

Лабораторная работа №1

Выполнил: Бельчиков Артём Игоревич. Вариант 3.

Тема: Система контроля версий Git.

Цель: Познакомиться с возможностями и получить практические навыки работы с системой контроля версий Git.

Задание:

1. Подготовьте рабочее окружение в соответствии с типом вашей операционной системы(<https://smartiqa.ru/courses/git/lesson-1>):

- Установите Git (<https://git-scm.com/downloads>)

```
brew install git
```

b. Выполните базовую настройку

```
[artembelcikova@MacBook-Air-Artem-3 ~ % git --version  
git version 2.53.0
```

```
[artembelcikova@MacBook-Air-Artem-3 ~ % git config --global init.defaultBranch main
```

```
[artembelcikova@MacBook-Air-Artem-3 ~ % cat .gitconfig
```

```
[user]  
    name = Artem Belchikov  
    email = artpres444@gmail.com  
[init]  
    defaultBranch = main
```

2. Создайте структуру папок (использовать командную строку) и поместите в репозиторий Git на своем локальном компьютере:

(Наименование для базовой папки: **453501_IVANOV_12**, где 12 – порядковый номер в журнале)

Внутри создайте структуру (в каждую папку поместите файл ИмяПапкиTest.txt):

GROUP_NUMBER_YOUR_LAST_NAME_NUMBER_IN_LIST

IGI

LR1

Папки и файлы в соответствии с индивидуальным заданием

Отчет по ЛР1 со скринами действий и результатов

LR2

LR3

LR4

LR5

STRWEB

LR1

LR2

LR3

LR4

```
artembelcikova@MacBook-Air-Artem-3 453501_BELCHIKOV_3 % mkdir IGI
artembelcikova@MacBook-Air-Artem-3 453501_BELCHIKOV_3 % cd IGI
artembelcikova@MacBook-Air-Artem-3 IGI % mkdir LR1
artembelcikova@MacBook-Air-Artem-3 IGI % cd LR1
artembelcikova@MacBook-Air-Artem-3 LR1 % touch LR1Test.txt
artembelcikova@MacBook-Air-Artem-3 LR1 % pwd
/Users/artembelcikova/Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3/IGI/LR1
artembelcikova@MacBook-Air-Artem-3 LR1 % mkdir bar
artembelcikova@MacBook-Air-Artem-3 LR1 % cd bar
artembelcikova@MacBook-Air-Artem-3 bar % mkdir 755
artembelcikova@MacBook-Air-Artem-3 bar % mkdir baz
artembelcikova@MacBook-Air-Artem-3 bar % cd baz
artembelcikova@MacBook-Air-Artem-3 baz % mkdir 744
artembelcikova@MacBook-Air-Artem-3 baz % echo "readme.txt" > 544
artembelcikova@MacBook-Air-Artem-3 baz % ls
544    744
artembelcikova@MacBook-Air-Artem-3 baz % rm 544
artembelcikova@MacBook-Air-Artem-3 baz % echo "544" > readme.txt
artembelcikova@MacBook-Air-Artem-3 baz % car readme.txt
zsh: command not found: car
artembelcikova@MacBook-Air-Artem-3 baz % cat readme.txt
544
artembelcikova@MacBook-Air-Artem-3 baz % mkdir example
artembelcikova@MacBook-Air-Artem-3 baz % cd example
artembelcikova@MacBook-Air-Artem-3 example % mkrid 255
zsh: command not found: mkrid
artembelcikova@MacBook-Air-Artem-3 example % mkdir 255
artembelcikova@MacBook-Air-Artem-3 example % cd ../..
artembelcikova@MacBook-Air-Artem-3 bar % cd ..
artembelcikova@MacBook-Air-Artem-3 LR1 % mkdir foo
artembelcikova@MacBook-Air-Artem-3 LR1 % cd foo
artembelcikova@MacBook-Air-Artem-3 foo % mkdir 711
artembelcikova@MacBook-Air-Artem-3 foo % echo "000" > test.txt
artembelcikova@MacBook-Air-Artem-3 foo % mkdir bin
artembelcikova@MacBook-Air-Artem-3 foo % cd bin
artembelcikova@MacBook-Air-Artem-3 bin % mkdir 766
artembelcikova@MacBook-Air-Artem-3 bin % mkdir touch
artembelcikova@MacBook-Air-Artem-3 bin % cd touch
artembelcikova@MacBook-Air-Artem-3 touch % mkdir 777
artembelcikova@MacBook-Air-Artem-3 touch % cd ../../...
artembelcikova@MacBook-Air-Artem-3 IGI % tree
```

