2025-06-03 | First Commit [Nikita Migunov]

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ |
```

Отметка тегом коммита

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git tas oooops
git: 'tas' is not a git command. See 'git --help'.

The most similar commands are
    stash
    tag

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git hist
* 6821e31 2025-06-03 | Revert "Oops, this is bad commit" (HEAD -> master) [Nikita Migunov]
* d0c4015 2025-06-03 | Oops, this is bad commit [Nikita Migunov]
* 4e4b107 2025-06-03 | Add HTML header (tag: ver1) [Nikita Migunov]
* e82a9c1 2025-06-03 | Добавлен новый файл hello.html с базовой структурой HTML (tag: ver1-beta) [Nikita Migunov]
* 9a9d126 2025-06-03 | Восстановлен hello.html [Nikita Migunov]
* ddaf0a 2025-06-03 | Added h2 tag [Nikita Migunov]
* d3d9239 2025-06-03 | Unrelated change for v [Nikita Migunov]
* 266dc47 2025-06-03 | changes for a and b [Nikita Migunov]
* cb6ec63 2025-06-03 | First Commit [Nikita Migunov]

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ |

```

Сброс коммита

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git reset --hard ver1
HEAD is now at 4e4b107 Add HTML header

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git hist
* 4e4b107 2025-06-03 | Add HTML header (HEAD -> master, tag: ver1) [Nikita Migunov]
* e82a9c1 2025-06-03 | Добавлен новый файл hello.html с базовой структурой HTML (tag: ver1-beta) [Nikita Migunov]
* 9a9d126 2025-06-03 | Восстановлен hello.html [Nikita Migunov]
* ddaf0a 2025-06-03 | Added h2 tag [Nikita Migunov]
* d3d9239 2025-06-03 | Unrelated change for v [Nikita Migunov]
* 266dc47 2025-06-03 | changes for a and b [Nikita Migunov]
* cb6ec63 2025-06-03 | First Commit [Nikita Migunov]

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ |

```

Сброшенные коммиты находятся по-прежнему в репозитории

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git hist --all
* 4e4b107 2025-06-03 | Add HTML header (HEAD -> master, tag: ver1) [Nikita Migunov]
* e82a9c1 2025-06-03 | Добавлен новый файл hello.html с базовой структурой HTML (tag: ver1-beta) [Nikita Migunov]
* 9a9d126 2025-06-03 | Восстановлен hello.html [Nikita Migunov]
* ddaf0a 2025-06-03 | Added h2 tag [Nikita Migunov]
* d3d9239 2025-06-03 | Unrelated change for v [Nikita Migunov]
* 266dc47 2025-06-03 | changes for a and b [Nikita Migunov]
* cb6ec63 2025-06-03 | First Commit [Nikita Migunov]

```

Удаление тега


```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git tas -d oooops
git: 'tas' is not a git command. see 'git --help'.

The most similar commands are
    stash
    tag

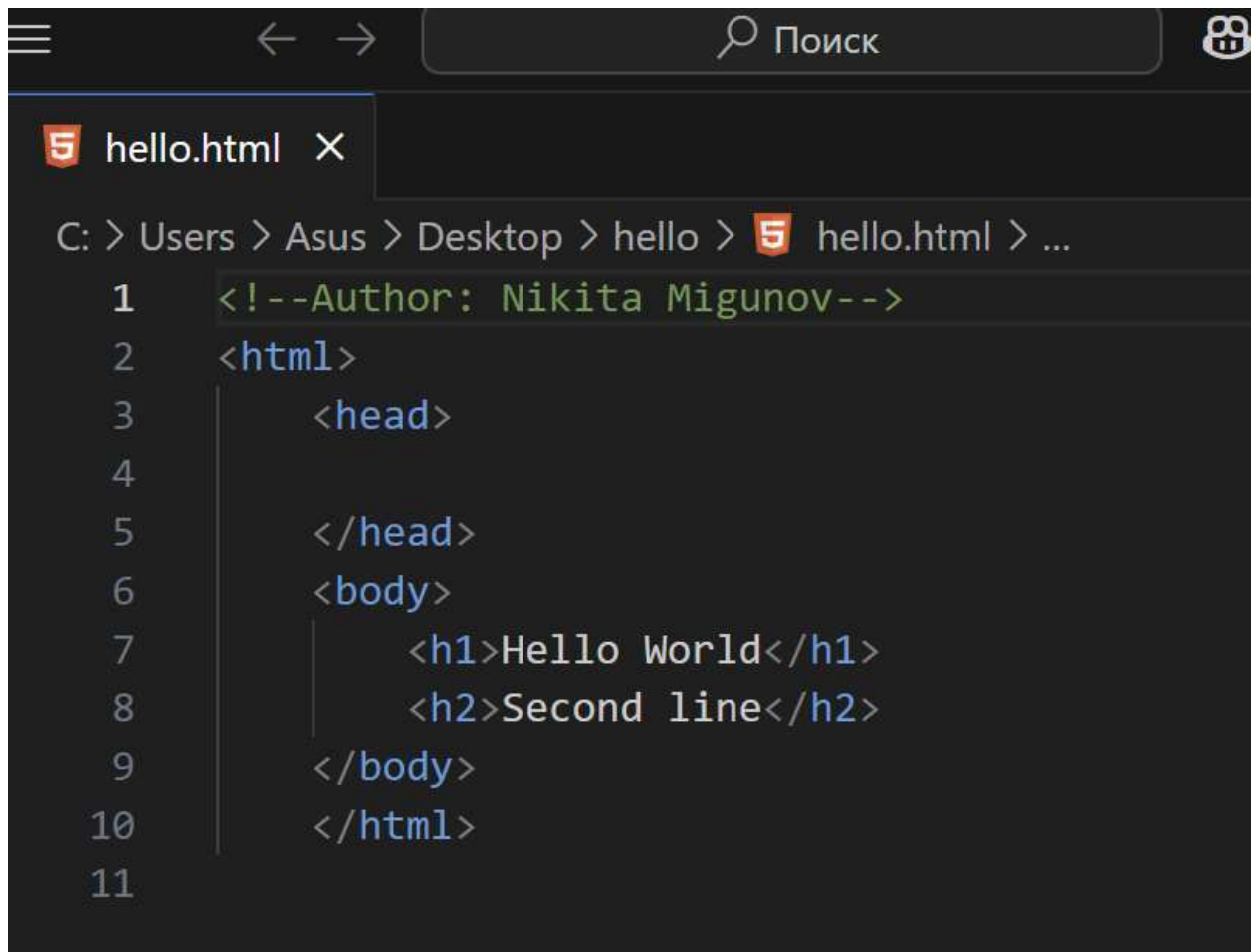
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git hist --all
* 4e4b107 2025-06-03 | Add HTML header (HEAD -> master, tag: ver1) [Nikita Migunov]
* e82a9c1 2025-06-03 | Добавлен новый файл hello.html с базовой структурой HTML (tag: ver1-beta) [Nikita Migunov]
* 9a9d126 2025-06-03 | Восстановлен hello.html [Nikita Migunov]
* ddafd0a 2025-06-03 | Added h2 tag [Nikita Migunov]
* d3d9239 2025-06-03 | Unrelated change for v [Nikita Migunov]
* 266dc47 2025-06-03 | changes for a and b [Nikita Migunov]
* cb6ec63 2025-06-03 | First Commit [Nikita Migunov]

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)

```

Гит 1.3

Добавление комментария в файл



```

C: > Users > Asus > Desktop > hello > hello.html > ...

1  <!--Author: Nikita Migunov-->
2  <html>
3      <head>
4
5      </head>
6      <body>
7          <h1>Hello World</h1>
8          <h2>Second line</h2>
9      </body>
10 </html>
11

```

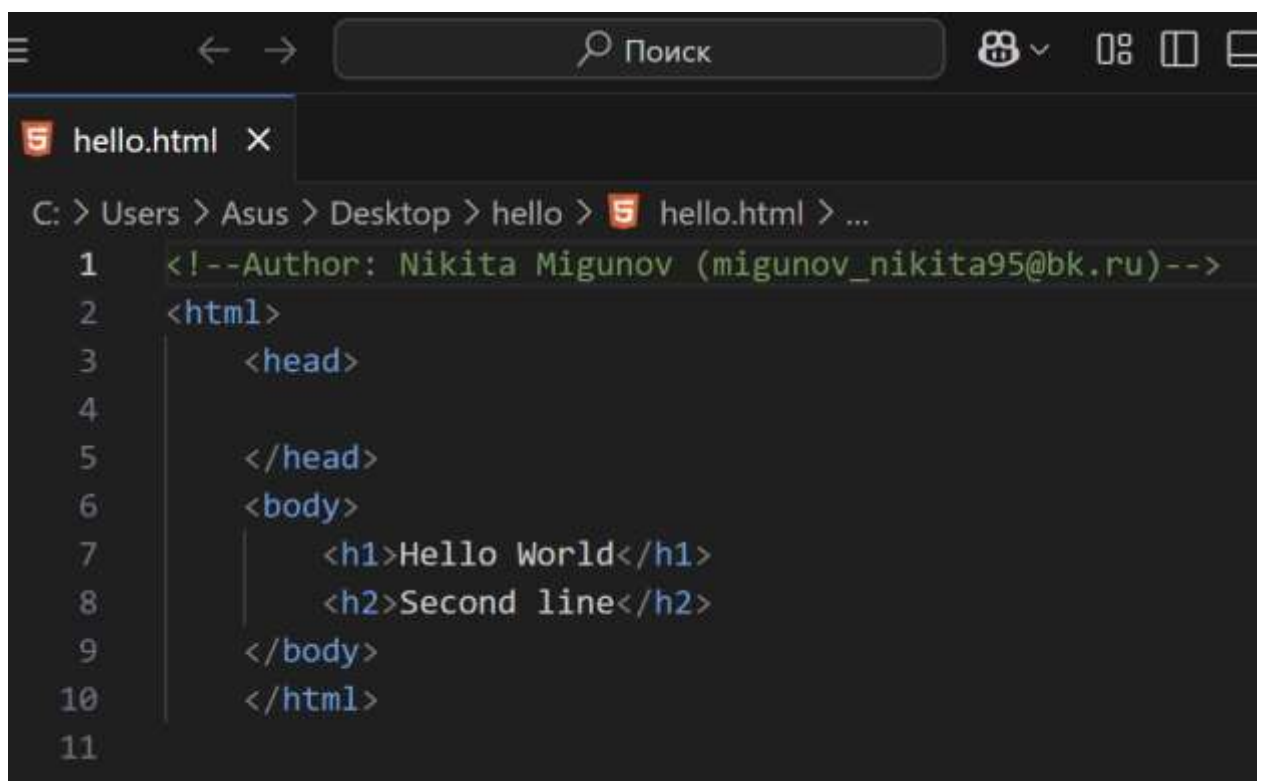
Индексация и коммит

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git add hello.html

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git commit -m "Add an author comment"
[master 38678ac] Add an author comment
1 file changed, 1 insertion(+)

