

Отчёта по лабораторной работе 1

Математическое моделирование

КОНЕ СИРИКИ

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Цель работы

Познакомиться с Работа с git.

Выполнение работы.

1.1.1 Установка имени и электронной почты

(рис. -@fig:001)

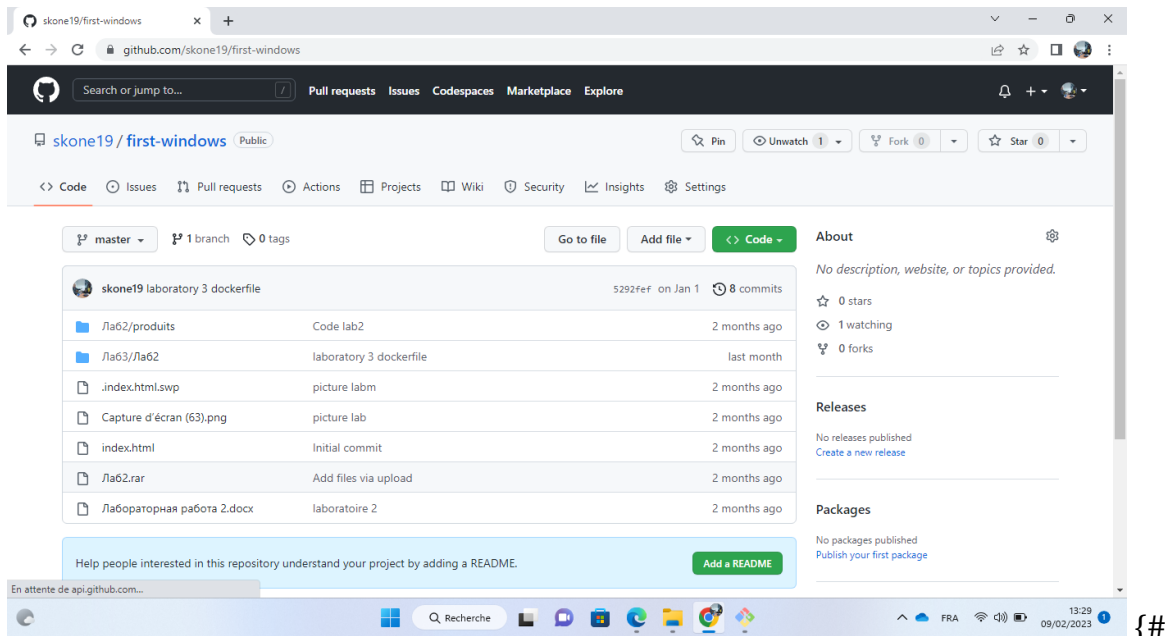


fig:001 width=70%}

1.1.2 Параметры установки окончаний строк.

1.1.3 Установка отображения unicode

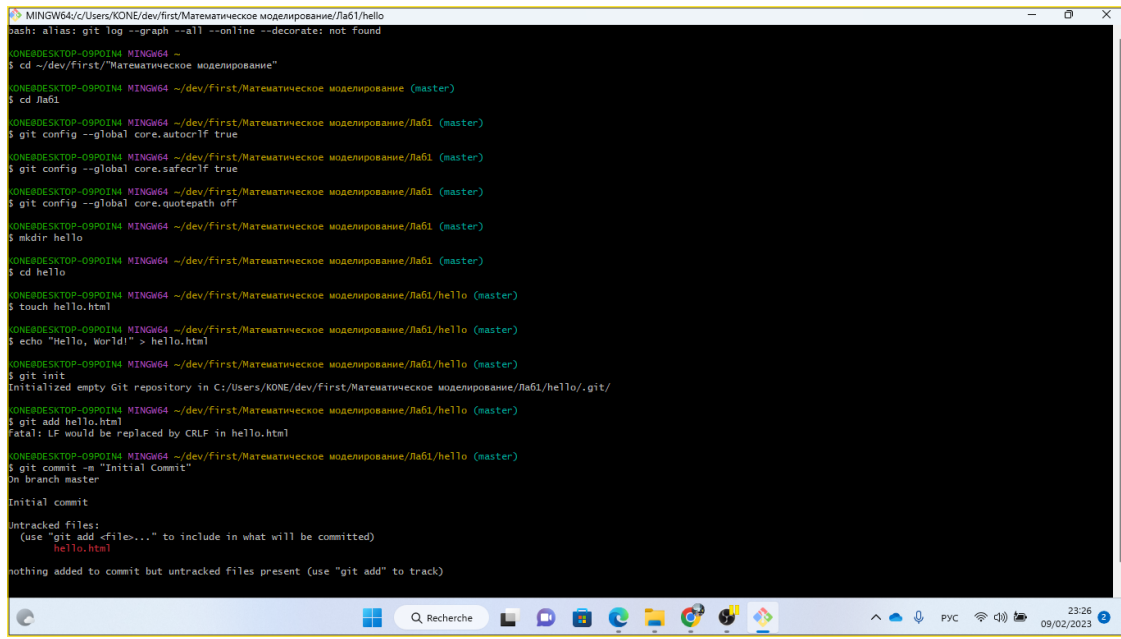
1.2 Создание проекта

1.2.1 Создайте страницу «Hello, World»

1.2.2 Создание репозитория

1.2.3 Добавление файла в репозиторий

(рис. -@fig:002)



```
MINGW64/c/Users/KONE/dev/first/Математическое моделирование/la61/hello
bash: alias: git: log --graph --all --online --decorate: not found

KONE@DESKTOP-09PQ1W4 MINGW64 ~
$ cd ~/dev/first/Математическое моделирование
KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование (master)
$ cd la61
KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/la61 (master)
$ git config --global core.autocrlf true
KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/la61 (master)
$ git config --global core.safecrlf true
KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/la61 (master)
$ git config --global core.quotePath off
KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/la61 (master)
$ mkdir hello
KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/la61 (master)
$ cd hello
KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ touch hello.html
KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ echo "Hello, World!" > hello.html
KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git init
Initialized empty Git repository in C:/Users/KONE/dev/first/Математическое моделирование/la61/hello/.git/
KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git add hello.html
fatal: LF would be replaced by CRLF in hello.html
KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git commit -m "Initial Commit"
[master 0b12345] Initial commit
Initial commit
Untracked files:
  (use "git add <file>..." to include in what will be committed)
  hello.html
nothing added to commit but untracked files present (use "git add" to track)
```

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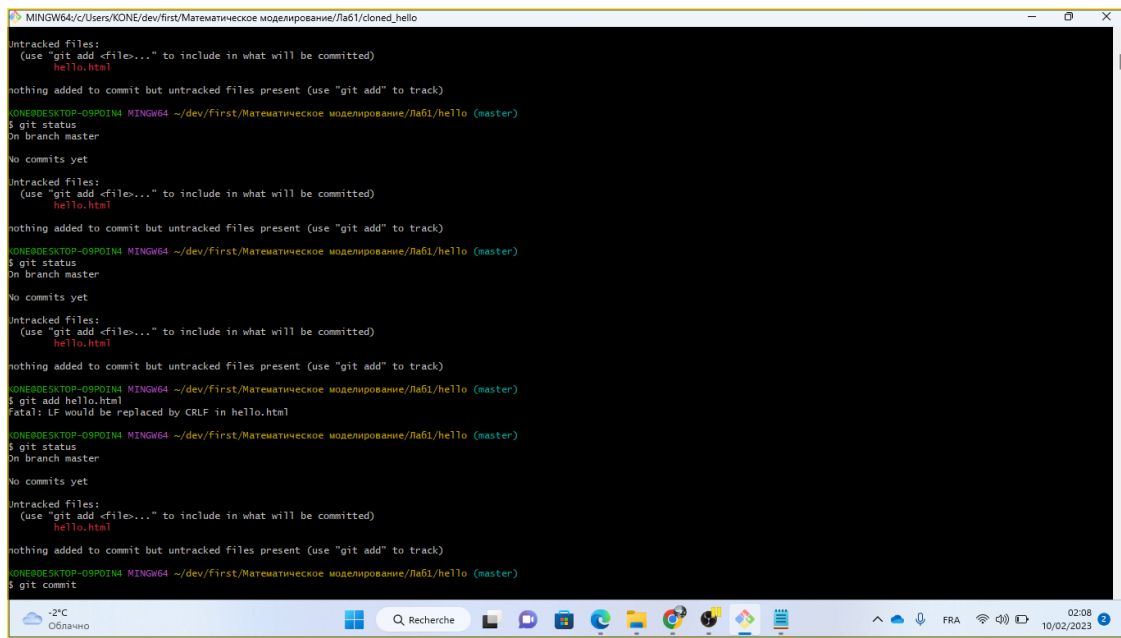
1.2.4 Проверка состояние репозитория

1.3 Внесение изменений

1.3.1 Измените страницу «Hello, World»