Далее все данные команды будут повторяться, поэтому я сразу выводу полученный результат после создания всех папок и файлов в них

```
 MacBook-Pro:~/Doc/4/4/ИГ/453501_BELCHIKOV_3 git: main ?4 > tree
```

```
+- 453501_BELCHIKOV_3Test.txt
+- IGI
|   +- IGITest.txt
|   +- LR1
|       +- LR1Test.txt
|       +- bar
|           +- 755
|               +- 755Test.txt
|           +- barTest.txt
|           +- baz
|               +- 744
|                   +- 744Test.txt
|               +- bazTest.txt
|               +- example
|                   +- 255
|                       +- 255Test.txt
|                       +- exampleTest.txt
|               +- readme.txt
|       +- foo
|           +- 711
|               +- 711Test.txt
|           +- bin
|               +- 766
|                   +- 766Test.txt
|               +- binTest.txt
|               +- touch
|                   +- 777
|                       +- 777Test.txt
|                       +- touchTest.txt
|               +- fooTest.txt
|               +- test.txt
|       +- geometric_lib
|           +- circle.py
|           +- docs
|               +- README.md
|               +- square.py
|       +- LR2
|           +- LR2Test.txt
|
+- LR3
    +- LR3Test.txt
+- LR4
    +- LR4Test.txt
+- LR5
    +- LR5Test.txt
-
+- STRWEB
|   +- LR1
|       +- LR1Test.txt
|   +- LR2
|       +- LR2Test.txt
|   +- LR3
|       +- LR3Test.txt
|   +- LR4
|       +- LR4Test.txt
|   +- STRWEBTest.txt

```

26 directories, 29 files

Так же в задании сказано после в корневой директории инициализировать локальный репозиторий

```
➔ ~ ~/Doc/4/4/ИГ/453501_BELCHIKOV_3 git ⌂ main ?4 ➤ git status
On branch main

No commits yet

Untracked files:
(use "git add <file>..." to include in what will be committed)
.DS_Store
453501_BELCHIKOV_3Test.txt
IGI/
STRWEB/

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

3. Создайте репозиторий внутри папки LR1 с помощью клонирования проекта с сайта [github.com](https://github.com/smartiqaorg/geometric_lib) (https://github.com/smartiqaorg/geometric_lib)

```
[artembelcikova@MacBook-Air-Artem-3 LR1 % git clone https://github.com/smartiqaorg/geometric_lib.git
Cloning into 'geometric_lib'...
remote: Enumerating objects: 35, done.
remote: Total 35 (delta 0), reused 0 (delta 0), pack-reused 35 (from 1)
Receiving objects: 100% (35/35), 4.69 KiB | 4.69 MiB/s, done.
Resolving deltas: 100% (5/5), done.
```

4. Выполните следующие действия, каждый раз проверяя состояние файлов в локальном репозитории до и после выполнения операции:

а. сделайте индексацию нескольких файлов в вашем Git-репозитории (git add ...),

```
➔ ~/Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 git ⌂ main ?4 ➤ git add 453501_BELCHIKOV_3Test.txt IGI/IGITest.txt
➔ ~ ~/Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 git ⌂ main +2 ?8 ➤ git status
On branch main

No commits yet

Changes to be committed:
(use "git rm --cached <file>..." to unstage)
  new file:   453501_BELCHIKOV_3Test.txt
  new file:   IGI/IGITest.txt

Untracked files:
(use "git add <file>..." to include in what will be committed)
.DS_Store
IGI/.DS_Store
IGI/LR1/
IGI/LR2/
IGI/LR3/
IGI/LR4/
IGI/LR5/
```

б. внесите изменения в файлы (через nano поменял в терминале)

```

apple ~ /Doc/4/4th_semester/ИГИ/453501_BELCHIKOV_3 ✘ main +2 !2 ?8 > git status
On branch main

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
    new file:  453501_BELCHIKOV_3Test.txt
    new file:  IGI/IGITest.txt

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
    modified:  453501_BELCHIKOV_3Test.txt
    modified:  IGI/IGITest.txt

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

```

Видно то что после изменений старые версии находятся в индексе, а так же говориться что эти файлы уже так же были изменены и хранят новый код.

с. выполните коммиты к проиндексированным файлам

Сначала за коммичу старые файлы, после добавлю в индекс новые изменения и за коммичу уже их.