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$
```

Добавление электронной почты

A screenshot of a web browser window. The address bar shows the file path: C:\Users\Asus\Desktop\hello\hello.html. The page content is an HTML document with a comment and two paragraphs. The comment is: <!--Author: Nikita Migunov (migunov_nikita95@bk.ru)-->. The first paragraph is "Hello World" and the second is "Second line".

```
1 <!--Author: Nikita Migunov (migunov_nikita95@bk.ru)-->
2 <html>
3   <head>
4
5   </head>
6   <body>
7     <h1>Hello World</h1>
8     <h2>Second line</h2>
9   </body>
10  </html>
11
```

Индексация и изменение коммита


```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git add hello.html

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git commit -m "Add an author/email comment"
[master 6af9b38] Add an author/email comment
1 file changed, 1 insertion(+), 1 deletion(-)

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)

```

Последний коммит изменен

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git hist
* 6af9b38 2025-06-03 | Add an author/email comment (HEAD -> master) [Nikita Migunov]
* 38678ac 2025-06-03 | Add an author comment [Nikita Migunov]
* 4e4b107 2025-06-03 | Add HTML header (tag: ver1) [Nikita Migunov]
* e82a9c1 2025-06-03 | Добавлен новый файл hello.html с базовой структурой HTML (tag: ver1-beta) [Nikita Migunov]
* 9a9d126 2025-06-03 | Восстановлен hello.html [Nikita Migunov]
* ddafd0a 2025-06-03 | Added h2 tag [Nikita Migunov]
* d3d9239 2025-06-03 | Unrelated change for v [Nikita Migunov]
* 266dc47 2025-06-03 | changes for a and b [Nikita Migunov]
* cb6ec63 2025-06-03 | First Commit [Nikita Migunov]

```

Перемещение файла

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ mkdir lib

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git mv hello.html lib

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git status
On branch master
changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        renamed:    hello.html -> lib/hello.html

```

Коммит перемещения

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git commit -m "Moved hello.html to lib"
[master ed35500] Moved hello.html to lib
1 file changed, 0 insertions(+), 0 deletions(-)
rename hello.html => lib/hello.html (100%)

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ |
```

Содержимое файла index.html



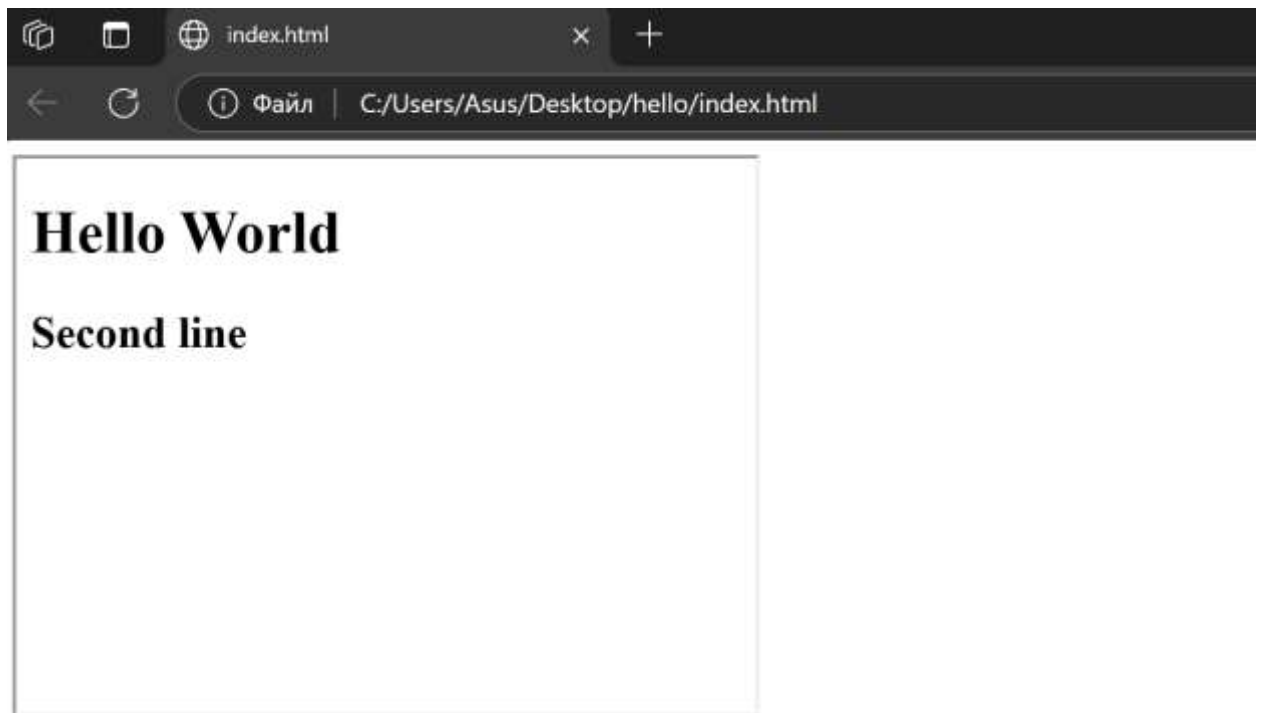
```
hello.html  index.html X
C: > Users > Asus > Desktop > hello > index.html > html
1  <html>
2      <body>
3          <iframe src="lib/hello.html" width="200" height="200"></iframe>
4      </body>
5  </html>
6
```

Индексация и коммит

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git add index.html

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git commit -m "Add index.html"
[master cffa954] Add index.html
1 file changed, 5 insertions(+)
create mode 100644 index.html
```

Файл index.html, открытый в браузере



Содержание каталога .git

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ ls -C .git
COMMIT_EDITMSG HEAD ORIG_HEAD config description hooks/ index info/ logs/ objects/ refs/
```

Содержание каталога objects

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ ls -C .git/objects
05/ 0d/ 26/ 38/ 45/ 4e/ 5f/ 68/ 7e/ 99/ 9f/ bd/ cf/ d3/ db/ e6/ ec/ f6/ pack/
0a/ 1e/ 27/ 3b/ 4d/ 5c/ 64/ 6a/ 8f/ 9a/ b7/ cb/ d0/ d8/ dd/ e8/ ed/ info/
```

Просмотр каталога d8

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ ls -C .git/objects
05/ 0d/ 26/ 38/ 45/ 4e/ 5f/ 68/ 7e/ 99/ 9f/ bd/ cf/ d3/ db/ e6/ ec/ f6/ pack/
0a/ 1e/ 27/ 3b/ 4d/ 5c/ 64/ 6a/ 8f/ 9a/ b7/ cb/ d0/ d8/ dd/ e8/ ed/ info/

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ ls -C .git/objects/d8
a800db068656c3aafc962f7a438c987b49dd60
```

Просмотр файла конфигурации

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ cat .git/config
[core]
    repositoryformatversion = 0
    filemode = false
    bare = false
    logallrefupdates = true
    symlinks = false
    ignorecase = true
```

Просмотр файлов и веток

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ ls .git/refs
heads/  tags/

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ ls .git/refs/heads
master

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ ls .git/refs/tags
ver1  ver1-beta

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ ls .git/refs/tags/ver1
.git/refs/tags/ver1

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ |
```

Содержимое файла HEAD

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ cat .git/HEAD
ref: refs/heads/master

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ |
```

Последний коммит

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git hist --max-count=1
* cffa954 2025-06-03 | Add index.html (HEAD -> master) [Nikita Migunov]

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ |
```

Просмотр объекта коммита

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git cat-file -t cb6ec63
commit

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git cat-file -p cb6ec63
tree d8a800db068656c3aafc962f7a438c987b49dd60
author Nikita Migunov <migunov_nikita95@bk.ru> 1748937424 +0300
committer Nikita Migunov <migunov_nikita95@bk.ru> 1748937424 +0300

First Commit

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$
```

Использование алиасов

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git type cb6ec63
commit

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git dump cb6ec63
tree d8a800db068656c3aafc962f7a438c987b49dd60
author Nikita Migunov <migunov_nikita95@bk.ru> 1748937424 +0300
committer Nikita Migunov <migunov_nikita95@bk.ru> 1748937424 +0300

First Commit

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$

```

Просмотр дерева каталогов

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git cat-file -p 4e4b107
tree 9ff0b0d0be0f0b1a9679bb4273ef6e0320b69754
parent e82a9c13da97f0c3d35ec33940ce91cc047f66a6
author Nikita Migunov <migunov_nikita95@bk.ru> 1748952621 +0300
committer Nikita Migunov <migunov_nikita95@bk.ru> 1748952621 +0300