1.4 Индексация изменений

(рис. -@fig:003)



```
MINGW64/c/Users/KONE/dev/first/Математическое моделирование/la61/cloned_hello
$ git status
On branch master
No commits yet

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

nothing added to commit but untracked files present (use "git add" to track)
KONE@DESKTOP-09PDIW4 MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git status
On branch master
No commits yet

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

nothing added to commit but untracked files present (use "git add" to track)
KONE@DESKTOP-09PDIW4 MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git add hello.html
fatal: LF would be replaced by CRLF in hello.html
KONE@DESKTOP-09PDIW4 MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git status
On branch master
No commits yet

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

nothing added to commit but untracked files present (use "git add" to track)
KONE@DESKTOP-09PDIW4 MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git commit
Initial commit
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        hello.html

nothing added to commit but untracked files present (use "git add" to track)
KONE@DESKTOP-09PDIW4 MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git status
On branch master
No commits yet

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

nothing added to commit but untracked files present (use "git add" to track)
KONE@DESKTOP-09PDIW4 MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git commit -m "Added standard HTML page tags"
Initial commit
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        hello.html

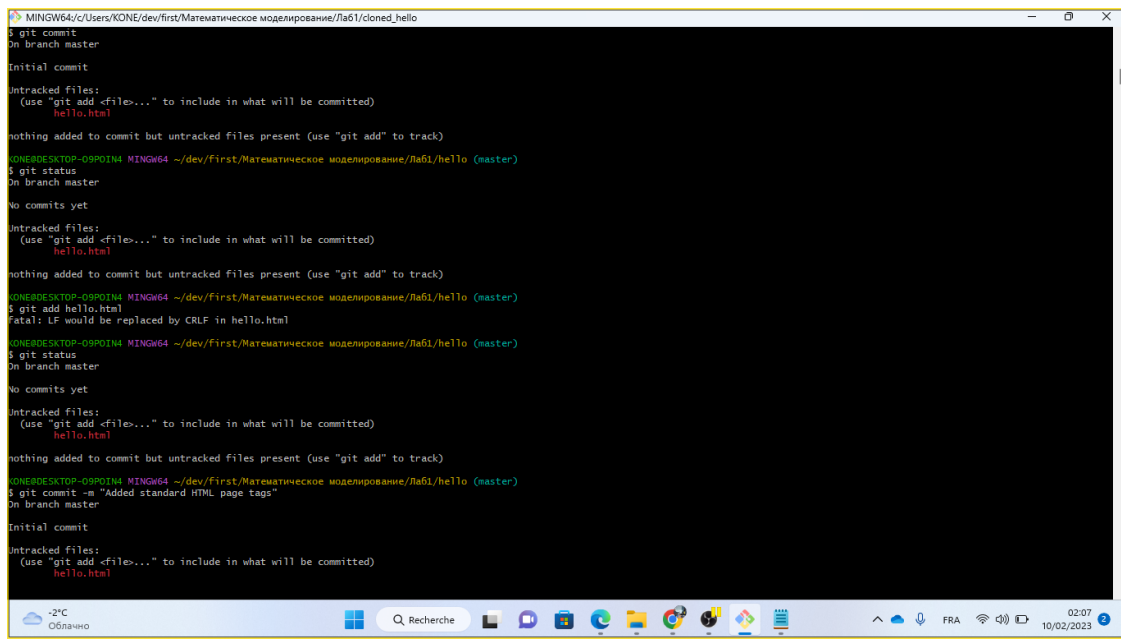
nothing added to commit but untracked files present (use "git add" to track)
```

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1.4.1 Коммит изменений

1.4.2 Добавьте стандартные теги страницы

(рис. -@fig:004)



```
MINGW64/c/Users/KONE/dev/first/Математическое моделирование/la61/cloned_hello
$ git commit
Initial commit
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        hello.html

nothing added to commit but untracked files present (use "git add" to track)
KONE@DESKTOP-09PDIW4 MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git status
On branch master
No commits yet

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

nothing added to commit but untracked files present (use "git add" to track)
KONE@DESKTOP-09PDIW4 MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git add hello.html
fatal: LF would be replaced by CRLF in hello.html
KONE@DESKTOP-09PDIW4 MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git status
On branch master
No commits yet

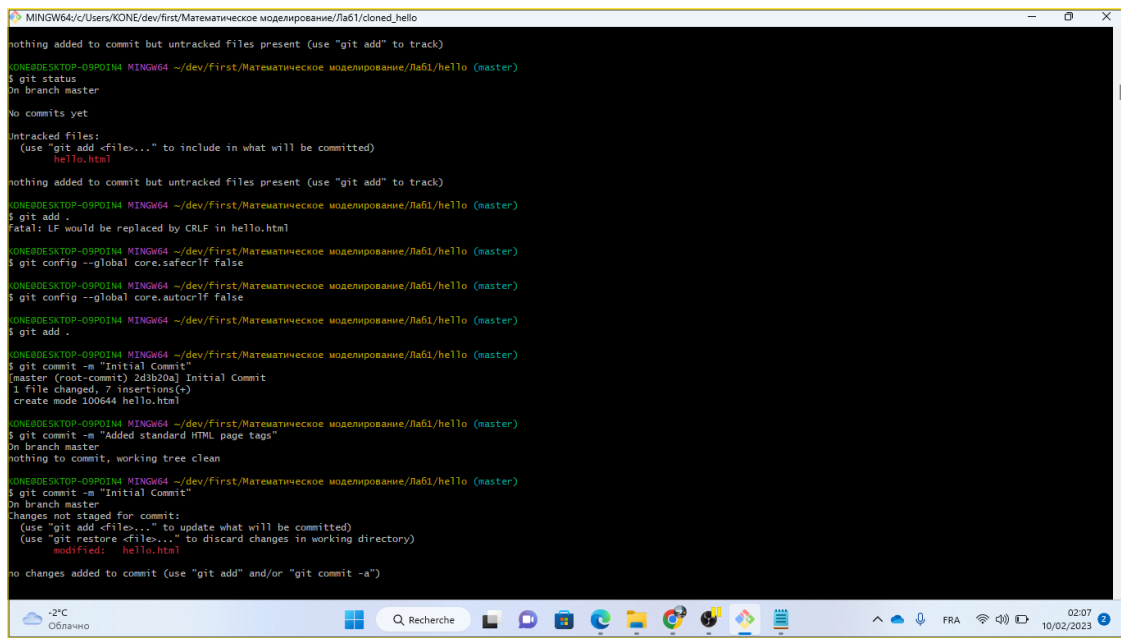
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        hello.html

nothing added to commit but untracked files present (use "git add" to track)
KONE@DESKTOP-09PDIW4 MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git commit -m "Added standard HTML page tags"
Initial commit
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        hello.html

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

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(рис. -@fig:005)



```
MINGW64/c/Users/KONE/dev/first/Математическое моделирование/la61/cloned_hello
nothing added to commit but untracked files present (use "git add" to track)
KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git add .
$ git status
On branch master

No commits yet

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

nothing added to commit but untracked files present (use "git add" to track)
KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git add .
fatal: LF would be replaced by CRLF in hello.html
KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git config --global core.safecrlf false
KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git config --global core.autocrlf false
KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git add .
KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git commit -m "Initial Commit"
[master (root-commit) 2d3b20a] Initial Commit
1 file changed, 7 insertions(+)
create mode 100644 hello.html
KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git commit -m "Added standard HTML page tags"
On branch master
nothing to commit, working tree clean
KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git commit -m "Initial Commit"
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")
```

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1.4.3 История

1.4.4 Получение старых версий

(рис. -@fig:006)



```
MINGW64/c/Users/KONE/dev/first/Математическое моделирование/la61/cloned_hello
KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git commit -m "Added HTML header"
On branch master
nothing to commit, working tree clean
KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git log
commit 2d3b20a4122c2ec5114c8a666fd3d794a980bfff6 (HEAD -> master)
Author: skone19 <skone103@gmail.com>
Date:   Thu Feb 9 23:40:29 2023 +0300

    Initial Commit

KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git log --pretty=oneline --max-count=2
2d3b20a4122c2ec5114c8a666fd3d794a980bfff6 (HEAD -> master) Initial Commit
KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git log --pretty=oneline --since=5 minutes ago
KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git log --pretty=oneline --all
2d3b20a4122c2ec5114c8a666fd3d794a980bfff6 (HEAD -> master) Initial Commit
KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git log
commit 2d3b20a4122c2ec5114c8a666fd3d794a980bfff6 (HEAD -> master)
Author: skone19 <skone103@gmail.com>
Date:   Thu Feb 9 23:40:29 2023 +0300

    Initial Commit

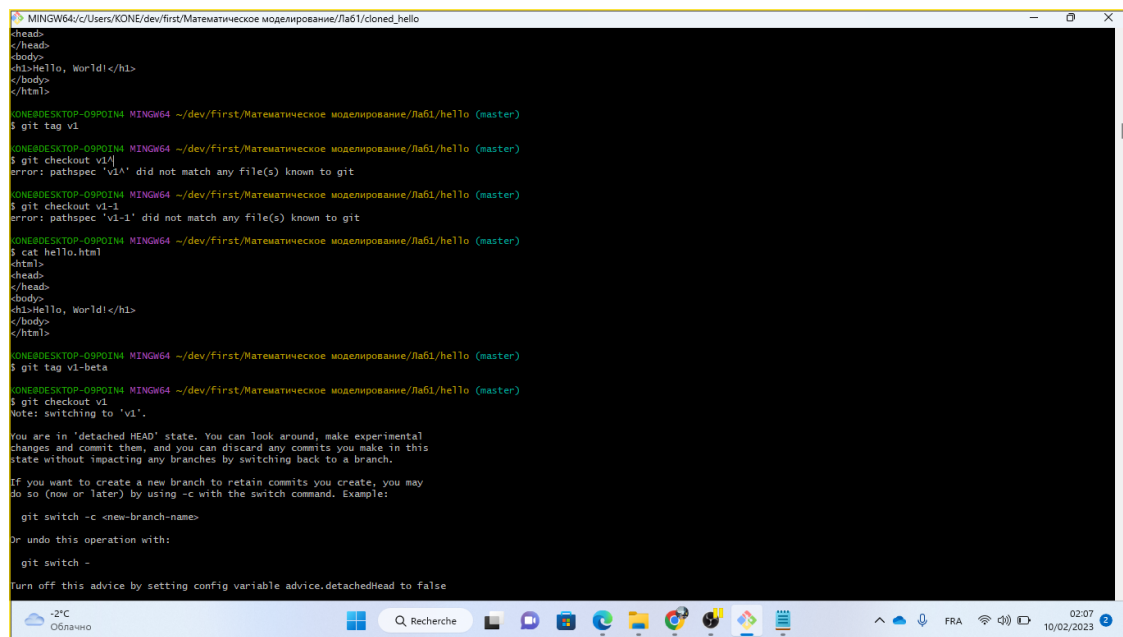
KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git checkout <hash>
bash: syntax error near unexpected token `newline'
KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ cat hello.html
<html>
<head>
</head>
<body>
<h1>Hello, World!</h1>
</body>
</html>
KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git checkout master
```

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1.4.5 Создание тегов версий

1.4.6 Переключение по имени тега

(рис. -@fig:007)



```
MINGW64/c/Users/KONE/dev/first/Математическое моделирование/la61/cloned_hello
<head>
</head>
<body>
<h1>Hello, World!</h1>
</body>
</html>

KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git tag v1

KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git checkout v1
error: pathspec 'v1' did not match any file(s) known to git

KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git checkout v1-1
error: pathspec 'v1-1' did not match any file(s) known to git

KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ cat hello.html
<html>
<head>
</head>
<body>
<h1>Hello, World!</h1>
</body>
</html>

KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git tag v1-beta

KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git checkout v1
Note: switching to 'v1'.