```

apple ~ /Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ✘ main +2 !2 ?8 > git commit -m "branch: main save old versions of files"
[main (root-commit) 0349e72] branch: main save old versions of files
 2 files changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 453501_BELCHIKOV_3Test.txt
 create mode 100644 IGI/IGITest.txt
apple ~ /Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ✘ main !2 ?8 > git add 453501_BELCHIKOV_3Test.txt IGI/IGITest.txt
apple ~ /Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ✘ main +2 ?8 > git status
On branch main
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    modified:  453501_BELCHIKOV_3Test.txt
    modified:  IGI/IGITest.txt

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    .DS_Store
    IGI/.DS_Store
    IGI/LR1/
    IGI/LR2/
    IGI/LR3/
    IGI/LR4/
    IGI/LR5/
    STRWEB/

apple ~ /Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ✘ main +2 ?8 > git commit -m "branch: main | save changed versions of files"
[main 9d18634] branch: main | save changed versions of files
 2 files changed, 2 insertions(+)
apple ~ /Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ✘ main ?8 > git status
On branch main
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    .DS_Store
    IGI/.DS_Store
    IGI/LR1/
    IGI/LR2/
    IGI/LR3/
    IGI/LR4/
    IGI/LR5/
    STRWEB/

```

[artembelcikova@MacBook-Air-Artem-3 geometric_lib % git commit -m "change style of functions"
[main 1b3edc2] change style of functions
2 files changed, 5 insertions(+), 4 deletions(-)

д. добавьте и удалите файлы (один и группу файлов с определенным расширением)

```

apple ~ /Doc/4/4th_semester/ИГИ/453501_BELCHIKOV_3/IGI/LR1 ✘ main ?8 > git touch text{1,2,3,4}.txt
git: 'touch' is not a git command. See 'git --help'.
apple ~ /Doc/4/4th_semester/ИГИ/453501_BELCHIKOV_3/IGI/LR1 ✘ main ?8 > touch text{1,2,3,4}.txt
apple ~ /Doc/4/4th_semester/ИГИ/453501_BELCHIKOV_3/IGI/LR1 ✘ main ?8 > ls
LR1Test.txt  bar  foo  geometric.lib  text1.txt  text2.txt  text3.txt  text4.txt
apple ~ /Doc/4/4th_semester/ИГИ/453501_BELCHIKOV_3/IGI/LR1 ✘ main ?8 > git add *txt
apple ~ /Doc/4/4th_semester/ИГИ/453501_BELCHIKOV_3/IGI/LR1 ✘ main +5 ?11 > git status
On branch main
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:  LR1Test.txt
    new file:  text1.txt
    new file:  text2.txt
    new file:  text3.txt
    new file:  text4.txt

```

Удаление из индекса:

```
apple ~ ~/Doc/4/4th_semester/ИГИ/453501_BELCHIKOV_3/IGI/LR1 git p main +5 ?11 > git rm --cached *.txt
rm 'IGI/LR1/LR1Test.txt'
rm 'IGI/LR1/text1.txt'
rm 'IGI/LR1/text2.txt'
rm 'IGI/LR1/text3.txt'
rm 'IGI/LR1/text4.txt'
apple ~ ~/Doc/4/4th_semester/ИГИ/453501_BELCHIKOV_3/IGI/LR1 git p main ?8 > git status
On branch main
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    ./../.DS_Store
    ./.DS_Store
    ./
    ../LR2/
    ../LR3/
    ../LR4/
    ../LR5/
    ../.../STRWEB/
nothing added to commit but untracked files present (use "git add" to track)
```

для 1 файла:

```
apple ~ ~/Doc/4/4th_semester/ИГИ/453501_BELCHIKOV_3/IGI/LR1 git p main ?8 > git status
On branch main
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    ./../.DS_Store
    ./../.DS_Store
apple ~ ~/Doc/4/4th_semester/ИГИ/453501_BELCHIKOV_3/IGI/LR1 git p main ?8 > git add photo.png
apple ~ ~/Doc/4/4th_semester/ИГИ/453501_BELCHIKOV_3/IGI/LR1 git p main +1 ?16 > git status
On branch main
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:   photo.png

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    ./.../.DS_Store
    .../.DS_Store
    .DS_Store
    LR1Test.txt
    bar/
    foo/
    geometric_lib/
    text1.txt
    text2.txt
    text3.txt
    text4.txt
    ../LR2/
    ../LR3/
    ../LR4/
    ../LR5/
    .../.../STRWEB/
apple ~ ~/Doc/4/4th_semester/ИГИ/453501_BELCHIKOV_3/IGI/LR1 git p main +1 ?16 > git rm --cached photo.png
rm 'IGI/LR1/photo.png'
apple ~ ~/Doc/4/4th_semester/ИГИ/453501_BELCHIKOV_3/IGI/LR1 git p main ?8 > git status
On branch main
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    ./.../.DS_Store
    .../.DS_Store
```

е. переименуйте файлы

```

➔ ~ /Doc/4/4th_semester/ИГИ/453501_BELCHIKOV_3/IGI/LR1 ✉ P main ?8 > git add photo.png
➔ ~ /Doc/4/4th_semester/ИГИ/453501_BELCHIKOV_3/IGI/LR1 ✉ P main +1 ?16 > git status
On branch main
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:  photo.png