Add HTML header

```

Просмотр каталога lib

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git cat-file -p e82a9c1
tree d08bf146daf7b6f65cfe4c400dbcd4153b44c27c
parent 9a9d12666198e6d31990bbdb4dc3c74c72be55b
author Nikita Migunov <migunov_nikita95@bk.ru> 1748949517 +0300
committer Nikita Migunov <migunov_nikita95@bk.ru> 1748949517 +0300

Добавлен новый файл hello.html с базовой структурой HTML

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$

```

Вывод содержимого файла hello.html

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git show 4e4b107:hello.html
<html>
  <head>

  </head>
  <body>
    <h1>Hello world</h1>
    <h2>Second line</h2>
  </body>
</html>

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$

```

Просмотр содержимого файла при первом коммите

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git hist
* cffa954 2025-06-03 Add index.html (HEAD -> master) [Nikita Mgunov]
* ed35500 2025-06-03 Moved hello.html to lib [Nikita Mgunov]
* 6a59b18 2025-06-03 Add an author/email comment [Nikita Mgunov]
* 38b78ac 2025-06-03 Add an author comment [Nikita Mgunov]
* 4e4b107 2025-06-03 Add HTML header (tag: ver1) [Nikita Mgunov]
* a32a9c1 2025-06-03 Добавлен новый файл hello.html с базовой структурой HTML (t
tag: ver1-beta) [Nikita Mgunov]
* 509d126 2025-06-03 Добавлен файл hello.html [Nikita Mgunov]
* ddaef0e 2025-06-03 Added h2 tag [Nikita Mgunov]
* d3d9239 2025-06-03 Unrelated change for v [Nikita Mgunov]
* 286dc47 2025-06-03 Changes for a and b [Nikita Mgunov]
* cb6ecb3 2025-06-03 First Commit [Nikita Mgunov]

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git cat-file -p cffa954
tree b77d3ed2544f9923c81546fa35ad456a59c87ac2
parent ed3550094591a8ef430b221f4fb79ac6ed07c451
author Nikita Mgunov <mgunov_nikita95@bk.ru> 1748969700 +0300
committer Nikita Mgunov <mgunov_nikita95@bk.ru> 1748969700 +0300

add index.html

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git cat-file -p cb6ecb3
tree d8a800b0b8656c3aaf962f7e438c987b49dd60
author Nikita Mgunov <mgunov_nikita95@bk.ru> 1748917424 +0300
committer Nikita Mgunov <mgunov_nikita95@bk.ru> 1748917424 +0300

First Commit

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git cat-file -p ddaef0e
tree f08d389783ab31466734dd841cd5ebfa8f53c0f
parent d3d9239a13d90ceabf78a28e122c497ed6b560cb
author Nikita Mgunov <mgunov_nikita95@bk.ru> 1748944233 +0300
committer Nikita Mgunov <mgunov_nikita95@bk.ru> 1748944233 +0300

Added h2 tag

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git cat-file -p cffa954
tree b77d3ed2544f9923c81546fa35ad456a59c87ac2
parent ed3550094591a8ef430b221f4fb79ac6ed07c451
author Nikita Mgunov <mgunov_nikita95@bk.ru> 1748969700 +0300
committer Nikita Mgunov <mgunov_nikita95@bk.ru> 1748969700 +0300

add index.html

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$

```


Гит 1.4

Создание новой ветки style

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git checkout -b style
Switched to a new branch 'style'
```

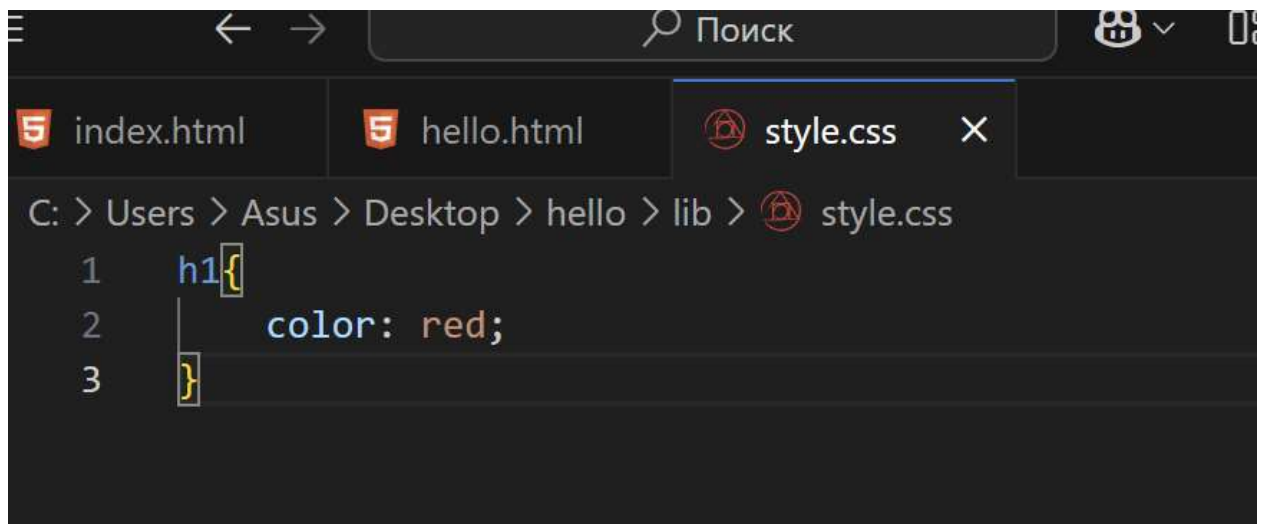
```
$ git status
On branch style
nothing to commit, working tree clean
```

Создание файла стилей

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (style)
$ touch lib/style.css

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (style)
$ |
```

Код style.css

A screenshot of a code editor window. The title bar shows three tabs: 'index.html', 'hello.html', and 'style.css' (which is the active tab). The editor's path bar shows 'C: > Users > Asus > Desktop > hello > lib > style.css'. The code content is as follows:

```
1  h1{
2      color: red;
3  }
```

Индексация и коммит нового файла

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (style)
$ git add lib/style.css

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (style)
$ git commit -m "Added css stylesheet"
[style 57132ca] Added css stylesheet
2 files changed, 8 insertions(+), 4 deletions(-)
create mode 100644 lib/style.css

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (style)
$
```

Изменения в файле hello.html



```
index.html  hello.html X  style.css
C:\Users\Asus\Desktop\hello\lib\hello.html > html > head > link
1  <!-- Author: Nikita Migunov (migunov_nikita95@bk.ru) -->
2  <html>
3    <head>
4      <link rel="stylesheet" type="text/css" media="all" href="style.css">
5    </head>
6    <body>
7      <h1>Hello World</h1>
8      <h2>Second line</h2>
9    </body>
10   </html>
11
```

Индексация и коммит

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (style)
$ git add lib/hello.html

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (style)
$ git commit -m "Hello.html usus style.css"
[style 9fa673d] Hello.html usus style.css
1 file changed, 1 insertion(+), 1 deletion(-)

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (style)
$ |
```

Изменения в файле index.html

```
index.html X hello.html style.css
C: > Users > Asus > Desktop > hello > index.html > html > head > link
1 <!DOCTYPE html>
2 <html>
3   <head>
4     <link rel="stylesheet" type="text/css" media="all" href="lib/style.css">
5   </head>
6 <body>
7   <iframe src="lib/hello.html" width="400" height="300"></iframe>
8 </body>
9 </html>
```

Индексация и коммит

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (style)
$ git add index.html

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (style)
$ git commit -m "Update index.html"
[style ef18f4b] Update index.html
1 file changed, 3 insertions(+)

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (style)
$ |
```

Просмотр истории

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (style)
$ git hist --all
* ef18f4b 2025-06-03 | Update index.html (HEAD -> style) [Nikita Migunov]
* 9fa673d 2025-06-03 | Hello.html usus style.css [Nikita Migunov]
* 57132ca 2025-06-03 | Added css stylesheet [Nikita Migunov]
* cffa954 2025-06-03 | Add index.html (master) [Nikita Migunov]
* ed35500 2025-06-03 | Moved hello.html to lib [Nikita Migunov]
* 6af9b38 2025-06-03 | Add an author/email comment [Nikita Migunov]
* 38678ac 2025-06-03 | Add an author comment [Nikita Migunov]
* 4e4b107 2025-06-03 | Add HTML header (tag: ver1) [Nikita Migunov]
* e82a9c1 2025-06-03 | Добавлен новый файл hello.html с базовой структурой HTML (tag: ver1-beta) [Nikita Migunov]
* 9a9d126 2025-06-03 | Восстановлен hello.html [Nikita Migunov]
* ddaafd0a 2025-06-03 | Added h2 tag [Nikita Migunov]
* d3d9239 2025-06-03 | Unrelated change for v [Nikita Migunov]
* 266dc47 2025-06-03 | Changes for a and b [Nikita Migunov]
* cb6ec63 2025-06-03 | First Commit [Nikita Migunov]

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (style)
$ |
```

Переключение на ветку master

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (style)
$ git checkout master
Switched to branch 'master'

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ cat lib/hello.html
<!--Author: Nikita Migunov (migunov_nikita95@bk.ru)-->
<html>
  <head>

  </head>
  <body>
    <h1>Hello world</h1>
    <h2>Second line</h2>
  </body>
</html>