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
```

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1.4.7 Просмотр тегов с помощью команды tag

1.5 Отмена локальных изменений (до индексации)

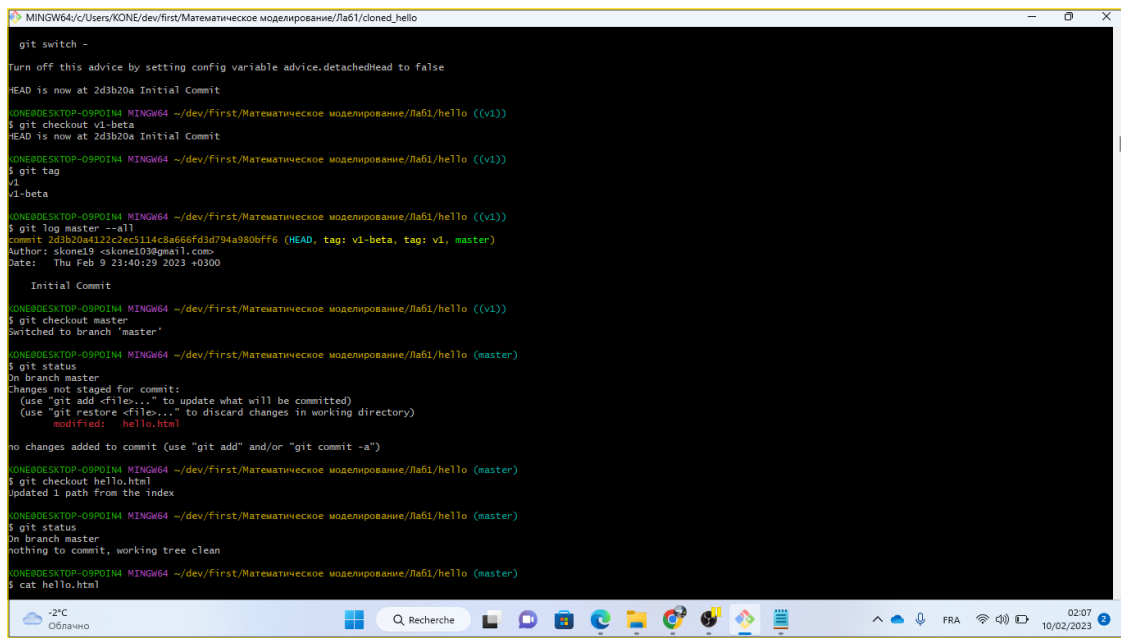
1.5.1 Переключитесь на ветку master

1.5.2 Измените hello.html

1.5.3 Проверьте состояние

1.5.4 Отмена изменений в рабочем каталоге

(рис. -@fig:008)



```
git switch -
Turn off this advice by setting config variable advice.detachedHead to false
HEAD is now at 2d3b20a Initial Commit
KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello ((v1))
$ git checkout v1-beta
HEAD is now at 2d3b20a Initial Commit
KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello ((v1))
$ git tag
v1
v1-beta
KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello ((v1))
$ git log master --all
commit 2d3b20a4122c2ec5114c8a666fd3d794a980bfff6 (HEAD, tag: v1-beta, tag: v1, master)
Author: skone19 <skone103@gmail.com>
Date: Thu Feb 9 23:40:29 2023 +0300
    Initial Commit
KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello ((v1))
$ git checkout master
Switched to branch "master"
KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/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")
KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git checkout hello.html
Updated 1 path from the index
KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git status
On branch master
nothing to commit, working tree clean
KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ cat hello.html
```

fig:008 width=70%}

1.6 Отмена проиндексированных изменений (перед коммитом)

1.6.1 Измените файл и проиндексируйте изменения

1.6.2 Проверьте состояние

1.6.3 Выполните сброс буферной зоны

1.6.4 Переключитесь на версию коммита

1.7 Отмена коммитов

1.7.1 Отмена коммитов

1.7.2 Измените файл и сделайте коммит

1.7.3 Сделайте коммит с новыми изменениями, отменяющими предыдущие

(рис. -@fig:009)

```
MINGW64/c/Users/KONE/dev/first/Математическое моделирование/la61/cloned_hello
nothing to commit, working tree clean

KONE@DESKTOP-09P01W4 MINGW64 ~/dev/First/Математическое моделирование/la61/hello (master)
$ cat hello.html
<html>
<head>
</head>
<body>
<h1>Hello, World!</h1>
</body>
</html>

KONE@DESKTOP-09P01W4 MINGW64 ~/dev/First/Математическое моделирование/la61/hello (master)
$ git add hello.html

KONE@DESKTOP-09P01W4 MINGW64 ~/dev/First/Математическое моделирование/la61/hello (master)
$ git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        modified:   hello.html

KONE@DESKTOP-09P01W4 MINGW64 ~/dev/First/Математическое моделирование/la61/hello (master)
$ git reset HEAD hello.html
Unstaged changes after reset:
M       hello.html

KONE@DESKTOP-09P01W4 MINGW64 ~/dev/First/Математическое моделирование/la61/hello (master)
$ git checkout hello.html
Updated 1 path from the index

KONE@DESKTOP-09P01W4 MINGW64 ~/dev/First/Математическое моделирование/la61/hello (master)
$ git status
On branch master
nothing to commit, working tree clean

KONE@DESKTOP-09P01W4 MINGW64 ~/dev/First/Математическое моделирование/la61/hello (master)
$ git add hello.html

KONE@DESKTOP-09P01W4 MINGW64 ~/dev/First/Математическое моделирование/la61/hello (master)
$ git commit -m "Oops, we didn't want this commit"
[master 4c36fff] Oops, we didn't want this commit
1 file changed, 1 insertion(+)

KONE@DESKTOP-09P01W4 MINGW64 ~/dev/First/Математическое моделирование/la61/hello (master)
$ git revert HEAD
~~~~~[master 1994766] Revert "Oops, we didn't want this commit"
1 file changed, 1 deletion(-)
```

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1.7.4 Проверьте лог

Проверка лога показывает нежелательные и отмененные коммиты в наш репозиторий.

1.8 Удаление коммитов из ветки

1.8.1 Команда git reset

1.8.2 Проверьте нашу историю

1.8.3 Для начала отметьте эту ветку

(рис. -@fig:010)

```
MINGW64/c/Users/KONE/dev/first/Математическое моделирование/la61/cloned_hello
1 file changed, 1 deletion(-)
ZZZZZZZZZZ
KONE@DESKTOP-09PQ1W MINGW64 ~/dev/First/Математическое моделирование/la61/hello (master)
$ git log
commit 1994766b5c9fa13d3a780ef523bf081d8aeba490 (HEAD -> master)
Author: skone19 <skone103@gmail.com>
Date: Fri Feb 10 00:12:07 2023 +0300

    Revert "Oops, we didn't want this commit"

    This reverts commit 4c36fff5570c54a86759638cd16cdae482d8cd57.

commit 4c36fff5570c54a86759638cd16cdae482d8cd57
Author: skone19 <skone103@gmail.com>
Date: Fri Feb 10 00:11:10 2023 +0300

    Oops, we didn't want this commit

commit 2d3b20a4122c2ec5114c8a666fd3d794a980bfff6 (tag: v1-beta, tag: v1)
Author: skone19 <skone103@gmail.com>
Date: Thu Feb 9 23:40:29 2023 +0300

    Initial Commit

KONE@DESKTOP-09PQ1W MINGW64 ~/dev/First/Математическое моделирование/la61/hello (master)
$ git log
commit 1994766b5c9fa13d3a780ef523bf081d8aeba490 (HEAD -> master)
Author: skone19 <skone103@gmail.com>
Date: Fri Feb 10 00:12:07 2023 +0300

    Revert "Oops, we didn't want this commit"

    This reverts commit 4c36fff5570c54a86759638cd16cdae482d8cd57.

commit 4c36fff5570c54a86759638cd16cdae482d8cd57
Author: skone19 <skone103@gmail.com>
Date: Fri Feb 10 00:11:10 2023 +0300

    Oops, we didn't want this commit

commit 2d3b20a4122c2ec5114c8a666fd3d794a980bfff6 (tag: v1-beta, tag: v1)
Author: skone19 <skone103@gmail.com>
Date: Thu Feb 9 23:40:29 2023 +0300

    Initial Commit

KONE@DESKTOP-09PQ1W MINGW64 ~/dev/First/Математическое моделирование/la61/hello (master)
$ git tag oops
```