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    ../../.DS_Store
    ../.DS_Store
    .DS_Store
    LR1Test.txt
    bar/
    foo/
    geometric_lib/
    text1.txt
    text2.txt
    text3.txt
    text4.txt
    ../LR2/
    ../LR3/
    ../LR4/
    ../LR5/
    ../../STRWEB/
➔ ~ /Doc/4/4th_semester/ИГИ/453501_BELCHIKOV_3/IGI/LR1 ✉ P main +1 ?16 > git mv photo.png photoOfSecretAgent.png
➔ ~ /Doc/4/4th_semester/ИГИ/453501_BELCHIKOV_3/IGI/LR1 ✉ P main +1 ?16 > git status
On branch main
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:  photoOfSecretAgent.png

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    ../../.DS_Store
    ../.DS_Store
    .DS_Store
    LR1Test.txt
➔ ~ /Doc/4/4th_semester/ИГИ/453501_BELCHIKOV_3/IGI/LR1 ✉ P main +1 ?16 > git commit -m "branch main | save renamed file"
[main 51032bd] branch main | save renamed file
  1 file changed, 0 insertions(+), 0 deletions(-)
  create mode 100644 IGI/LR1/photoOfSecretAgent.png

```

f. создайте для IGI и STRWEB, а также для каждой ЛР, вложенной в них,

отдельные ветки, поместите файлы на соответствующие ветки

```

➔ ~/Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ✉ P IGI ?18 > echo "add some text to the file IGI/IGITest.txt" >> IGI/IGITest.txt
➔ ~ /Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ✉ P IGI !1 ?18 > git status
On branch IGI
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:   IGI/IGITest.txt

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    .DS_Store
    IGI/.DS_Store
    IGI/LR1/.DS_Store
    IGI/LR1/LR1Test.txt
    IGI/LR1/Report_LR1_IGI.docx
    IGI/LR1/bar/
    IGI/LR1/foo/
    IGI/LR1/geometric_lib/
    IGI/LR1/text1.txt
    IGI/LR1/text2.txt
    IGI/LR1/text3.txt
    IGI/LR1/text4.txt
    IGI/LR1/~$port_LR1_IGI.docx
    IGI/LR2/
    IGI/LR3/
    IGI/LR4/
    IGI/LR5/
    STRWEB/

no changes added to commit (use "git add" and/or "git commit -a")
➔ ~ /Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ✉ P IGI !1 ?18 > git add IGI/IGITest.txt
➔ ~ /Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ✉ P IGI +1 ?18 > git status
On branch IGI
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    modified:   IGI/IGITest.txt

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

```

Делаю коммит, чтобы я мог перейти на другую ветку

```
➔ ~ ~/Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ✘ P IGI +1 ?18 ➤ git commit -m "branch IGI | commit files belong to IGI"  
[IGI d1125ff] branch IGI | commit files belong to IGI  
1 file changed, 1 insertion(+)
```

Далее проделаю данные действия для всех веток и посмотрю, что будет

происходить

```
➔ ~ ~/Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ✘ P main ?16 ➤ git checkout -b IGI-LR1  
Switched to a new branch 'IGI-LR1'  
➔ ~ ~/Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ✘ P IGI-LR1 ?16 ➤ git status  
On branch IGI-LR1  
Untracked files:  
  (use "git add <file>..." to include in what will be committed)  
    .DS_Store  
    IGI/.DS_Store  
    IGI/LR1/.DS_Store  
    IGI/LR1/LR1Test.txt  
    IGI/LR1/bar/  
    IGI/LR1/foo/  
    IGI/LR1/geometric_lib/  
    IGI/LR1/text1.txt  
    IGI/LR1/text2.txt  
    IGI/LR1/text3.txt  
    IGI/LR1/text4.txt  
    IGI/LR2/  
    IGI/LR3/  
    IGI/LR4/  
    IGI/LR5/  
    STRWEB/  
  
nothing added to commit but untracked files present (use "git add" to track)  
➔ ~ ~/Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ✘ P IGI-LR1 ?16 ➤ git add IGI/LR1  
➔ ~ ~/Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ✘ P IGI-LR1 +24 ?7 ➤ git status  
On branch IGI-LR1  
Changes to be committed:  
  (use "git restore --staged <file>..." to unstage)  
    new file:   IGI/LR1/.DS_Store  
    new file:   IGI/LR1/LR1Test.txt  
    new file:   IGI/LR1/bar/755/755Test.txt  
    new file:   IGI/LR1/bar/barTest.txt  
    new file:   IGI/LR1/bar/baz/744/744Test.txt  
    new file:   IGI/LR1/bar/baz/bazTest.txt  
    new file:   IGI/LR1/bar/baz/example/255/255Test.txt  
    new file:   IGI/LR1/bar/baz/example/exampleTest.txt  
    new file:   IGI/LR1/bar/baz/readme.txt  
    new file:   IGI/LR1/foo/711/711Test.txt  
    new file:   IGI/LR1/foo/bin/.DS_Store  
  
➔ ~ ~/Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ✘ P IGI-LR1 +24 ?7 ➤ git commit -m "branch IGI-LR1 | commit files belong to IGI/LR1"
```

Я заметил то что как только я для какой-то папки из LR прописываю add и commit, то на другой ветке я уже не вижу её.