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ |
```

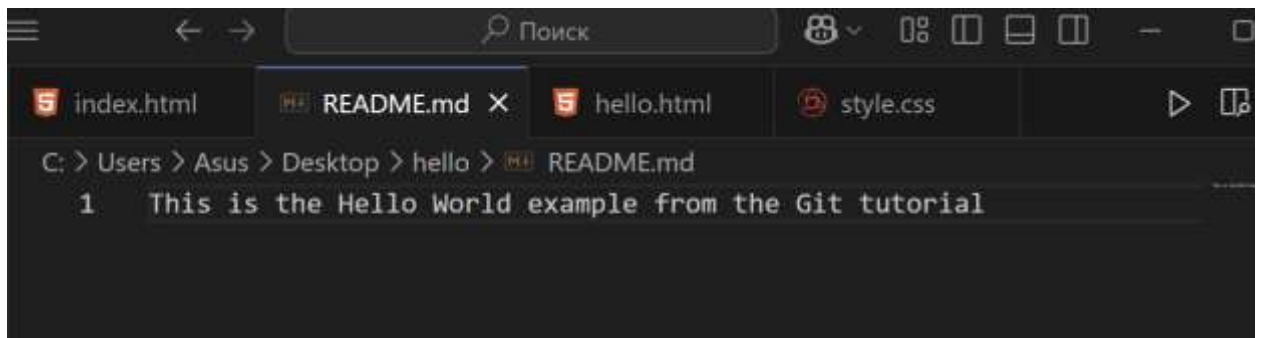
Переключение на ветку style

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git checkout style
Switched to branch 'style'

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (style)
$ cat lib/hello.html
<!--Author: Nikita Migunov (migunov_nikita95@bk.ru)-->
<html>
  <head>
    <link rel="stylesheet" type="text/css" media="all" href="style.css">
  </head>
  <body>
    <h1>Hello world</h1>
    <h2>Second line</h2>
  </body>
</html>

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (style)
$
```

Содержимое файла README



Индексация и коммит

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git add README.md

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git commit -m "Added README"
[master 1ddb042] Added README
1 file changed, 1 insertion(+)
create mode 100644 README.md

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ |
```

Дерево коммитов

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git hist --all
* 1ddb042 2025-06-03 | Added README (HEAD -> master) [Nikita Migunov]
* ef18f4b 2025-06-03 | Update index.html (style) [Nikita Migunov]
* 9fa673d 2025-06-03 | Hello.html usus style.css [Nikita Migunov]
* 57132ca 2025-06-03 | Added css stylesheet [Nikita Migunov]
/
* cffa954 2025-06-03 | Add index.html [Nikita Migunov]
* ed35500 2025-06-03 | Moved hello.html to lib [Nikita Migunov]
* 6af9b38 2025-06-03 | Add an author/email comment [Nikita Migunov]
* 38678ac 2025-06-03 | Add an author comment [Nikita Migunov]
* 4e4b107 2025-06-03 | Add HTML header (tag: ver1) [Nikita Migunov]
* e82a9c1 2025-06-03 | добавлен новый файл hello.html с базовой структурой HTML (tag: ver1-beta) [Nikita Migunov]
* 9a9d126 2025-06-03 | Восстановлен hello.html [Nikita Migunov]
* ddafd0a 2025-06-03 | Added h2 tag [Nikita Migunov]
* d3d9239 2025-06-03 | Unrelated change for v [Nikita Migunov]
* 266dc47 2025-06-03 | Changes for a and b [Nikita Migunov]
* cb6ec63 2025-06-03 | First commit [Nikita Migunov]

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ |
```

Переключение на ветку style

Слияние с веткой master

```
Merge made by the 'ort' strategy.
```

```
README.md | 1 +
```

```
1 file changed, 1 insertion(+)
```

```
create mode 100644 README.md
```

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (style)
```

```
$ git merge master
```

Просмотр истории

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (style)
```

```
$ git hist --all
```

```
* 2097fd3 2025-06-03 | Merge branch 'master' into style (HEAD -> style) [Nikita Migunov]
```

```
└─ * 1ddb042 2025-06-03 | Added README (master) [Nikita Migunov]
```

```
   * ef18f4b 2025-06-03 | Update index.html [Nikita Migunov]
```

```
   * 9fa673d 2025-06-03 | Hello.html usus style.css [Nikita Migunov]
```

```
   * 57132ca 2025-06-03 | Added css stylesheet [Nikita Migunov]
```

```
└─ * cffa954 2025-06-03 | Add index.html [Nikita Migunov]
```

```
* ed35500 2025-06-03 | Moved hello.html to lib [Nikita Migunov]
```

```
* 6af9b38 2025-06-03 | Add an author/email comment [Nikita Migunov]
```

```
* 38678ac 2025-06-03 | Add an author comment [Nikita Migunov]
```

```
* 4e4b107 2025-06-03 | Add HTML header (tag: ver1) [Nikita Migunov]
```

```
* e82a9c1 2025-06-03 | Добавлен новый файл hello.html с базовой структурой HTML (tag: ver1-beta) [Nikita Migunov]
```

```
* 9a9d126 2025-06-03 | Восстановлен hello.html [Nikita Migunov]
```

```
* ddafd0a 2025-06-03 | Added h2 tag [Nikita Migunov]
```

```
* d3d9239 2025-06-03 | Unrelated change for v [Nikita Migunov]
```

```
* 266dc47 2025-06-03 | Changes for a and b [Nikita Migunov]
```

```
* cb6ec63 2025-06-03 | First Commit [Nikita Migunov]
```

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (style)
```

```
$
```

Переход в ветку master

```
cb6ec63 2025-06-03 | First Commit [Nikita Migunov]
```

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (style)
```

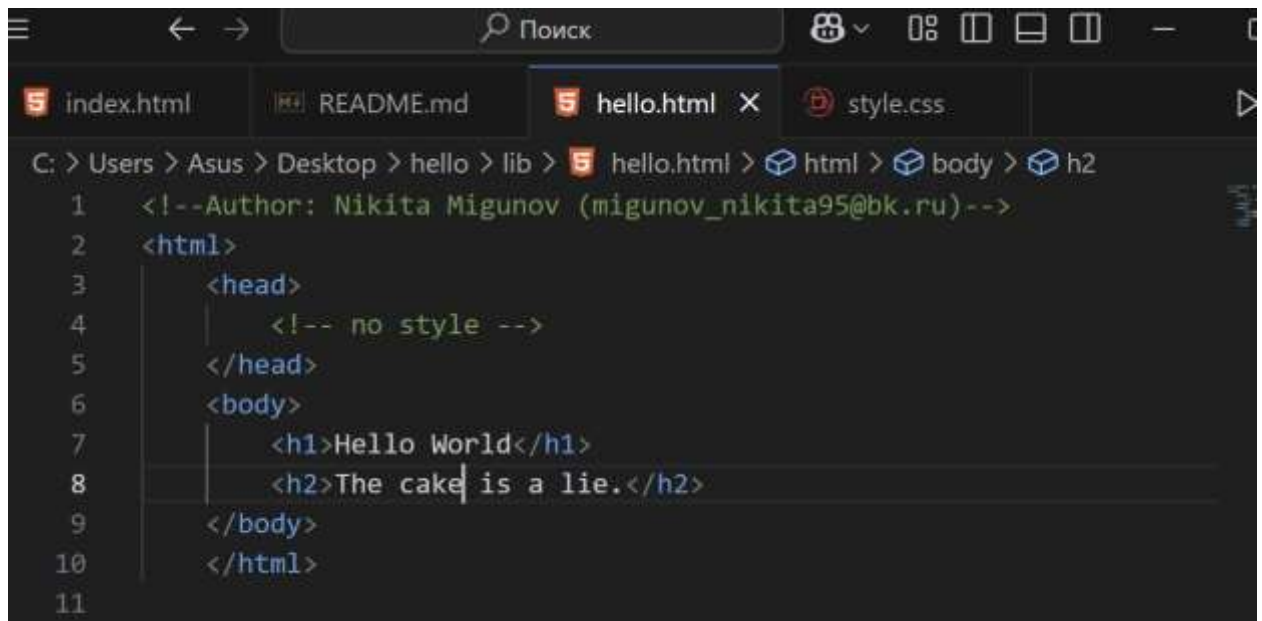
```
$ git checkout master
```

```
switched to branch 'master'
```

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
```

```
$ |
```

Внесение изменений



```
C: > Users > Asus > Desktop > hello > lib > hello.html > html > body > h2
1  <!--Author: Nikita Migunov (migunov_nikita95@bk.ru)-->
2  <html>
3      <head>
4          <!-- no style -->
5      </head>
6      <body>
7          <h1>Hello World</h1>
8          <h2>The cake is a lie.</h2>
9      </body>
10 </html>
11
```

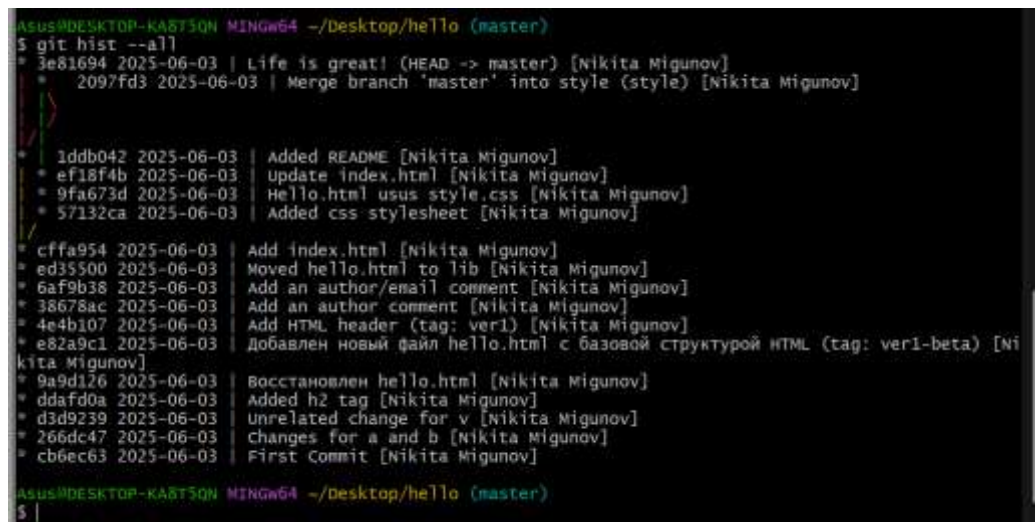
Индексация и коммит

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git add lib/hello.html

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git commit -m 'Life is great!'
[master 3e81694] Life is great!
1 file changed, 2 insertions(+), 2 deletions(-)

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ |
```