fig:010 width=70%}

1.8.4 Сброс коммитов к предшествующим коммиту Oops

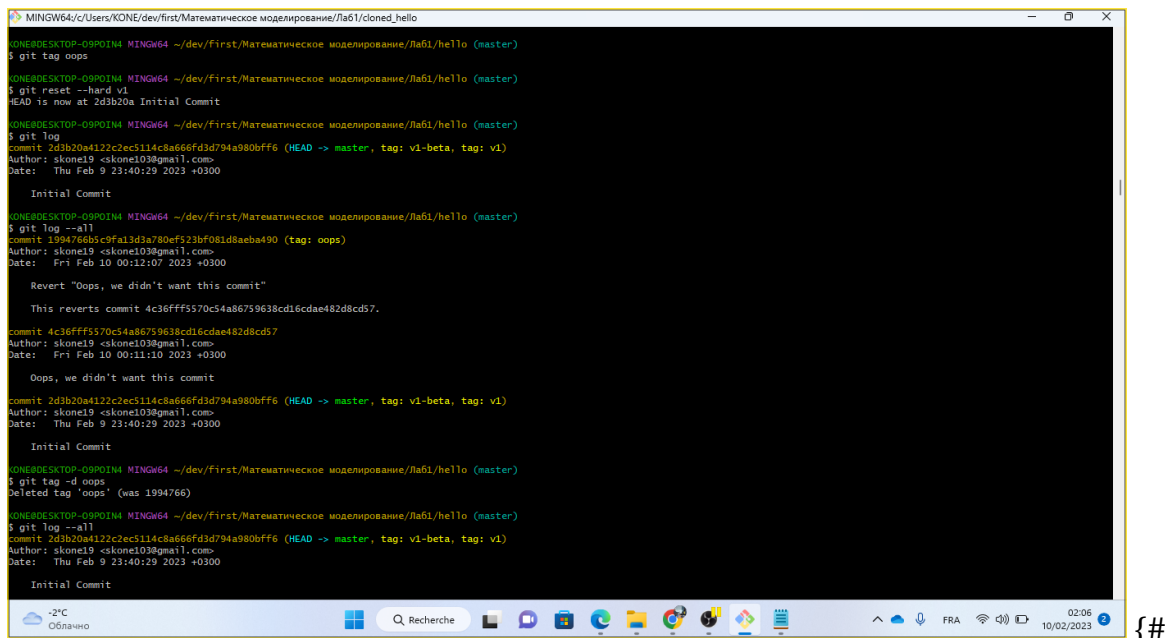
1.8.5 Ничего никогда не теряется

1.8.6 Опасность сброса

1.9 Удаление тега oops

1.9.1 Удаление тега oops

(рис. -@fig:011)



```
MINGW64/c/Users/KONE/dev/first/Математическое моделирование/la61/cloned_hello
KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git tag oops
KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git reset --hard v1
HEAD is now at 2d3b20a Initial Commit
KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git log
commit 2d3b20a4122c2ec5114c8a666fd3d794a980bfff6 (HEAD -> master, tag: v1-beta, tag: v1)
Author: skone19 <skone103@gmail.com>
Date: Thu Feb 9 23:40:29 2023 +0300

    Initial Commit

KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git log --all
commit 1994766b5c9f1d3d3a780ef523bf081d8aeba490 (tag: oops)
Author: skone19 <skone103@gmail.com>
Date: Fri Feb 10 00:12:07 2023 +0300

    Revert "Oops, we didn't want this commit"

    This reverts commit 4c38fff5570c54a86759638cd16cdae482d8cd57.

commit 4c38fff5570c54a86759638cd16cdae482d8cd57
Author: skone19 <skone103@gmail.com>
Date: Fri Feb 10 00:11:10 2023 +0300

    Oops, we didn't want this commit

commit 2d3b20a4122c2ec5114c8a666fd3d794a980bfff6 (HEAD -> master, tag: v1-beta, tag: v1)
Author: skone19 <skone103@gmail.com>
Date: Thu Feb 9 23:40:29 2023 +0300

    Initial Commit

KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git tag -d oops
Deleted tag 'oops' (was 1994766)
KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git log --all
commit 2d3b20a4122c2ec5114c8a666fd3d794a980bfff6 (HEAD -> master, tag: v1-beta, tag: v1)
Author: skone19 <skone103@gmail.com>
Date: Thu Feb 9 23:40:29 2023 +0300

    Initial Commit
```

fig:011 width=70%}

1.10 Внесение изменений в коммиты

1.10.1 Измените страницу, а затем сделайте коммит

1.10.2 Необходим email

1.10.3 Измените предыдущий коммит

1.10.4 Просмотр истории

1.11 Перемещение файлов

1.11.1 Переместите файл hello.html в каталог lib

1.12 Второй способ перемещения файлов

1.12.1 Коммит в новый каталог

1.13 Подробнее о структуре

1.13.1 Добавление index.html

(рис. -@fig:012)

fig:012 width=70%}

1.14 Git внутри: Каталог .git

1.14.1 Каталог .git

1.14.2 База данных объектов

1.14.3 Углубляемся в базу данных объектов

1.14.4 Config File

1.14.5 Ветки и теги

1.14.6 Файл HEAD

1.15 Работа непосредственно с объектами git

1.15.1 Поиск последнего коммита

(рис. -@fig:013)

```
MINGW64/c/Users/KONE/dev/first/Математическое моделирование/la61/cloned_hello
bash: syntax error near unexpected token `newline'

KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ ls -C .git/objects
09/ 10/ 15/ 17/ 19/ 2d/ 2e/ 49/ 4b/ 4c/ 4f/ 5e/ 72/ 8d/ 8f/ 93/ b8/ bd/ c3/ c6/ info/ pack/

KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ ls -C .git/objects/cdir>
bash: syntax error near unexpected token `newline'

KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ cat .git/config
[core]
  repositoryformatversion = 0
  filemode = false
  bare = false
  logallrefupdates = true
  symlinks = false
  ignorecase = true

KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ ls .git/refs
heads/ tags/

KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ ls .git/refs/heads
master

KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ ls .git/refs/tags
v1 v1-beta

KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ cat .git/refs/tags/v1
d3b204122c2ec314c5a666fd3d794a980bff6

KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ cat .git/HEAD
ref: refs/heads/master

KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git log --max-count=1
commit bd1c75a3152f7f08de97b7eaa5db0192c07fdf (HEAD -> master)
Author: skone19 <skone103@gmail.com>
Date: Fri Feb 10 00:38:00 2023 +0300

    Added index.html.

KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
```

fig:013 width=70%}

1.15.2 Вывод последнего коммита с помощью SHA1 хэша

(рис. -@fig:014)

```
MINGW64/c/Users/KONE/dev/first

KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git cat-file -t <hash>
bash: syntax error near unexpected token `newline'

KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git cat-file -t
fatal: <object> required with '-t'

usage: git cat-file <type> <object>
or: git cat-file (-e | -p) <object>
or: git cat-file (-t | -s) [--allow-unknown-type] <object>
or: git cat-file (--batch | --batch-check | --batch-command) [--batch-all-objects]
    [--buffer] [--follow-symlinks] [--unordered]
    [--textconv | --filters] [-z]
or: git cat-file (--textconv | --filters)
    [--rev]<:path|tree-ish> | --path=<path|tree-ish> <rev>]

Check object existence or emit object contents
-e          check if <object> exists
-p          pretty-print <object> content

Emit [broken] object attributes
-t          show object type (one of 'blob', 'tree', 'commit', 'tag', ...)
-s          show object size
--allow-unknown-type allow -s and -t to work with broken/corrupt objects
--use-mailmap use mail map file
--mailmap ... alias of --use-mailmap

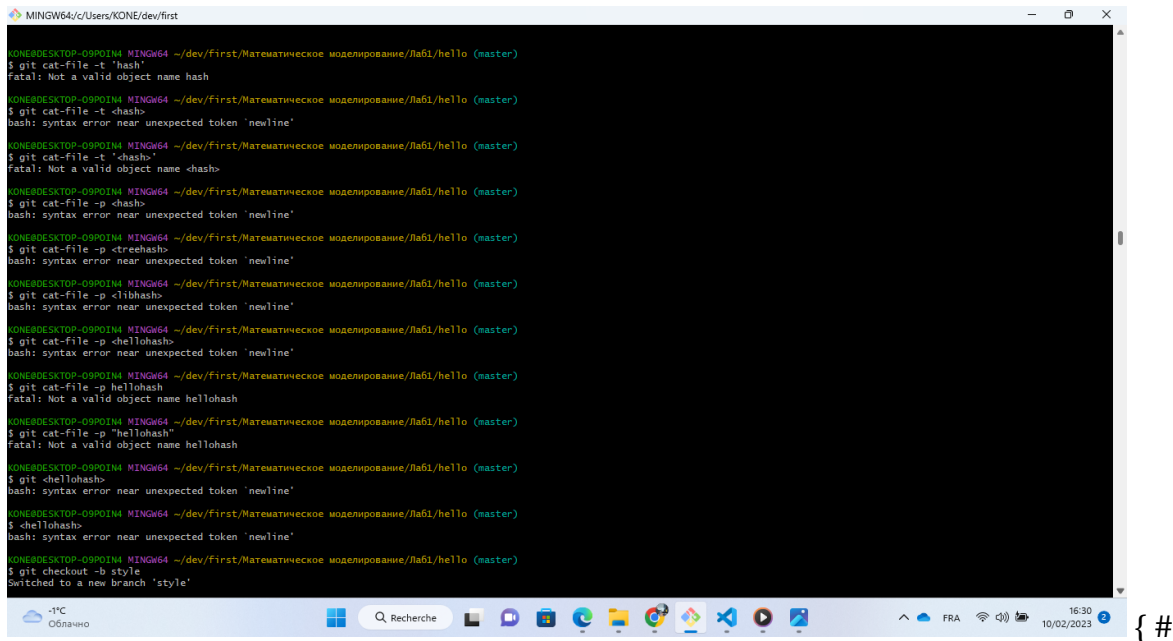
Batch objects requested on stdin (or --batch-all-objects)
--batch[=<format>] show full <object> or <rev> contents
--batch-check[=<format>] like --batch, but don't emit <contents>
-z          stdin is NUL-terminated
--batch-command[=<format>] read commands from stdin
--batch-all-objects with --batch-check; ignores stdin, batches all known objects

Change or optimize batch output
--buffer          buffer --batch output
--follow-symlinks follow in-tree symlinks
--unordered       do not order objects before emitting them

Emit object (blob or tree) with conversion or filter (stand-alone, or with batch)
--textconv        run textconv on object's content
--filters          run filters on object's content
--path blob|tree  use a <path> for (--textconv | --filters); Not with 'batch'
```