```
new file:   IGI/LR1/foo/bin/766/766Test.txt  
new file:   IGI/LR1/foo/bin/binTest.txt  
new file:   IGI/LR1/foo/bin/touch/777/777Test.txt  
new file:   IGI/LR1/foo/bin/touch/touchTest.txt  
new file:   IGI/LR1/foo/fooTest.txt  
new file:   IGI/LR1/foo/test.txt  
new file:   IGI/LR1/geometric_lib/circle.py  
new file:   IGI/LR1/geometric_lib/docs/README.md  
new file:   IGI/LR1/geometric_lib/square.py  
new file:   IGI/LR1/text1.txt  
new file:   IGI/LR1/text2.txt  
new file:   IGI/LR1/text3.txt  
new file:   IGI/LR1/text4.txt  
  
Untracked files:  
  (use "git add <file>..." to include in what will be committed)  
    .DS_Store  
    IGI/.DS_Store  
    IGI/LR2/  
    IGI/LR3/  
    IGI/LR4/  
    IGI/LR5/  
    STRWEB/  
  
➔ ~ ~/Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ✘ P IGI-LR1 +24 ?7 ➤ git commit -m "branch IGI-LR1 | commit files belong to IGI/LR1"  
[IGI-LR1 984882a] branch IGI-LR1 | commit files belong to IGI/LR1  
24 files changed, 29 insertions(+)  
create mode 100644 IGI/LR1/.DS_Store  
create mode 100644 IGI/LR1/LR1Test.txt  
create mode 100644 IGI/LR1/bar/755/755Test.txt  
create mode 100644 IGI/LR1/bar/barTest.txt  
create mode 100644 IGI/LR1/bar/baz/bazTest.txt  
create mode 100644 IGI/LR1/bar/baz/example/255/255Test.txt  
create mode 100644 IGI/LR1/bar/baz/example/exampleTest.txt  
create mode 100644 IGI/LR1/bar/baz/readme.txt  
create mode 100644 IGI/LR1/foo/711/711Test.txt  
create mode 100644 IGI/LR1/foo/bin/.DS_Store  
create mode 100644 IGI/LR1/foo/bin/766/766Test.txt  
create mode 100644 IGI/LR1/foo/bin/binTest.txt
```

```

apple ~ /Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 git P IGI-LR1 ?? > git status
On branch IGI-LR1
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    .DS_Store
    IGI/.DS_Store
    IGI/LR2/
    IGI/LR3/
    IGI/LR4/
    IGI/LR5/
    STRWEB/
nothing added to commit but untracked files present (use "git add" to track)

```

Далее проделаю данные команды для всех остальных директорий

```

apple ~ /Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 git P IGI-LR1 ?? > git checkout main
Switched to branch 'main'
apple ~ /Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 git P main ?? > git checkout -b IGI-LR2
Switched to a new branch 'IGI-LR2'
apple ~ /Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 git P IGI-LR2 ?? > git log
commit 51032bd42e277f3d3efc41bd43c13357f6f5fb4 (HEAD --> IGI-LR2, main)
Author: Artem Belchikov <artpres44@gmail.com>
Date: Mon Feb 16 13:20:48 2026 +0300

  branch main | save renamed file

commit 9d186347926ad362c28f6fd5f2c2fb5ce7c3085b
Author: Artem Belchikov <artpres44@gmail.com>
Date: Mon Feb 16 11:58:30 2026 +0300

  branch: main | save changed versions of files

commit 0349e72d5d500aa4376195da8b775a17213a61a7
Author: Artem Belchikov <artpres44@gmail.com>
Date: Mon Feb 16 11:57:17 2026 +0300