Конфликт изменений



```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git hist --all
* 3e81694 2025-06-03 | Life is great! (HEAD -> master) [Nikita Migunov]
* 2097fd3 2025-06-03 | Merge branch 'master' into style (style) [Nikita Migunov]
* 1ddb042 2025-06-03 | Added README [Nikita Migunov]
* ef18f4b 2025-06-03 | update index.html [Nikita Migunov]
* 9fa673d 2025-06-03 | Hello.html usus style.css [Nikita Migunov]
* 57132ca 2025-06-03 | Added css stylesheet [Nikita Migunov]
* cffa954 2025-06-03 | Add index.html [Nikita Migunov]
* ed35500 2025-06-03 | Moved hello.html to lib [Nikita Migunov]
* 6af9b38 2025-06-03 | Add an author/email comment [Nikita Migunov]
* 38678ac 2025-06-03 | Add an author comment [Nikita Migunov]
* 4e4b107 2025-06-03 | Add HTML header (tag: ver1) [Nikita Migunov]
* e82a9c1 2025-06-03 | Добавлен новый файл hello.html с базовой структурой HTML (tag: ver1-beta) [Nikita Migunov]
* 9a9d126 2025-06-03 | Восстановлен hello.html [Nikita Migunov]
* ddafd0a 2025-06-03 | Added h2 tag [Nikita Migunov]
* d3d9239 2025-06-03 | Unrelated change for v [Nikita Migunov]
* 266dc47 2025-06-03 | changes for a and b [Nikita Migunov]
* cb6ec63 2025-06-03 | First Commit [Nikita Migunov]

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ |
```

Ошибка при слиянии


```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git checkout style
Switched to branch 'style'

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (style)
$ git merge master
Auto-merging lib/hello.html
CONFLICT (content): Merge conflict in lib/hello.html
Automatic merge failed; fix conflicts and then commit the result.

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (style|MERGING)
$

```

Просмотр файла hello.html при наличии конфликта

```

1  <!--Author: Nikita Migunov (migunov_nikita95@bk.ru)-->
2  <html>
3    <head>
4      <link rel="stylesheet" type="text/css" media="all" href="style.css">
5      <!-- no style -->
6    </head>
7    <body>
8      <h1>Hello World.</h1>
9      <h2>The cake is a lie.</h2>
10   </body>
11 </html>

```

Решение конфликта вручную

```

<!--Author: Nikita Migunov (migunov_nikita95@bk.ru)-->
<html>
  <head>
    <link rel="stylesheet" type="text/css" media="all" href="style.css">
    <!-- no style -->
  </head>
  <body>
    <h1>Hello World. Life is great</h1>
    <h2>The cake is a lie.</h2>
  </body>
</html>

```

Индексация и коммит

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (style|MERGING)
$ git add lib/hello.html

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (style|MERGING)
$ git commit -m "Merged master fixed conflict."
[style 3262e50] Merged master fixed conflict.

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (style)
$

```

Гит 1.5

Просмотр истории

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (style)
$ git checkout style
M      lib/hello.html
Already on 'style'

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (style)
$ git hist
*   3262e50 2025-06-03 | Merged master fixed conflict. (HEAD -> style) [Nikita Migunov]
|
| * 3e81694 2025-06-03 | Life is great! (master) [Nikita Migunov]
| * 2097fd3 2025-06-03 | Merge branch 'master' into style [Nikita Migunov]
|
| * 1ddb042 2025-06-03 | Added README [Nikita Migunov]
| * ef18f4b 2025-06-03 | Update index.html [Nikita Migunov]
| * 9fa673d 2025-06-03 | Hello.html usus style.css [Nikita Migunov]
| * 57132ca 2025-06-03 | Added css stylesheet [Nikita Migunov]
|
| * cffa954 2025-06-03 | Add index.html [Nikita Migunov]
| * ed35500 2025-06-03 | Moved hello.html to lib [Nikita Migunov]
| * 6af9b38 2025-06-03 | Add an author/email comment [Nikita Migunov]
| * 38678ac 2025-06-03 | Add an author comment [Nikita Migunov]
| * 4e4b107 2025-06-03 | Add HTML header (tag: ver1) [Nikita Migunov]
| * e82a9c1 2025-06-03 | Добавлен новый файл hello.html с базовой структурой HTML (tag: ver1-beta) [Nikita Migunov]
| * 9a9d126 2025-06-03 | Восстановлен hello.html [Nikita Migunov]
| * ddafd0a 2025-06-03 | Added h2 tag [Nikita Migunov]
| * d3d9239 2025-06-03 | unrelated change for v [Nikita Migunov]
| * 266dc47 2025-06-03 | changes for a and b [Nikita Migunov]
| * cb6ec63 2025-06-03 | First Commit [Nikita Migunov]
|
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (style)
$ |

```

Сброс ветки style

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (style)
$ git reset --hard cffa954
HEAD is now at cffa954 Add index.html

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (style)
$ git hist --all
* 3e81694 2025-06-03 | Life is great! (master) [Nikita Migunov]
* 1ddb042 2025-06-03 | Added README [Nikita Migunov]
* cffa954 2025-06-03 | Add index.html (HEAD -> style) [Nikita Migunov]
* ed35500 2025-06-03 | Moved hello.html to lib [Nikita Migunov]
* 6af9b38 2025-06-03 | Add an author/email comment [Nikita Migunov]
* 38678ac 2025-06-03 | Add an author comment [Nikita Migunov]
* 4e4b107 2025-06-03 | Add HTML header (tag: ver1) [Nikita Migunov]
* e82a9c1 2025-06-03 | Добавлен новый файл hello.html с базовой структурой HTML (tag: ver1-beta) [Nikita Migunov]
* 9a9d126 2025-06-03 | Восстановлен hello.html [Nikita Migunov]
* ddafd0a 2025-06-03 | Added h2 tag [Nikita Migunov]
* d3d9239 2025-06-03 | Unrelated change for v [Nikita Migunov]
* 266dc47 2025-06-03 | changes for a and b [Nikita Migunov]
* cb6ec63 2025-06-03 | First commit [Nikita Migunov]

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (style)
$

```

Переключение на master и просмотр истории

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (style)
$ git checkout master
Switched to branch 'master'

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git hist
* 3e81694 2025-06-03 | Life is great! (HEAD -> master) [Nikita Migunov]
* 1ddb042 2025-06-03 | Added README [Nikita Migunov]
* cffa954 2025-06-03 | Add index.html (style) [Nikita Migunov]
* ed35500 2025-06-03 | Moved hello.html to lib [Nikita Migunov]
* 6af9b38 2025-06-03 | Add an author/email comment [Nikita Migunov]
* 38678ac 2025-06-03 | Add an author comment [Nikita Migunov]
* 4e4b107 2025-06-03 | Add HTML header (tag: ver1) [Nikita Migunov]
* e82a9c1 2025-06-03 | Добавлен новый файл hello.html с базовой структурой HTML (tag: ver1-beta) [Nikita Migunov]
* 9a9d126 2025-06-03 | Восстановлен hello.html [Nikita Migunov]
* ddafd0a 2025-06-03 | Added h2 tag [Nikita Migunov]
* d3d9239 2025-06-03 | Unrelated change for v [Nikita Migunov]
* 266dc47 2025-06-03 | changes for a and b [Nikita Migunov]
* cb6ec63 2025-06-03 | First commit [Nikita Migunov]

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$

```

Сброс ветки master

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git reset --hard 3e81694
HEAD is now at 3e81694 Life is great!

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git hist --all
* 3e81694 2025-06-03 | Life is great! (HEAD -> master) [Nikita Migunov]
* 1ddb042 2025-06-03 | Added README [Nikita Migunov]
* cffa954 2025-06-03 | Add index.html (style) [Nikita Migunov]
* ed35500 2025-06-03 | Moved hello.html to lib [Nikita Migunov]
* 6af9b38 2025-06-03 | Add an author/email comment [Nikita Migunov]
* 38678ac 2025-06-03 | Add an author comment [Nikita Migunov]
* 4e4b107 2025-06-03 | Add HTML header (tag: ver1) [Nikita Migunov]
* e82a9c1 2025-06-03 | добавлен новый файл hello.html с базовой структурой HTML (tag: ver1-beta) [Nikita Migunov]
* 9a9d126 2025-06-03 | Восстановлен hello.html [Nikita Migunov]
* ddafd0a 2025-06-03 | Added h2 tag [Nikita Migunov]
* d3d9239 2025-06-03 | Unrelated change for v [Nikita Migunov]
* 266dc47 2025-06-03 | Changes for a and b [Nikita Migunov]
* cb6ec63 2025-06-03 | First commit [Nikita Migunov]

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)

```

Перебазирование веток

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git checkout style
Switched to branch 'style'

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (style)
$ git rebase master
Successfully rebased and updated refs/heads/style.

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (style)
$ git hist
* 3e81694 2025-06-03 | Life is great! (HEAD -> style, master) [Nikita Migunov]
* 1ddb042 2025-06-03 | Added README [Nikita Migunov]
* cffa954 2025-06-03 | Add index.html [Nikita Migunov]
* ed35500 2025-06-03 | Moved hello.html to lib [Nikita Migunov]
* 6af9b38 2025-06-03 | Add an author/email comment [Nikita Migunov]
* 38678ac 2025-06-03 | Add an author comment [Nikita Migunov]
* 4e4b107 2025-06-03 | Add HTML header (tag: ver1) [Nikita Migunov]
* e82a9c1 2025-06-03 | добавлен новый файл hello.html с базовой структурой HTML (tag: ver1-beta) [Nikita Migunov]
* 9a9d126 2025-06-03 | Восстановлен hello.html [Nikita Migunov]
* ddafd0a 2025-06-03 | Added h2 tag [Nikita Migunov]
* d3d9239 2025-06-03 | Unrelated change for v [Nikita Migunov]
* 266dc47 2025-06-03 | Changes for a and b [Nikita Migunov]
* cb6ec63 2025-06-03 | First commit [Nikita Migunov]

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (style)

```

Слияние веток


```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (style)
$ git checkout master
Switched to branch 'master'

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git merge style
Already up to date.