fig:014 width=70%}

(рис. -@fig:015)



```
MINGW64/c/Users/KONE/dev/first
KONEDESKTOP-09PQ1W MINGW64 ~/dev/First/Математическое моделирование/la61/hello (master)
$ git cat-file -t 'hash'
fatal: Not a valid object name hash

KONEDESKTOP-09PQ1W MINGW64 ~/dev/First/Математическое моделирование/la61/hello (master)
$ git cat-file -t <hash>
bash: syntax error near unexpected token 'newline'

KONEDESKTOP-09PQ1W MINGW64 ~/dev/First/Математическое моделирование/la61/hello (master)
$ git cat-file -t '<hash>'
fatal: Not a valid object name <hash>

KONEDESKTOP-09PQ1W MINGW64 ~/dev/First/Математическое моделирование/la61/hello (master)
$ git cat-file -p <hash>
bash: syntax error near unexpected token 'newline'

KONEDESKTOP-09PQ1W MINGW64 ~/dev/First/Математическое моделирование/la61/hello (master)
$ git cat-file -p <treehash>
bash: syntax error near unexpected token 'newline'

KONEDESKTOP-09PQ1W MINGW64 ~/dev/First/Математическое моделирование/la61/hello (master)
$ git cat-file -p <blobhash>
bash: syntax error near unexpected token 'newline'

KONEDESKTOP-09PQ1W MINGW64 ~/dev/First/Математическое моделирование/la61/hello (master)
$ git cat-file -p <hellohash>
bash: syntax error near unexpected token 'newline'

KONEDESKTOP-09PQ1W MINGW64 ~/dev/First/Математическое моделирование/la61/hello (master)
$ git cat-file -p hellohash
fatal: Not a valid object name hellohash

KONEDESKTOP-09PQ1W MINGW64 ~/dev/First/Математическое моделирование/la61/hello (master)
$ git cat-file -p "hellohash"
fatal: Not a valid object name hellohash

KONEDESKTOP-09PQ1W MINGW64 ~/dev/First/Математическое моделирование/la61/hello (master)
$ git <hellohash>
bash: syntax error near unexpected token 'newline'

KONEDESKTOP-09PQ1W MINGW64 ~/dev/First/Математическое моделирование/la61/hello (master)
$ <hellohash>
bash: syntax error near unexpected token 'newline'

KONEDESKTOP-09PQ1W MINGW64 ~/dev/First/Математическое моделирование/la61/hello (master)
$ git checkout -b style
Switched to a new branch 'style'
```

fig:015 width=70%}

1.15.3 Поиск дерева

1.15.4 Вывод каталога lib

1.15.5 Вывод файла hello.html

1.15.6 Исследуйте самостоятельно

1.16 Создание ветки

1.16.1 Создайте ветку

1.16.2 Добавьте файл стилей style.css

1.16.3 Измените основную страницу

1.16.4 Измените index.html

(рис. -@fig:016)

```
MINGW64/c/Users/KONE/dev/first
$ git cat-file -p "hellohash"
fatal: Not a valid object name hellohash

KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/лаб1/hello (master)
$ git <hellohash>
bash: syntax error near unexpected token 'newline'

KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/лаб1/hello (master)
$ <hellohash>
bash: syntax error near unexpected token 'newline'

KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/лаб1/hello (master)
$ git checkout -b style
Switched to a new branch 'style'

KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/лаб1/hello (style)
$ git status
On branch style
nothing to commit, working tree clean

KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/лаб1/hello (style)
$ touch lib/style.css

KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/лаб1/hello (style)
$ git add lib/style.css

KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/лаб1/hello (style)
$ git commit -m "Added css stylesheet"
[style 5d9139f] Added css stylesheet
1 file changed, 3 insertions(+)
create mode 100644 lib/style.css

KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/лаб1/hello (style)
$ git add lib/hello.html

KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/лаб1/hello (style)
$ git commit -m "Hello uses style.css"
[style 681480f] Hello uses style.css
1 file changed, 3 insertions(+), 1 deletion(-)

KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/лаб1/hello (style)
$ git add index.html

KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/лаб1/hello (style)
$ git commit -m "Updated index.html"
[style 4d07d30] Updated index.html
1 file changed, 4 insertions(+)
```

fig:016 width=70%}

1.17 Навигация по веткам

1.17.1 Переключение на ветку master

1.17.2 Вернемся к ветке style

1.18 Изменения в ветке master

1.18.1 Создайте файл README в ветке master

1.19 Сделайте коммит изменений README.md в ветку master.

(рис. -@fig:017)

```
MINGW64/c/Users/KONE/dev/first/Математическое моделирование/la61/cloned_hello
Author: skone19 <skone103@gmail.com>
Date: Thu Feb 9 23:40:29 2023 +0300

Initial Commit

KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (style)
$ git checkout master
Switched to branch 'master'

KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ cat lib/hello.html
<!-- Author: Dmitry S. Kulyabov (kulyabov-ds@rudn.ru) -->
<html>
<head>
</head>
<body>
<h1>Hello, World!</h1>
</body>
</html>

KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git checkout style
Switched to branch 'style'

KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (style)
$ cat lib/hello.html
<!-- Author: Dmitry S. Kulyabov (kulyabov-ds@rudn.ru) -->
<html>
<head>
<link type="text/css" rel="stylesheet"
media="all" href="style.css" />
</head>
<body>
<h1>Hello, World!</h1>
</body>
</html>

KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (style)
$ git checkout master
Switched to branch 'master'

KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ echo "This is the Hello World example from the git tutorial." > README.md
KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git add README.md
KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git commit -m "Added README"
[master 89edf09] Added README
```

fig:017 width=70%}

1.19.1 Просмотр отличающихся веток

1.19.2 Просмотрите текущие ветки

1.20 Слияние

1.20.1 Слияние веток

(рис. -@fig:018)

```
MINGW64/c/Users/KONE/dev/first/Математическое моделирование/la61/cloned_hello
* commit 681480f3bb007a1a07e44d4a7030cc34bd61ea
  Author: skone19 <skone103@gmail.com>
  Date: Fri Feb 10 00:57:21 2023 +0300

    Hello uses style.css

* commit 5d9139fcc5bf44afaf879bdd3db54f5df73569
  Author: skone19 <skone103@gmail.com>
  Date: Fri Feb 10 00:53:35 2023 +0300

    Added css stylesheet

* commit bd1c75a152f7f08d6e97b7eaa5db0192c07fdf
  Author: skone19 <skone103@gmail.com>
  Date: Fri Feb 10 00:38:00 2023 +0300

    Added index.html.

* commit 8d9a6b31eb2f69873167153c5075df9738fcae21
  Author: skone19 <skone103@gmail.com>
  Date: Fri Feb 10 00:33:55 2023 +0300

    Moved hello.html to lib

* commit b8fd176ca5228f0140bc770dc3ff3a516279d82f
  Author: skone19 <skone103@gmail.com>
  Date: Fri Feb 10 00:27:48 2023 +0300

    Add an author/email comment

* commit 2d3b20a4122c2ec5114c8a666fd3d794a980bFF6 (tag: v1-beta, tag: v1)
  Author: skone19 <skone103@gmail.com>
  Date: Thu Feb 9 23:40:29 2023 +0300

    Initial Commit

KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git checkout style
Switched to branch 'style'

KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (style)
$ git merge master
Merge made by the 'ort' strategy.
 README.md | 1 +
 1 file changed, 1 insertion(+)
 create mode 100644 README.md

KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (style)
$ git log --graph --all
```