  branch: main save old versions of files
apple ~ /Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 git P IGI-LR2 ?? > clear
apple ~ /Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 git P IGI-LR2 ?? > git add IGI/LR2
apple ~ /Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 git P IGI-LR2 +1 ?6 > git commit -m "branch IGI-LR2 | commit files belong to IGI/LR2"
[IGI-LR2 db26e89] branch IGI-LR2 | commit files belong to IGI/LR2
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 IGI/LR2/LR2Test.txt
apple ~ /Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 git P IGI-LR2 ?6 > git checkout -
Switched to branch 'main'
apple ~ /Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 git P main ?? > git checkout -b IGI-LR3
Switched to a new branch 'IGI-LR3'
apple ~ /Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 git P IGI-LR3 ?6 > git add IGI/LR3
apple ~ /Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 git P IGI-LR3 +1 ?5 > git commit -m "branch IGI-LR3 | commit files belong to IGI/LR3"
[IGI-LR3 d53eaea] branch IGI-LR3 | commit files belong to IGI/LR3
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 IGI/LR3/LR3Test.txt
apple ~ /Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 git P IGI-LR3 ?5 > git checkout -
Switched to branch 'main'
apple ~ /Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 git P main ?? > git checkout -b IGI-LR4
Switched to a new branch 'IGI-LR4'
apple ~ /Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 git P IGI-LR4 ?5 > git add IGI/LR4
apple ~ /Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 git P IGI-LR4 +1 ?4 > git commit -m "branch IGI-LR4 | commit files belong to IGI/LR4"
[IGI-LR4 bb652c7] branch IGI-LR4 | commit files belong to IGI/LR4
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 IGI/LR4/LR4Test.txt
apple ~ /Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 git P IGI-LR4 ?4 > git checkout -
Switched to branch 'main'
apple ~ /Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 git P main ?? > git checkout -b IGI-LR5
Switched to a new branch 'IGI-LR5'
apple ~ /Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 git P IGI-LR5 ?4 > git add IGI/LR5
apple ~ /Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 git P IGI-LR5 +1 ?3 > git commit -m "branch IGI-LR5 | commit files belong to IGI/LR5"
[IGI-LR5 2a8cbb0] branch IGI-LR5 | commit files belong to IGI/LR5
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 IGI/LR5/LR5Test.txt
apple ~ /Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 git P IGI-LR5 ?3 > git checkout -
Switched to branch 'main'
apple ~ /Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 git P main ?? > git checkout -b STRWEB
Switched to a new branch 'STRWEB'
apple ~ /Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 git P STRWEB ?3 > git add STRWEB/STRWEBTest.txt
apple ~ /Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 git P STRWEB +1 ?6 > git commit -m "branch STRWEB | commit files belong to STRWEB"
[STRWEB cd91ee1] branch STRWEB | commit files belong to STRWEB
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 STRWEB/STRWEBTest.txt
apple ~ /Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 git P STRWEB ?6 > git checkout -
Switched to branch 'main'
apple ~ /Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 git P main ?? > git checkout -b STRWEB-LR1
Switched to a new branch 'STRWEB-LR1'
apple ~ /Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 git P STRWEB-LR1 ?3 > git add STRWEB/STRWEBLR1
apple ~ /Doc/4/4th_semester/ИГИ/453501_BELCHIKOV_3 git P STRWEB-LR1 +1 ?5 > git commit -m "branch STRWEB-LR1 | commit files belong to STRWEB/LR1"
[STRWEB-LR1 96dd47a] branch STRWEB-LR1 | commit files belong to STRWEB/LR1
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 STRWEB/LR1/LR1Test.txt

```

```

MacBook-Pro:~/Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ➜ git checkout -
Switched to branch 'main'
MacBook-Pro:~/Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ➜ main ?3 ➜ git checkout -b STRWEB-LR2
Switched to a new branch 'STRWEB-LR2'
MacBook-Pro:~/Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ➜ P STRWEB-LR2 ?3 ➜ git add STRWEB/LR2
MacBook-Pro:~/Doc/4/4th_semester/ИГИ/453501_BELCHIKOV_3 ➜ P STRWEB-LR2 +1 ?4 ➜ git commit -m "branch STRWEB-LR2 | commit files belong to STRWEB/LR2"
[STRWEB-LR2 76e892a] branch STRWEB-LR2 | commit files belong to STRWEB/LR2
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 STRWEB/LR2/LR2Test.txt
MacBook-Pro:~/Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ➜ P STRWEB-LR2 ?4 ➜ git checkout -
Switched to branch 'main'
MacBook-Pro:~/Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ➜ main ?3 ➜ git checkout -b STRWEB-LR3
Switched to a new branch 'STRWEB-LR3'
MacBook-Pro:~/Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ➜ P STRWEB-LR3 ?3 ➜ git add STRWEB/LR3
MacBook-Pro:~/Doc/4/4th_semester/ИГИ/453501_BELCHIKOV_3 ➜ P STRWEB-LR3 +1 ?4 ➜ git commit -m "branch STRWEB-LR3 | commit files belong to STRWEB/LR3"
[STRWEB-LR3 b8fe363] branch STRWEB-LR3 | commit files belong to STRWEB/LR3
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 STRWEB/LR3/LR3Test.txt
MacBook-Pro:~/Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ➜ P STRWEB-LR3 ?3 ➜ git checkout -
Switched to branch 'main'
MacBook-Pro:~/Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ➜ main ?3 ➜ git checkout -b STRWEB-LR4
Switched to a new branch 'STRWEB-LR4'
MacBook-Pro:~/Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ➜ P STRWEB-LR4 ?3 ➜ git add STRWEB/LR4
fatal: pathspec 'STRWEB/LR3' did not match any files
MacBook-Pro:~/Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ➜ P STRWEB-LR4 ?3 ➜ git add STRWEB/LR4
MacBook-Pro:~/Doc/4/4th_semester/ИГИ/453501_BELCHIKOV_3 ➜ P STRWEB-LR4 +1 ?2 ➜ git commit -m "branch STRWEB-LR4 | commit files belong to STRWEB/LR4"
[STRWEB-LR4 378a39e] branch STRWEB-LR4 | commit files belong to STRWEB/LR4
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 STRWEB/LR4/LR4Test.txt
MacBook-Pro:~/Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ➜ P STRWEB-LR4 ?2 ➜ git status
On branch STRWEB-LR4
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    .DS_Store
    IGI/.DS_Store

```

г. выведите историю коммитов: полностью и с ограничением вывода –отобразить только последние, до и после указанной даты, по автору файлов, коммитов (флаги n, since, after, until, before, author, committer,

grep) <https://code.mu/ru/tool/git/basis/limit-output-commit-history-flags/> ,