```

Просмотр истории

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git hist
* 3e81694 2025-06-03 | Life is great! (HEAD -> master, style) [Nikita Migunov]
* 1ddb042 2025-06-03 | Added README [Nikita Migunov]
* cffa954 2025-06-03 | Add index.html [Nikita Migunov]
* ed35500 2025-06-03 | Moved hello.html to lib [Nikita Migunov]
* 6af9b38 2025-06-03 | Add an author/email comment [Nikita Migunov]
* 38678ac 2025-06-03 | Add an author comment [Nikita Migunov]
* 4e4b107 2025-06-03 | Add HTML header (tag: ver1) [Nikita Migunov]
* e82a9c1 2025-06-03 | добавлен новый файл hello.html с базовой структурой HTML (tag: ver1-beta) [Nikita Migunov]
* 9a9d126 2025-06-03 | Восстановлен hello.html [Nikita Migunov]
* ddafd0a 2025-06-03 | Added h2 tag [Nikita Migunov]
* d3d9239 2025-06-03 | unrelated change for v [Nikita Migunov]
* 266dc47 2025-06-03 | changes for a and b [Nikita Migunov]
* cb6ec63 2025-06-03 | First Commit [Nikita Migunov]

```

Переход в рабочий каталог и его клонирование

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ cd

Asus@DESKTOP-KA8T5QN MINGW64 ~
$ pwd
/c/Users/Asus

Asus@DESKTOP-KA8T5QN MINGW64 ~
$ cd Desktop

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop
$ git clone hello closed_hello
cloning into 'closed_hello'...
done.

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop
$ ls
closed_hello/  hello/

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop
$ |

```

Просмотр содержимого клонированного репозитория

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop
$ cd closed_hello

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/closed_hello (master)
$ ls
README.md  a.html  b.html  index.html  lib/  v.html

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/closed_hello (master)

```

Просмотр логов клонированного каталога

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/closed_hello (master)
$ git hist --all
* 3e81694 2025-06-03 | Life is great! (HEAD -> master, origin/style, origin/master, origin/HEAD) [Nikita Migunov]
* 1ddb042 2025-06-03 | Added README [Nikita Migunov]
* cffa954 2025-06-03 | Add index.html [Nikita Migunov]
* ed35500 2025-06-03 | Moved hello.html to lib [Nikita Migunov]
* 6af9b38 2025-06-03 | Add an author/email comment [Nikita Migunov]
* 38678ac 2025-06-03 | Add an author comment [Nikita Migunov]
* 4e4b107 2025-06-03 | Add HTML header (tag: ver1) [Nikita Migunov]
* e82a9c1 2025-06-03 | добавлен новый файл hello.html с базовой структурой HTML (tag: ver1-beta) [Nikita Migunov]
* 9a9d126 2025-06-03 | Восстановлен hello.html [Nikita Migunov]
* ddafd0a 2025-06-03 | Added h2 tag [Nikita Migunov]
* d3d9239 2025-06-03 | Unrelated change for v [Nikita Migunov]
* 266dc47 2025-06-03 | Changes for a and b [Nikita Migunov]
* cb6ec63 2025-06-03 | First Commit [Nikita Migunov]

```

Просмотр данных об origin

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/closed_hello (master)
$ git remote
origin

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/closed_hello (master)
$ git remote show origin
* remote origin
  Fetch URL: C:/Users/Asus/Desktop/hello
  Push URL: C:/Users/Asus/Desktop/hello
  HEAD branch: master
  Remote branches:
    master tracked
    style tracked
  Local branch configured for 'git pull':
    master merges with remote master
  Local ref configured for 'git push':
    master pushes to master (up to date)

```

Просмотр удаленных веток


```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/closed_hello (master)
$ git branch
* master

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/closed_hello (master)
$ git branch -a
* master
remotes/origin/HEAD -> origin/master
remotes/origin/master
remotes/origin/style
```

Гит 1.6

Переход в оригинальный репозиторий

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/closed_hello (master)
$ cd ../hello

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$
```

Изменения в файле README



```
README.md X
C: > Users > Asus > Desktop > hello > README.md
1 This is the Hello World example from the Git tutorial
2 [changed in original]
```

Индексация и коммит новых изменений

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git add README.md

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git commit -m "Changed README in original repo"
[master 3fc20c9] Changed README in original repo
1 file changed, 2 insertions(+), 1 deletion(-)

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ |
```

Извлечение изменений

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ cd ../cloned_hello

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/cloned_hello (master)
$ git fetch
remote: Enumerating objects: 5, done.
remote: Counting objects: 100% (5/5), done.
remote: Compressing objects: 100% (3/3), done.
remote: Total 3 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
Unpacking objects: 100% (3/3), 351 bytes | 87.00 KiB/s, done.
From C:/Users/Asus/Desktop/hello
  3e81694..3fc20c9  master    -> origin/master

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/cloned_hello (master)
$
```

Просмотр истории

```

ASus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/cloned_hello (master)
$ git hist --all
* 3fc20c9 2025-06-04 | Changed README in original repo (origin/master, origin/HEAD) [Nikita Migunov]
* 3e81694 2025-06-03 | Life is great! (HEAD -> master, origin/style) [Nikita Migunov]
* 1ddb042 2025-06-03 | Added README [Nikita Migunov]
* cffa954 2025-06-03 | Add index.html [Nikita Migunov]
* ed35500 2025-06-03 | Moved hello.html to lib [Nikita Migunov]
* 6af9b38 2025-06-03 | Add an author/email comment [Nikita Migunov]
* 38678ac 2025-06-03 | Add an author comment [Nikita Migunov]
* 4e4b107 2025-06-03 | Add HTML header (tag: ver1) [Nikita Migunov]
* e82a9c1 2025-06-03 | Добавлен новый файл hello.html с базовой структурой HTML (tag: ver1-beta) [Nikita Migunov]
* 9a9d126 2025-06-03 | Восстановлен hello.html [Nikita Migunov]
* ddafd0a 2025-06-03 | Added h2 tag [Nikita Migunov]
* d3d9239 2025-06-03 | Unrelated change for v [Nikita Migunov]
* 266dc47 2025-06-03 | Changes for a and b [Nikita Migunov]
* cb6ec63 2025-06-03 | First commit [Nikita Migunov]
ASus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/cloned_hello (master)
$ |

```

Вывод содержимого файла README

```

ASus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/cloned_hello (master)
$ cat README.md
This is the Hello world example from the Git tutorial
ASus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/cloned_hello (master)
$ |

```

Слияние изменений

```

ASus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/cloned_hello (master)
$ git merge origin/master
Updating 3e81694..3fc20c9
Fast-forward
 README.md | 3 ++-
 1 file changed, 2 insertions(+), 1 deletion(-)

```

Вывод содержимого файла README

```

ASus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/cloned_hello (master)
$ cat README.md
This is the Hello world example from the Git tutorial
(changed in original)

```

Команда git pull

```

ASus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/cloned_hello (master)
$ git pull
Already up to date.

```

Добавление локальной ветки

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/cloned_hello (master)
$ git branch --track style origin/style
branch 'style' set up to track 'origin/style'.

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/cloned_hello (master)
$ git branch -a
* master
  style
remotes/origin/HEAD -> origin/master
remotes/origin/master
remotes/origin/style

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/cloned_hello (master)
$ git hist --max-count=2
* 3fc20c9 2025-06-04 | Changed README in original repo (HEAD -> master, origin/master, origin/HEAD) [Nikita Migunov]
* 3e81694 2025-06-03 | Life is great! (origin/style, style) [Nikita Migunov]
```

Создание чистого репозитория

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/cloned_hello (master)
$ cd ..

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop
$ git clone --bare hello hello.git
Cloning into bare repository 'hello.git'...
done.

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop
$ ls hello.git
HEAD config description hooks/ info/ objects/ packed-refs refs/
```

Добавление удаленного репозитория

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop
$ cd hello

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git remote add shared ../hello.git
```

Внесение изменений в файл

```
README.md X
C: > Users > Asus > Desktop > hello > README.md
1 This is the Hello World example from the Git
  tutorial
2 (Changed in orginal and pushed to shared)
```

Индексация и коммит

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git checkout master
M README.md
Already on 'master'

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git add README.md

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git commit -m "Added shared comment to README"
[master 9d3180a] Added shared comment to README
1 file changed, 1 insertion(+), 1 deletion(-)
```

Отправка изменений в общий репозиторий

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git push shared master
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 22 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 382 bytes | 382.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
To ../hello.git
    3fc20c9..9d3180a  master -> master

```

Переход в клонированный репозиторий

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ cd ../cloned_hello

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/cloned_hello (master)
$ |

```

Команды, извлекающие общие изменения

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/cloned_hello (master)
$ git remote add shared ../hello.git

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/cloned_hello (master)
$ git branch --track shared master
branch 'shared' set up to track 'master'.