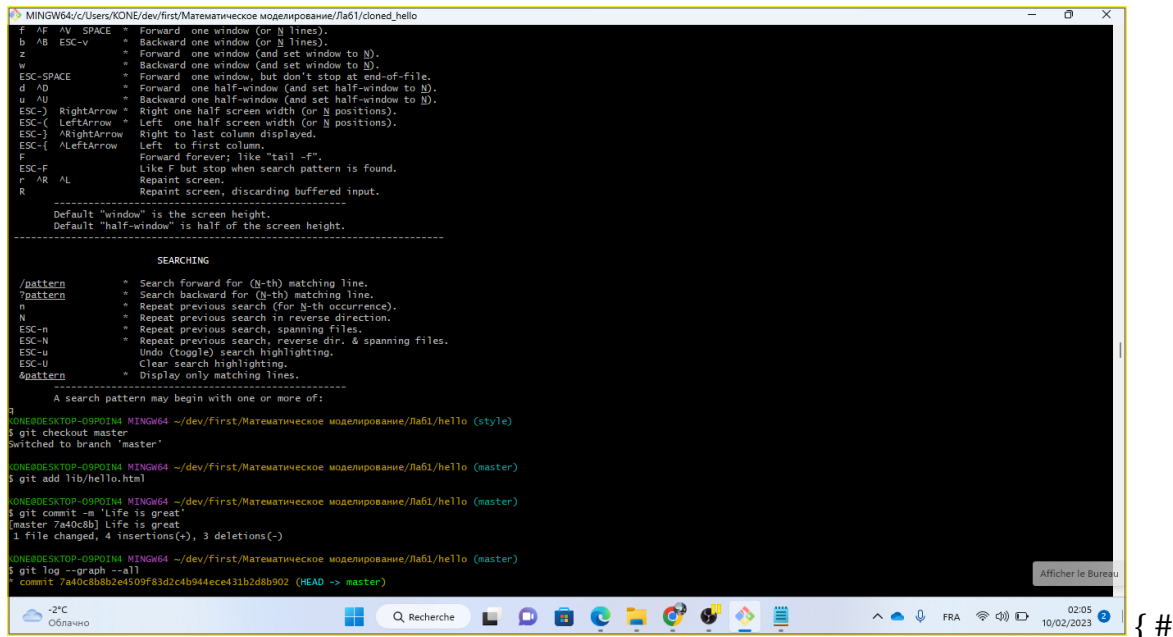
fig:018 width=70%}

1.21 Создание конфликта

1.21.1 Вернитесь в master и создайте конфликт

1.21.2 Просмотр веток

(рис. -@fig:019)



```
MINGW64/c/Users/KONE/dev/first/Математическое моделирование/la61/cloned_hello
f AF AV SPACE * Forward one window (or N lines).
b AB ESC-v * Backward one window (or N lines).
z * Forward one window (and set window to 0).
w * Backward one window (and set window to 0).
ESC-SPACE * Forward one window, but don't stop at end-of-file.
d AD * Forward one half-window (and set half-window to 0).
u AU * Backward one half-window (and set half-window to 0).
ESC-~ RightArrow * Right one half screen width (or N positions).
ESC-~ LeftArrow * Left one half screen width (or N positions).
ESC-} RightArrow * Right to last column displayed.
ESC-~ LeftArrow * Left to first column.
F * Forward forever; like "tail -f".
ESC-F * Like F but stop when search pattern is found.
r AR /L * Repaint screen.
R * Repaint screen, discarding buffered input.

-----
Default "window" is the screen height.
Default "half-window" is half of the screen height.
-----

SEARCHING
/pattern * Search Forward for (N-th) matching line.
?pattern * Search backward for (N-th) matching line.
n * Repeat previous search (for N-th occurrence).
N * Repeat previous search, spanning files.
ESC-n * Repeat previous search, spanning files.
ESC-N * Repeat previous search, reverse dir. & spanning files.
ESC-u * Undo (top/b) search highlighting.
ESC-U * Clear search highlighting.
&pattern * Display only matching lines.
-----
A search pattern may begin with one or more of:

KONEDESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (style)
$ git checkout master
Switched to branch 'master'
KONEDESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git add lib/hello.html
$ git commit -m "Life is great"
[master 7a40c8b] Life is great
1 file changed, 4 insertions(+), 3 deletions(-)
KONEDESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git log --graph --all
* commit 7a40c8b8b2e4509f83d2c4b944ee431b2d8b902 (HEAD -> master)
```

fig:019 width=70%}

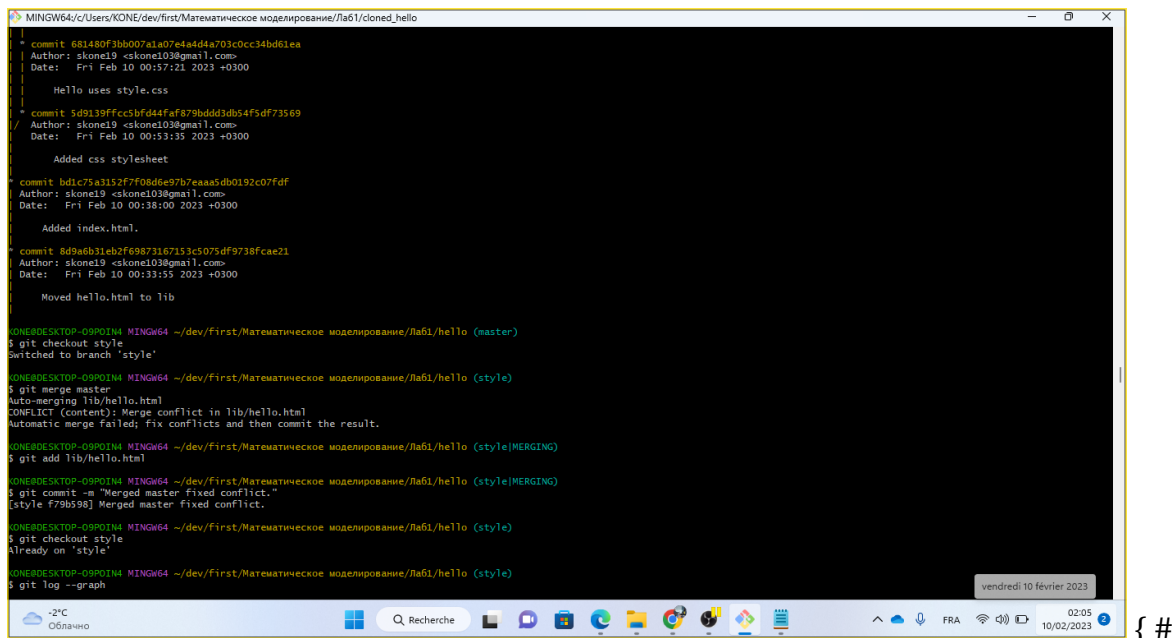
1.22 Разрешение конфликтов

1.22.1 Слияние master с веткой style

1.22.2 Решение конфликта

1.22.3 Сделайте коммит решения конфликта

(рис. -@fig:020)



```
commit 681480f1bb007a1e07e4a4d4703c0cc34bd61ea
Author: skone19 <skone103@gmail.com>
Date: Fri Feb 10 00:57:21 2023 +0300

    Hello uses style.css

commit 5d9139ffcc5bf4d4fafa879bdd3db54f5df73569
Author: skone19 <skone103@gmail.com>
Date: Fri Feb 10 00:53:33 2023 +0300

    Added css stylesheet

commit bd1c75a3152f7f08d6e97b7eaa5db0192c07f4df
Author: skone19 <skone103@gmail.com>
Date: Fri Feb 10 00:38:00 2023 +0300

    Added index.html.

commit 8d9a6b11ab2f68673167131c075df9738fcae21
Author: skone19 <skone103@gmail.com>
Date: Fri Feb 10 00:33:55 2023 +0300

    Moved hello.html to lib

KONERDESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git checkout style
Switched to branch 'style'

KONERDESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/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.

KONERDESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (style)MERGING
$ git add lib/hello.html

KONERDESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (style)MERGING
$ git commit -m "Merged master fixed conflict."
[style f79b598] Merged master fixed conflict.

KONERDESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (style)
$ git checkout style
Already on 'style'

KONERDESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (style)
$ git log --graph
```

fig:020 width=70%}

1.22.4 Перебазирование как альтернатива слиянию

1.23 Сброс ветки style

1.23.1 Сброс ветки style

1.23.2 Проверьте ветку.

1.24 Сброс ветки master

1.24.1 Сброс ветки master

1.25 Перебазирование

(рис. -@fig:021)


```
MINGW64/c/Users/KONE/dev/first/Математическое моделирование/la61/cloned_hello
Date: Fri Feb 10 01:15:24 2023 +0300

Life is great

commit df6886f77cca60dc3e4efba32412e5f2d957777
Merge: 4d07d10 89edf09
Author: skone19 <skone103@gmail.com>
Date: Fri Feb 10 01:05:41 2023 +0300

Merge branch 'master' into style

commit 89edf098bbe11dbd7205b203477162505c89c6cf
Author: skone19 <skone103@gmail.com>
Date: Fri Feb 10 01:04:33 2023 +0300

Added README

commit 4d07d309b7cfc9221cc8f4b1dc17e6c28587670
Author: skone19 <skone103@gmail.com>
Date: Fri Feb 10 01:00:16 2023 +0300

Updated index.html

commit 681480f3bb007a1a07e4a4d4a701c0cc34bd61ea
Author: skone19 <skone103@gmail.com>
Date: Fri Feb 10 00:57:21 2023 +0300

Hello uses style.css

commit 5d9139ffcc5bf444faf879bddd3db54f5df73569
Author: skone19 <skone103@gmail.com>
Date: Fri Feb 10 00:53:35 2023 +0300

Added css stylesheet

commit bdc1c75a3152f7f08d6e97b7eaa5db0192c07fdf
Author: skone19 <skone103@gmail.com>
Date: Fri Feb 10 00:38:00 2023 +0300

KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git checkout style
Switched to branch 'style'

KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (style)
$ git rebase master
Auto-merging lib/hello.html
CONFLICT (content): Merge conflict in lib/hello.html
error: could not apply 681480f... Hello uses style.css

{ #
```

fig:021 width=70%)

1.25.1 Слияние VS перебазирование

1.26 Слияние в ветку master

1.26.1 Слияние style в master

(рис. -@fig:022)

```
MINGW64/c/Users/KONE/dev/first/Математическое моделирование/la61/cloned_hello

commit f21041cebded12eda115185c1595598f296fc0dc (HEAD)
Author: skone19 <skone103@gmail.com>
Date: Fri Feb 10 00:53:35 2023 +0300

Added css stylesheet

commit 7a40c8b8b2e4509f83d2c4b944ece431b2d8b902 (master)
Author: skone19 <skone103@gmail.com>
Date: Fri Feb 10 01:15:24 2023 +0300

Life is great

commit 89edf098bbe11dbd7205b203477162505c89c6cf
Author: skone19 <skone103@gmail.com>
Date: Fri Feb 10 01:04:33 2023 +0300

Added README

commit bdc1c75a3152f7f08d6e97b7eaa5db0192c07fdf
Author: skone19 <skone103@gmail.com>
Date: Fri Feb 10 00:38:00 2023 +0300

Added index.html.

commit 8d9aebb1eb2f69873167153c5075df9738fcae21
Author: skone19 <skone103@gmail.com>
Date: Fri Feb 10 00:33:55 2023 +0300

Moved hello.html to lib

commit ba5fd176ca5228f0140bc770dc3ff3a516279d82f
Author: skone19 <skone103@gmail.com>
Date: Fri Feb 10 00:27:48 2023 +0300

Add an author/email comment

commit 2d3b20a4122c2ec5114c8a666fd3d794a980bFF6 (tag: v1-beta, tag: v1)
Author: skone19 <skone103@gmail.com>
Date: Thu Feb 9 23:40:29 2023 +0300

Initial Commit

KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (style)REBASE 2/3
$ git checkout master
error: you need to resolve your current index first
lib/hello.html: needs merge

KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (style)REBASE 2/3
$ git merge style

Afficher le Bureau

{ #
```

fig:022 width=70%)