```

MacBook-Pro:~/Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ➜ main ?2 ➜ git log
commit 51032bd42e277f3d3efc41bd43c13357f6f5f8d4 (HEAD -> main)
Author: Artem Belchikov <artpres444@gmail.com>
Date:   Mon Feb 16 13:20:48 2026 +0300

  branch main | save renamed file

commit 9d186347926ad362c28f6fd5f2c2fb5ce7c3085b
Author: Artem Belchikov <artpres444@gmail.com>
Date:   Mon Feb 16 11:58:30 2026 +0300

  branch: main | save changed versions of files

commit 0349e72d5d500aa4376195da8b775a17213a61a7
Author: Artem Belchikov <artpres444@gmail.com>
Date:   Mon Feb 16 11:57:17 2026 +0300

  branch: main save old versions of files
MacBook-Pro:~/Doc/4/4th_semester/ИГИ/453501_BELCHIKOV_3 ➜ main ?2 ➜ git log --all
commit 378a39e1ee580e63103f260947685f7b5be4f (STRWEB-LR4)
Author: Artem Belchikov <artpres444@gmail.com>
Date:   Tue Feb 17 00:09:53 2026 +0300

  branch STRWEB-LR4 | commit files belong to STRWEB/LR4

commit b8fe3632042d1d4f55e7d932e8bf0e873b5b684 (STRWEB-LR3)
Author: Artem Belchikov <artpres444@gmail.com>
Date:   Tue Feb 17 00:09:01 2026 +0300

  branch STRWEB-LR3 | commit files belong to STRWEB/LR3

commit 76e892a200c15c4022a46db27a8118d34b649eb0 (STRWEB-LR2)
Author: Artem Belchikov <artpres444@gmail.com>
Date:   Tue Feb 17 00:08:39 2026 +0300

  branch STRWEB-LR2 | commit files belong to STRWEB/LR2

commit 96dd47a476b375efa7b849303a76331cb7eb4dd9 (STRWEB-LR1)
Author: Artem Belchikov <artpres444@gmail.com>
Date:   Tue Feb 17 00:06:45 2026 +0300

  branch STRWEB-LR1 | commit files belong to STRWEB/LR1

commit cd91ee1f3ea642e85f2aec510b2ad03a85c0cf (STRWEB)
Author: Artem Belchikov <artpres444@gmail.com>
Date:   Tue Feb 17 00:05:00 2026 +0300

  branch STRWEB | commit files belong to STRWEB

commit 2a8ccb0d8bc737842d65bb6150ac805c0bb6b3eb (IGI-LR5)
Author: Artem Belchikov <artpres444@gmail.com>
Date:   Tue Feb 17 00:02:20 2026 +0300

  branch IGI-LR5 | commit files belong to IGI/LR5

commit bb652c7f8c4ec051099fd72a53f090f4db92810c (IGI-LR4)
Author: Artem Belchikov <artpres444@gmail.com>
Date:   Tue Feb 17 00:01:48 2026 +0300

```