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/cloned_hello (master)
$ git pull shared master
remote: Enumerating objects: 5, done.
remote: Counting objects: 100% (5/5), done.
remote: Compressing objects: 100% (3/3), done.
remote: Total 3 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
Unpacking objects: 100% (3/3), 362 bytes | 90.00 KiB/s, done.
From ../hello
 * branch                master       -> FETCH_HEAD
 * [new branch]          master       -> shared/master
Updating 3fc20c9..9d3180a
Fast-forward
 README.md | 2 +-
 1 file changed, 1 insertion(+), 1 deletion(-)

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/cloned_hello (master)
$ cat README.md
This is the Hello world example from the Git tutorial
(Changed in original and pushed to shared)
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/cloned_hello (master)
$ |

```

Настройка сервера


```
(Changed in original and pushed to shared)
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/cloned_hello (master)
$ git daemon --verbose --export-all --base-path=.
[19644] Ready to rumble
```

Клонирование проекта

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/cloned_hello (master)
$ git clone ~/Desktop/hello.git network_hello
Cloning into 'network_hello'...
done.

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/cloned_hello (master)
$ cd network_hello

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/cloned_hello/network_hello (master)
$ ls
README.md  a.html  b.html  index.html  lib/  v.html

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/cloned_hello/network_hello (master)
$ |
```

Гит 1.7

Клонирование репозитория и просмотр удаленных репозиторияев

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop
$ git clone https://github.com/schacon/ticgit
Cloning into 'ticgit'...
remote: Enumerating objects: 1857, done.
remote: Total 1857 (delta 0), reused 0 (delta 0), pack-reused 1857 (from 1)
Receiving objects: 100% (1857/1857), 334.06 KiB | 1.35 MiB/s, done.
Resolving deltas: 100% (837/837), done.

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop
$ cd ticgit

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/ticgit (master)
$ git remote
bash: git: command not found

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/ticgit (master)
$ git remote
origin

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/ticgit (master)
$
```

Просмотр удаленных репозиторияев с ключом -v

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/ticgit (master)
$ git remote -v
origin https://github.com/schacon/ticgit (fetch)
origin https://github.com/schacon/ticgit (push)

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/ticgit (master)
$ |
```

Добавление удаленного репозитория

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/ticgit (master)
$ git remote add pb https://github.com/paulboone/ticgit

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/ticgit (master)
$ git remote -v
origin https://github.com/schacon/ticgit (fetch)
origin https://github.com/schacon/ticgit (push)
pb https://github.com/paulboone/ticgit (fetch)
pb https://github.com/paulboone/ticgit (push)

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/ticgit (master)
$ |
```

Использование имени вместо пути

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/ticgit (master)
$ git fetch pb
remote: Enumerating objects: 43, done.
remote: Counting objects: 100% (22/22), done.
remote: Total 43 (delta 22), reused 22 (delta 22), pack-reused 21 (from 1)
Unpacking objects: 100% (43/43), 5.99 KiB | 113.00 KiB/s, done.
From https://github.com/paulboone/ticgit
 * [new branch]      master    -> pb/master
 * [new branch]      ticgit    -> pb/ticgit

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/ticgit (master)
$ |
```

Получение данных из удаленных проектов

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/ticgit (master)
$ git fetch ~/Desktop/cloned_hello
remote: Enumerating objects: 45, done.
remote: Counting objects: 100% (45/45), done.
remote: Compressing objects: 100% (38/38), done.
remote: Total 45 (delta 16), reused 0 (delta 0), pack-reused 0 (from 0)
Unpacking objects: 100% (45/45), 4.02 KiB | 76.00 KiB/s, done.
From C:/Users/Asus/Desktop/cloned_hello
* branch          HEAD       -> FETCH_HEAD
```

Отправка изменений в удаленный репозиторий

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/ticgit (master)
$ git push origin master
```



Информация об удаленном репозитории

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/ticgit (master)
$ git remote show origin
* remote origin
Fetch URL: https://github.com/schacon/ticgit
Push URL: https://github.com/schacon/ticgit
HEAD branch: master
Remote branches:
  master tracked
  ticgit tracked
Local branch configured for 'git pull':
  master merges with remote master
Local ref configured for 'git push':
  master pushes to master (up to date)
```

Переименование удаленного репозитория

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/ticgit (master)
$ git remote rename pb paul
Renaming remote references: 100% (4/4), done.

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/ticgit (master)
$ git remote
origin
paul

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/ticgit (master)
$ |
```

Удаление удаленного репозитория

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/ticgit (master)
$ git remote remove paul

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/ticgit (master)
$ git remote
origin

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/ticgit (master)
$ |
```

Просмотр тегов

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git tag
ver1
ver1-beta
```

Создание аннотированной метки

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git tag -a v2.1 -m "My version 2.1"

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git tag
v2.1
ver1
ver1-beta

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$

```

Просмотр данных тега

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git show v2.1
tag v2.1
Tagger: Nikita Migunov <migunov_nikita95@bk.ru>
Date: Thu Jun 5 00:54:00 2025 +0300

My version 2.1

commit 9d3180a3417e85698332a8c071d74b7f8a29071f (HEAD -> master, tag: v2.1, shared/master, shared/HEAD)
Author: Nikita Migunov <migunov_nikita95@bk.ru>
Date: Wed Jun 4 23:49:58 2025 +0300

    Added shared comment to README

diff --git a/README.md b/README.md
index 48fd818..0d650b5 100644
--- a/README.md
+++ b/README.md
@@ -1,2 +1,2 @@
- This is the Hello world example from the Git tutorial
- (changed in original)
\ No newline at end of file
+ (Changed in original and pushed to shared)
\ No newline at end of file

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$

```

Создание легковесной метки


```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git tag v2.1-1w

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git tag
v2.1
v2.1-1w
ver1
ver1-beta

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ |

```

Просмотр данных тега

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git show v2.1-1w
commit 9d3180a3417e85698332a8c071d74b7f8a29071f (HEAD -> master, tag: v2.1-1w, tag: v2.1, shared/master, shared/HEAD)
Author: Nikita Migunov <migunov_nikita95@bk.ru>
Date:   Wed Jun 4 23:49:58 2025 +0300

    Added shared comment to README

diff --git a/README.md b/README.md
index 48fd818..0d650b5 100644
--- a/README.md
+++ b/README.md
@@ -1,2 +1,2 @@
- This is the Hello world example from the Git tutorial
- (changed in original)
+ \ No newline at end of file
+ (changed in original and pushed to shared)
+ \ No newline at end of file

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ |

```

Просмотр истории

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git log --pretty=oneline
9d3180a3417e85698332a8c071d74b7f8a29071f (HEAD -> master, tag: v2.1-1w, tag: v2.1, shared/master, shared/HEAD) Added shared comment to README
3fc20c9775d2e472e34cba6004f43ea9bfe5f7e0 changed README in original repo
3e81694f350075f3bd21e5dcd54f55d7b57a6df5 (shared/style, style) Life is great!
1ddb04212a46f4ecec7d6a8b714276bd098079c5 Added README
cffa9545bae3092b739b81d5bca85e2b170d604c Add index.html
ed3550094591a8efd50b221f4fb79ac6ed07c451 Moved hello.html to lib
6af9b381c563a9e7edc80cb66d3461e0a8de3b35 Add an author/email comment
38678ac91d4ffb2dbd67a30e4c55ad313536f4dc Add an author comment
4e4b107da70717ff5135c459fa6faced1415caf6 (tag: ver1) Add HTML header
e82a9c13da97f0c3d35ec33940ce91cc047f66a6 (tag: ver1-beta) добавлен новый файл hello.html с базовой структурой HTML
9a9d12666198e6d31990bbdb4dc3c74c72be55b Восстановлен hello.html
ddaf0af9074141e28f43aa02fdeeb41e755e3b1 Added h2 tag
d3d9239a13dd0cea6f78a28a122c497ed6b560cb unrelated change for v
266dc47ca00647d848a954f92fd33d666d4d3f6e changes for a and b
cb6ec636f1a694c439e4846936ee6ba5e7d8307e First Commit

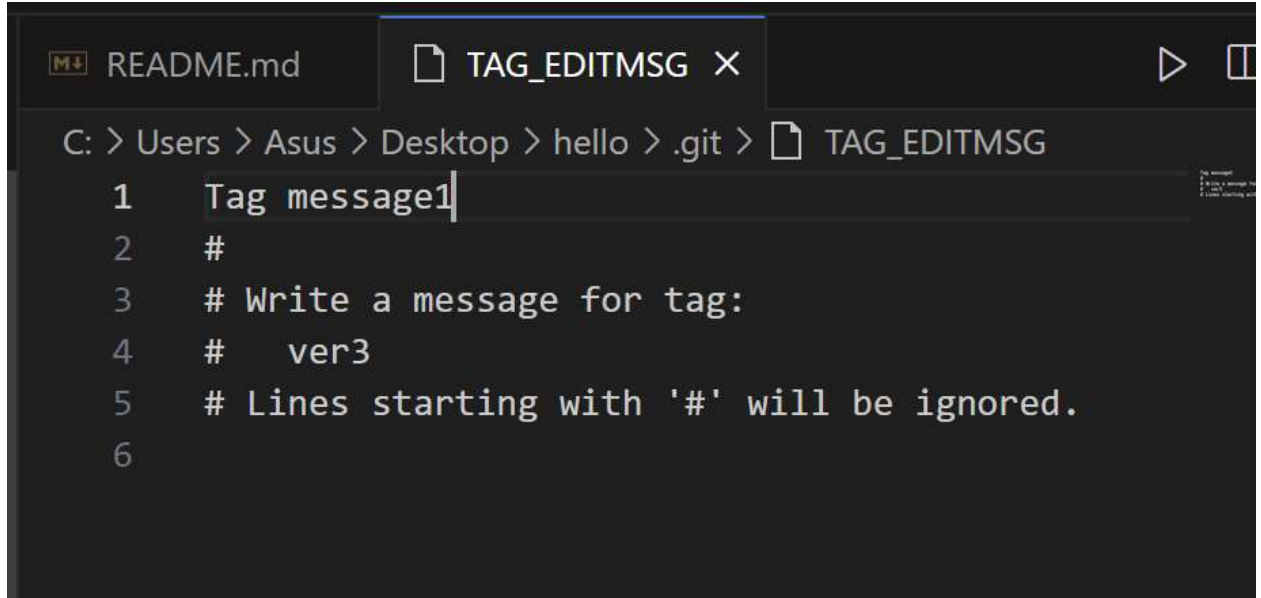
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$

```

Создание тега определенному коммиту


```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git tag -a ver3 4e4b107
```