1.26.2 Просмотрите логи

1.27 Клонирование репозитория

1.27.1 Перейдите в рабочий каталог

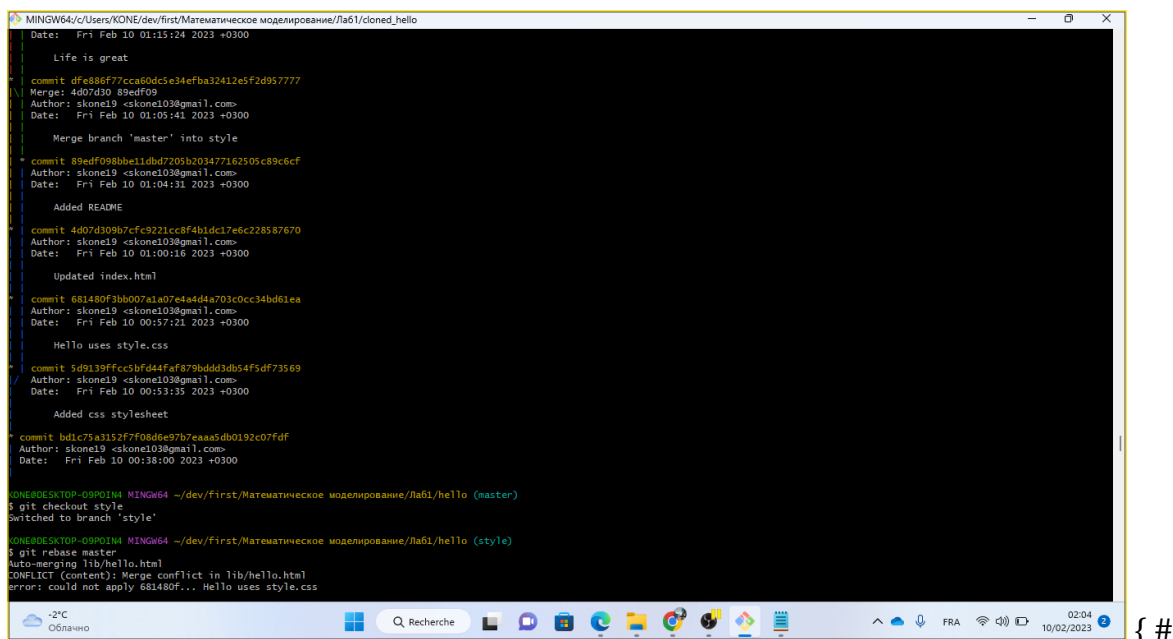
1.27.2 Создайте клон репозитория hello

1.28 Просмотр клонированного репозитория

1.28.1 Давайте взглянем на клонированный репозиторий.

1.28.2 Просмотрите историю репозитория

(рис. -@fig:023)



```
MINGW64/c:/Users/KONE/dev/first/Математическое моделирование/la61/cloned_hello
Date:   Fri Feb 10 01:15:24 2023 +0300

    Life is great

* commit dfe886f77cca60dce34efba32412e5f2d957777
Merge: 4d07d50 83edf09
Author: skone19 <skone103@gmail.com>
Date:   Fri Feb 10 01:05:41 2023 +0300

    Merge branch 'master' into style

* commit 89edf098b8e11dbd7205b20347716250c89c6cf
Author: skone19 <skone103@gmail.com>
Date:   Fri Feb 10 01:04:31 2023 +0300

    Added README

* commit 4d07d309b7cfc9221cc8f4b1dc17e6c228587670
Author: skone19 <skone103@gmail.com>
Date:   Fri Feb 10 01:00:16 2023 +0300

    Updated index.html

* commit 681480f3bb007a1a07e4a4a701c0cc34bd61ea
Author: skone19 <skone103@gmail.com>
Date:   Fri Feb 10 00:57:21 2023 +0300

    Hello uses style.css

* commit 5d9139ffcc5bf44fafa79bddd3db54f5df73569
Author: skone19 <skone103@gmail.com>
Date:   Fri Feb 10 00:53:35 2023 +0300

    Added css stylesheet

* commit bd1c75a1152f7f08d6e97b7eaa5db0192c07fdf
Author: skone19 <skone103@gmail.com>
Date:   Fri Feb 10 00:38:00 2023 +0300

ONK@DESKTOP-09PQW6 MINGW64 ~/dev/first/Математическое моделирование/la61/hello (master)
$ git checkout style
Switched to branch 'style'

ONK@DESKTOP-09PQW6 MINGW64 ~/dev/first/Математическое моделирование/la61/hello (style)
$ git rebase master
Auto-merging lib/hello.html
CONFLICT (content): Merge conflict in lib/hello.html
error: could not apply 681480f... Hello uses style.css
```

fig:023 width=70%}

1.28.3 Удаленные ветки

1.29 Что такое origin?

1.30 Удаленные ветки

1.30.1 Список удаленных веток

1.31 Изменение оригинального репозитория

1.31.1 Внесите изменения в оригинальный репозиторий hello

(рис. -@fig:024)

```
MINGW64/c/Users/KONE/dev/first/Математическое моделирование/la61/cloned_hello
Author: skone19 <skone103@gmail.com>
Date: Fri Feb 10 00:53:35 2023 +0300

KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/cloned_hello ((f21041c...))
$ git remote
origin
$ git remote show origin
* remote origin
Fetch URL: C:/Users/KONE/dev/first/Математическое моделирование/la61/hello
Push URL: C:/Users/KONE/dev/first/Математическое моделирование/la61/hello
HEAD branch: (unknown)
Remote branches:
  master tracked
  style tracked
$ git branch
* (no branch)
$ git branch -
fatal: '-' is not a valid branch name
$ git branch -a
* (no branch)
  remotes/origin/master
  remotes/origin/style
KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/cloned_hello ((f21041c...))
$ cd ../hello

KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (style|REBASE 2/3)
$ git add README
fatal: pathspec 'README' did not match any files
KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (style|REBASE 2/3)
$ git add README.md

KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (style|REBASE 2/3)
$ git commit -m "Changed README in original repo"
error: Committing is not possible because you have unmerged files.
hint: Fix them up in the work tree, and then use 'git add/rm <file>'
hint: as appropriate to mark resolution and make a commit.
fatal: Exiting because of an unresolved conflict.
U
 1b/hello.html
```

Français (France)
Anglais (États-Unis)
Pour changer de méthode d'entrée, appuyez sur
touche Windows + espace.

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1.31.2 Извлечение изменений

(рис. -@fig:025)

```
MINGW64/c/Users/KONE/dev/first/Математическое моделирование/la61/cloned_hello
U
 1b/hello.html

KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/hello (style|REBASE 2/3)
$ cd ../cloned_hello

KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/cloned_hello ((f21041c...))
$ git fetch

KONE@DESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/cloned_hello ((f21041c...))
$ git log --all
commit f21041cebed32ed15158c1595598f29fc00c (HEAD)
Author: skone19 <skone103@gmail.com>
Date: Fri Feb 10 00:53:35 2023 +0300

    Added css stylesheet

commit f79b598aa3e3b37b2ff6b2cdc1223d59ef1c1740 (origin/style)
Merge: df4886f 7a40c2b
Author: skone19 <skone103@gmail.com>
Date: Fri Feb 10 01:23:43 2023 +0300

    Merged master fixed conflict.

commit 7a40c2b8b2e4509f83d2c4b944ece431b2d8b902 (origin/master)
Author: skone19 <skone103@gmail.com>
Date: Fri Feb 10 01:15:24 2023 +0300

    Life is great

commit df4886f77cca60dc5e34efba32412e5f2d957777
Merge: 4d07d30 89edf09
Author: skone19 <skone103@gmail.com>
Date: Fri Feb 10 01:05:41 2023 +0300

    Merge branch 'master' into style

commit 89edf098bbe11dbd7205b203477162505c89c6cf
Author: skone19 <skone103@gmail.com>
Date: Fri Feb 10 01:04:31 2023 +0300

    Added README

commit 4d07d309b7cf9221cc8f4b1dc17e6c228587670
Author: skone19 <skone103@gmail.com>
Date: Fri Feb 10 01:00:16 2023 +0300

    Updated index.html

commit 681480f3bb007a1a07e4a4d4a703c0cc34bd61ea
```

fig:025 width=70%}

1.31.3 Проверьте README.md

1.32 Слияние извлеченных изменений

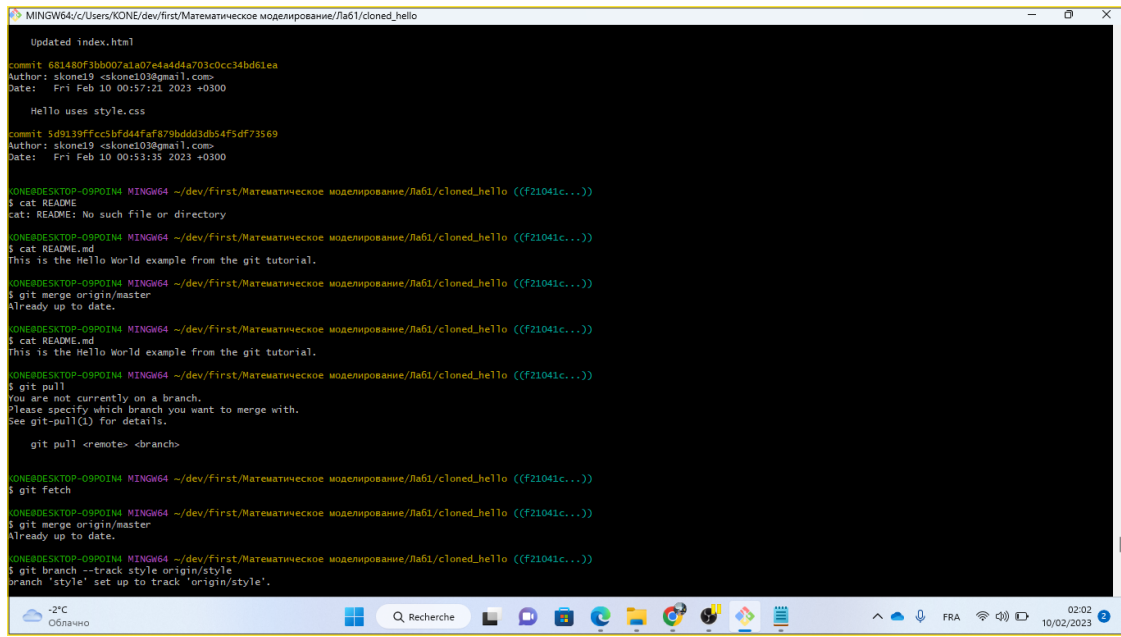
1.32.1 Слейте извлеченные изменения в локальную ветку master

1.32.2 Еще раз проверьте файл README.md

1.33 Добавление ветки наблюдения

1.33.1 Добавьте локальную ветку, которая отслеживает удаленную ветку

(рис. -@fig:026)



```
MINGW64/c/Users/KONE/dev/first/Математическое моделирование/la61/cloned_hello
Updated index.html
commit 681480f3bb007ea07e4e44da703c0cc34bd61ea
Author: skone19 <skone103@gmail.com>
Date: Fri Feb 10 00:57:21 2023 +0300

Hello uses style.css

commit 5d9139ffcc5bf444faf879bddd3db54f5df73569
Author: skone19 <skone103@gmail.com>
Date: Fri Feb 10 00:53:35 2023 +0300

KONEDESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/cloned_hello ((f21041c...))
$ cat README
cat: README: No such file or directory
KONEDESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/cloned_hello ((f21041c...))
$ cat README.md
This is the Hello World example from the git tutorial.
KONEDESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/cloned_hello ((f21041c...))
$ git merge origin/master
Already up to date.
KONEDESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/cloned_hello ((f21041c...))
$ cat README.md
This is the Hello World example from the git tutorial.
KONEDESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/cloned_hello ((f21041c...))
$ git pull
you are not currently on a branch.
Please specify which branch you want to merge with.
See git-pull(1) for details.

git pull <remote> <branch>
KONEDESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/cloned_hello ((f21041c...))
$ git fetch
KONEDESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/cloned_hello ((f21041c...))
$ git merge origin/master
Already up to date.
KONEDESKTOP-09PQ1W MINGW64 ~/dev/first/Математическое моделирование/la61/cloned_hello ((f21041c...))
$ git branch --track style origin/style
branch 'style' set up to track 'origin/style'.
```

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1.34 Чистые репозитории

1.35 Создайте чистый репозиторий

1.36 Добавление удаленного репозитория

(рис. -@fig:027)

```
MINGW64/c/Users/KONE/dev/first/Математическое моделирование/la61/cloned_hello
branch 'style' set up to track 'origin/style'.
KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/la61/cloned_hello ((f21041c...))
$ git branch -a
* (no branch)
  style
  remotes/origin/master
  remotes/origin/style
KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/la61/cloned_hello ((f21041c...))
$ git log --max-count=2
commit f21041cebded32eda115185c1595598f296fc00c (HEAD)
Author: skone19 <skone103@gmail.com>
Date:   Fri Feb 10 00:15:35 2023 +0300

    Added css stylesheet

commit 7a40c8b8b2e4509f83d2c4b944ece431b2d8b902 (origin/master)
Author: skone19 <skone103@gmail.com>
Date:   Fri Feb 10 01:15:24 2023 +0300

    Life is great
KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/la61/cloned_hello ((f21041c...))
$ cd ..
KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/la61 (master)
$ git clone --bare hello hello.git
Cloning into bare repository 'hello.git'...
done.
KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/la61 (master)
$ ls hello.git
HEAD config description hooks/ info/ objects/ packed-refs refs/
KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/la61 (master)
$ cd hello
KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/la61/hello (style)REBASE 2/3
$ git remote add shared ../hello.git
KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/la61/hello (style)REBASE 2/3
$ git checkout master
error: you need to resolve your current index first
lib/hello.html: needs merge
KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/la61/hello (style)REBASE 2/3
$ git add README
fatal: pathspec 'README' did not match any files
```

fig:027 width=70%}

1.37 Отправка изменений

(рис. -@fig:028)

```
fatal: pathspec 'README' did not match any files
KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/la61/hello (style)REBASE 2/3
$ git add README.md
KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/la61/hello (style)REBASE 2/3
$ git commit -m "Added shared comment to readme"
error: Committing is not possible because you have unmerged files.
hint: Fix them up in the work tree, and then use 'git add/rm <files>'
hint: as appropriate to mark resolution and make a commit.
fatal: Existing file(s) in the working tree were not staged:
lib/hello.html
KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/la61/hello (style)REBASE 2/3
$ git push shared master
Everything up-to-date
KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/la61/hello (style)REBASE 2/3
$ cd ../cloned_hello
KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/la61/cloned_hello ((f21041c...))
$ git remote add shared ../hello.git
KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/la61/cloned_hello ((f21041c...))
$ git branch --track shared master
fatal: the requested upstream branch 'master' does not exist
hint:
hint: If you are planning on basing your work on an upstream
hint: branch that already exists at the remote, you may need to
hint: run "git fetch" to retrieve it.
hint:
hint: If you are planning to push out a new local branch that
hint: will track its remote counterpart, you may want to use
hint: "git push -u" to set the upstream config as you push.
hint: Disable this message with "git config advice.setupstreamFailure false"
KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/la61/cloned_hello ((f21041c...))
$ git pull shared master
from ../hello      master      -> FETCH_HEAD
* [new branch]      master      -> shared/master
Already up to date.
KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/la61/cloned_hello ((f21041c...))
$ cat README.md
This is the Hello World example from the git tutorial.
KONE@DESKTOP-09PQ1W4 MINGW64 ~/dev/first/Математическое моделирование/la61/cloned_hello ((f21041c...))
$
```

fig:028 width=70%}

1.38 Извлечение общих изменений

(рис. -@fig:029)

```
MINGW64/c/Users/KONE/dev/first/Математическое моделирование/лаб1/cloned_hello
Fatal: pathspec 'README' did not match any files
KONERDESKTOP-09PQ1M MINGW64 ~/dev/first/Математическое моделирование/лаб1/hello (style|REBASE 2/3)
$ git add README.md
KONERDESKTOP-09PQ1M MINGW64 ~/dev/first/Математическое моделирование/лаб1/hello (style|REBASE 2/3)
$ git commit -m "Added shared comment to readme"
error: Committing is not possible because you have unmerged files.
hint: Fix them up in the work tree, and then use 'git add/rm <file>'
hint: as appropriate to mark resolution and make a commit.
Fatal: Exiting because of an unresolved conflict.
U       1lib/hello.html

KONERDESKTOP-09PQ1M MINGW64 ~/dev/first/Математическое моделирование/лаб1/hello (style|REBASE 2/3)
$ git push shared master
Everything up-to-date

KONERDESKTOP-09PQ1M MINGW64 ~/dev/first/Математическое моделирование/лаб1/hello (style|REBASE 2/3)
$ cd ../cloned_hello
KONERDESKTOP-09PQ1M MINGW64 ~/dev/first/Математическое моделирование/лаб1/cloned_hello ((f21041c...))
$ git remote add shared ../hello.git
KONERDESKTOP-09PQ1M MINGW64 ~/dev/first/Математическое моделирование/лаб1/cloned_hello ((f21041c...))
$ git branch --track shared master
Fatal: the requested upstream branch 'master' does not exist
hint:
hint: If you are planning on basing your work on an upstream
hint: branch that already exists at the remote, you may need to
hint: run "git fetch" to retrieve it.
hint:
hint: If you are planning to push out a new local branch that
hint: will track its remote counterpart, you may want to use
hint: "git push -u" to set the upstream config as you push.
hint: Disable this message with "git config advice.setUpstreamFailure false"

KONERDESKTOP-09PQ1M MINGW64 ~/dev/first/Математическое моделирование/лаб1/cloned_hello ((f21041c...))
$ git pull shared master
from ..:/hello
* branch                master      -> FETCH_HEAD
+ [new branch]          master      -> shared/master
Already up to date.

KONERDESKTOP-09PQ1M MINGW64 ~/dev/first/Математическое моделирование/лаб1/cloned_hello ((f21041c...))
$ cat README.md
This is the Hello World example from the git tutorial.

KONERDESKTOP-09PQ1M MINGW64 ~/dev/first/Математическое моделирование/лаб1/cloned_hello ((f21041c...))
$
```

fig:029 width=70%}

(рис. -@fig:030)

```
lib
Disque local (C:) > Utilisateurs > KONE > dev > first > Математическое моделирование > лаб1 > hello > lib
hello.html - Bloc-notes
Fichier  Modifier  Affichage
|!- Author: Dmitry S. Kulyabov (dskulyabov@rudn.ru) -->
<html>
<head>
<<<<<< HEAD
<link type="text/css" rel="stylesheet"
media="all" href="style.css" />
<!-- no style -->
>>>>>> master
</head>
<body>
<h1>Hello, World! Life is great!</h1>
</body>
</html>
```

fig:030 width=70%}

Вывод:

Изучил познакомился с работа git.