Ввод сообщения в текстовом редакторе



```
README.md TAG_EDITMSG X
C: > Users > Asus > Desktop > hello > .git > TAG_EDITMSG
1 Tag message1
2 #
3 # Write a message for tag:
4 # ver3
5 # Lines starting with '#' will be ignored.
6
```

Просмотр данных тега

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git show ver3
tag ver3
Tagger: Nikita Migunov <migunov_nikita95@bk.ru>
Date: Thu Jun 5 01:10:42 2025 +0300

Tag message1

commit 9d3180a3417e85698332a8c071d74b7f8a29071f (HEAD -> master, tag: ver3, tag: v2.1-1w, tag: v2.1,
shared/master, shared/HEAD)
Author: Nikita Migunov <migunov_nikita95@bk.ru>
Date: Wed Jun 4 23:49:58 2025 +0300

    Added shared comment to README

diff --git a/README.md b/README.md
index 48fd818..0d650b5 100644
--- a/README.md
+++ b/README.md
@@ -1,2 +1,2 @@
-This is the Hello world example from the Git tutorial
-(changed in original)
\ No newline at end of file
+(Changed in original and pushed to shared)
\ No newline at end of file

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
```

Отправка тега на удаленный сервер

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git push shared v2.1
Enumerating objects: 1, done.
Counting objects: 100% (1/1), done.
Writing objects: 100% (1/1), 168 bytes | 168.00 KiB/s, done.
Total 1 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To ../hello.git
 * [new tag]          v2.1 -> v2.1

```

Отправка всех тегов на сервер

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git push shared --tags
Enumerating objects: 1, done.
Counting objects: 100% (1/1), done.
Writing objects: 100% (1/1), 167 bytes | 167.00 KiB/s, done.
Total 1 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To ../hello.git
 * [new tag]          v2.1-1w -> v2.1-1w
 * [new tag]          ver3 -> ver3

```

Удаление тега

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git tag -d v2.1-1w
Deleted tag 'v2.1-1w' (was 9d3180a)

```

Удаление тегов с сервера

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git push shared :refs/tags/v2.1-1w
To ../hello.git
 - [deleted]          v2.1-1w

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$

```

Переключение на метку

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (master)
$ git checkout v2.1
Note: switching to 'v2.1'.

You are in 'detached HEAD' state. You can look around, make experimental
changes and commit them, and you can discard any commits you make in this
state without impacting any branches by switching back to a branch.

If you want to create a new branch to retain commits you create, you may
do so (now or later) by using -c with the switch command. Example:

    git switch -c <new-branch-name>

Or undo this operation with:

    git switch -

Turn off this advice by setting config variable advice.detachedHead to false

HEAD is now at 9d3180a Added shared comment to README
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello ((ver3))
$ |

```

Создание новой ветки

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello ((ver3))
$ git checkout -b version2 v2.1
switched to a new branch 'version2'

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (version2)
$ |

```

Задание алиасов

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (version2)
$ git config --global alias.co checkout

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (version2)
$ git config --global alias.br branch

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (version2)
$ git config --global alias.ci commit

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (version2)
$ git config --global alias.st status

```

Создание псевдонима исключения файла из индекса

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (version2)
$ git config --global alias.unstage 'reset HEAD --'

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (version2)
$ |
```

Использование созданного псевдонима

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (version2)
$ git unstage fileA

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (version2)
$ git reset HEAD -- fileA

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (version2)
$ |
```

Создание алиаса для просмотра последнего коммита

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (version2)
$ git config --global alias.last 'log -1 HEAD'

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (version2)
$
```

Результат работы созданного алиаса

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (version2)
$ git last
commit 9d3180a3417e85698332a8c071d74b7f8a29071f (HEAD -> version2, tag: ver3, tag: v2.1, shared/master, shared/HEAD, master)
Author: Nikita Migunov <migunov_nikita95@bk.ru>
Date:   Wed Jun 4 23:49:58 2025 +0300

    Added shared comment to README
```

Создание псевдонима внешней команды

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (version2)
$ git config --global alias.virtual '!gitk'

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello (version2)
$
```

Гит 1.8

Индексация и коммит 3 файлов

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (master)
$ git add README test.rb LICENSE

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (master)
$ git commit -m 'Initial commit of my project'
[master (root-commit) 96bbda4] Initial commit of my project
3 files changed, 0 insertions(+), 0 deletions(-)
create mode 100644 LICENSE
create mode 100644 README
create mode 100644 test.rb

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (master)
$
```

Создание ветки testing

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (master)
$ git branch testing
```

Переключение на ветку testing

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (master)
$ git checkout testing
Switched to branch 'testing'

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (testing)
$ |
```

Индексация и коммит файла test.rb

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (testing)
$ git add test.rb

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (testing)
$ git commit -m "New changes"
[testing d935409] New changes
1 file changed, 1 insertion(+)

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (testing)
$ |
```

Переключение на ветку master

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (testing)
$ git checkout master
Switched to branch 'master'
```

Еще индексация и коммит test.rb

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (master)
$ git add test.rb

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (master)
$ git commit -m 'Another changes'
[master a67f17c] Another changes
1 file changed, 1 insertion(+)

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (master)
$ |
```

Создание и переключение на ветку iss53

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (master)
$ git checkout -b iss53
Switched to a new branch 'iss53'

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (iss53)
$
```

Индексация и коммит файла index.html

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (iss53)
$ git add index.html

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (iss53)
$ git commit -m "Added html"
[iss53 42fcd10] Added html
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 index.html

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (iss53)
$
```

Переключение на ветку master


```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (iss53)
$ git checkout master
Switched to branch 'master'

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (master)
$ |

```

Индексация и коммит index.html на ветке hotfix

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (hotfix)
$ git add index.html

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (hotfix)
$ git commit -a -m 'Fixed the broken email address'
[hotfix 4a28466] Fixed the broken email address
1 file changed, 0 insertions(+), 0 deletions(-)
delete mode 100644 index.html

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (hotfix)
$ |

```

Переключение на ветку master и объединение с веткой hotfix

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (hotfix)
$ git checkout master
Switched to branch 'master'

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (master)
$ git merge hotfix
Updating aa8c859..4a28466
Fast-forward
 index.html | 0
1 file changed, 0 insertions(+), 0 deletions(-)
delete mode 100644 index.html

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (master)
$ |

```

Удаление ветки hotfix

```

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (master)
$ git branch -d hotfix
Deleted branch hotfix (was 107233f).

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (master)
$ |

```

Индексация и коммит index.html на ветке iss53

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (iss53)
$ git add index.html

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (iss53)
$ git commit -m "Обновлѐн index.html"
[iss53 bb93eca] Обновлѐн index.html
1 file changed, 1 insertion(+)

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (iss53)
$
```

Удаление ветки iss53

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (master)
$ git branch -d iss53
Deleted branch iss53 (was cc915ee).

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (master)
$ |
```

Гит 1.9

Список существующих веток

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (master)
$ git branch
* master
testing

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (master)
$
```

Список веток с последними коммитами

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (master)
$ git branch -v
* master    fd90dfb Merge branch 'iss53'
testing d935409 New changes
```

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (master)
$
```

Список веток слитых с текущей

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (master)
$ git branch --merged
* master

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (master)
$ |
```

Список веток не слитых с текущей

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (master)
$ git branch --no-merged
testing

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (master)
$
```

Удаление ветки

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (master)
$ git branch -D testing
Deleted branch testing (was d935409).

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (master)
$ |
```

Просмотр удаленных веток

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (master)
$ git remote show origin
* remote origin
  Fetch URL: https://github.com/DiamondRetr0/hello_two.git
  Push URL: https://github.com/DiamondRetr0/hello_two.git
  HEAD branch: (unknown)

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (master)
$
```

Отправка изменений

```
$ git push origin main
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 4 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 285 bytes | 95.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/Eternity-blip/repo1
  6cdd680..f6b94bc  main -> main
```

Выполнение команды git fetch

```
$ git fetch origin
remote: Enumerating objects: 4, done.
remote: Counting objects: 100% (4/4), 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), 693 bytes | 18.00 KiB/s, done.
From https://github.com/Eternity-blip/repo1
  f6b94bc..68cbf5f  main      -> origin/main
```

Создание ветки на основе удаленной ветки

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (main)
$ git checkout -b serv origin/master
branch 'serv' set up to track 'origin/master'.
Switched to a new branch 'serv'

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (serv)
```

Удаление ветки на сервере

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (serv)
$ git push origin :serv
To https://github.com/dkorzhivina/hello_two.git
- [deleted]          serv
```

Перемещение изменений

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (master)
$ git checkout exp
Switched to branch 'exp'

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (exp)
$ git rebase master
Current branch exp is up to date.
```

Перемещение изменений с параметром onto

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (master)
$ git rebase --onto master se c1
Current branch c1 is up to date.
```

Слияние веток master и c1

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (c1)
$ git checkout master
Switched to branch 'master'

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (master)
$ git merge c1
Updating 2654b01..ae249bf
Fast-forward
 newfile.txt | 1 +
 1 file changed, 1 insertion(+)
 create mode 100644 newfile.txt
```


Перемещение изменений

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (master)
$ git rebase master se
Successfully rebased and updated refs/heads/se.
```

Слияние веток master и se

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (se)
$ git checkout master
Switched to branch 'master'

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (master)
$ git merge se
Updating ae249bf..046edff
Fast-forward
 e.txt | 0
 q.txt | 0
 repol | 1 +
3 files changed, 1 insertion(+)
create mode 100644 e.txt
create mode 100644 q.txt
create mode 100644 repol
```

Удаление веток cl и se

```
Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (master)
$ git branch -d cl
Deleted branch cl (was ae249bf).

Asus@DESKTOP-KA8T5QN MINGW64 ~/Desktop/hello_two (master)
$ git branch -d se
Deleted branch se (was 046edff).
```