```
commit d53eaea0bdced031ded25c04cab5d2b180cb38a5 (IGI-LR3)
Author: Artem Belchikov <artpres444@gmail.com>
Date: Mon Feb 16 23:03:58 2026 +0300

branch IGI-LR3 | commit files belong to IGI/LR3

commit db26e8986e75abef5f598b00f57977778e49a980 (IGI-LR2)
Author: Artem Belchikov <artpres444@gmail.com>
Date: Mon Feb 16 23:02:44 2026 +0300

branch IGI-LR2 | commit files belong to IGI/LR2

commit 984882a76c46655b4eefa0113f8d4f8359e108a6 (IGI-LR1)
Author: Artem Belchikov <artpres444@gmail.com>
Date: Mon Feb 16 21:18:47 2026 +0300

branch IGI-LR1 | commit files belong to IGI/LR1

commit d1125ffa6c45118c1095e5db857458d1497e283 (IGI)
Author: Artem Belchikov <artpres444@gmail.com>
Date: Mon Feb 16 18:46:13 2026 +0300

branch IGI | commit files belong to IGI

commit 51032bd42e277f3d3efc41bd43c13357f6f5f8d4 (HEAD -> main)
Author: Artem Belchikov <artpres444@gmail.com>
Date: Mon Feb 16 13:20:48 2026 +0300

branch main | save renamed file

commit 9d186347926ad362c28f6fd5f2c2fb5ce7c3085b
Author: Artem Belchikov <artpres444@gmail.com>
Date: Mon Feb 16 11:58:30 2026 +0300

branch: main | save changed versions of files

commit 0349e72d5d500aa4376195da8b775a17213a61a7
Author: Artem Belchikov <artpres444@gmail.com>
Date: Mon Feb 16 11:57:17 2026 +0300

# ~~/Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 #` main ?? > git log -n 2
commit 51032bd42e277f3d3efc41bd43c13357f6f5f8d4 (HEAD -> main)
Author: Artem Belchikov <artpres444@gmail.com>
Date: Mon Feb 16 13:20:48 2026 +0300

branch main | save renamed file

commit 9d186347926ad362c28f6fd5f2c2fb5ce7c3085b
Author: Artem Belchikov <artpres444@gmail.com>
Date: Mon Feb 16 11:58:30 2026 +0300

branch: main | save changed versions of files

# ~~/Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 #` main ?? > git log --since="Mon Feb 16 11:58:29 2026"
commit 51032bd42e277f3d3efc41bd43c13357f6f5f8d4 (HEAD -> main)
Author: Artem Belchikov <artpres444@gmail.com>
Date: Mon Feb 16 13:20:48 2026 +0300

branch main | save renamed file

commit 9d186347926ad362c28f6fd5f2c2fb5ce7c3085b
Author: Artem Belchikov <artpres444@gmail.com>
Date: Mon Feb 16 11:58:30 2026 +0300

branch: main | save changed versions of files

# ~~/Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 #` main ?? > git log --after="Mon Feb 16 11:58:30 2026"
commit 51032bd42e277f3d3efc41bd43c13357f6f5f8d4 (HEAD -> main)
Author: Artem Belchikov <artpres444@gmail.com>
Date: Mon Feb 16 13:20:48 2026 +0300

branch main | save renamed file

commit 9d186347926ad362c28f6fd5f2c2fb5ce7c3085b
Author: Artem Belchikov <artpres444@gmail.com>
Date: Mon Feb 16 11:58:30 2026 +0300

branch: main | save changed versions of files

# ~~/Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 #` main ?? > git log --before="Mon Feb 16 11:58:30 2026"
commit 9d186347926ad362c28f6fd5f2c2fb5ce7c3085b
Author: Artem Belchikov <artpres444@gmail.com>
Date: Mon Feb 16 11:58:30 2026 +0300

branch: main | save old versions of files

# ~~/Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 #` main ?? > git log --before="Mon Feb 16 11:58:29 2026"
commit 0349e72d5d500aa4376195da8b775a17213a61a7
Author: Artem Belchikov <artpres444@gmail.com>
Date: Mon Feb 16 11:57:17 2026 +0300

branch: main save old versions of files

# ~~/Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 #` main ?? > git log --until="Mon Feb 16 11:58:29 2026"
commit 0349e72d5d500aa4376195da8b775a17213a61a7
Author: Artem Belchikov <artpres444@gmail.com>
Date: Mon Feb 16 11:57:17 2026 +0300

branch: main save old versions of files
```

```

apple ~ /Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 > P main ?2 > git log --author="Artem Belchikov"
commit 51032bd42e277f3d3efc41bd43c13357f6f5f8d4 (HEAD -> main)
Author: Artem Belchikov <artpres444@gmail.com>
Date: Mon Feb 16 13:20:48 2026 +0300

branch main | save renamed file

commit 9d186347926ad362c28f6fd5f2c2fb5ce7c3085b
Author: Artem Belchikov <artpres444@gmail.com>
Date: Mon Feb 16 11:58:30 2026 +0300

branch: main | save changed versions of files

commit 0349e72d5d500aa4376195da8b775a17213a61a7
Author: Artem Belchikov <artpres444@gmail.com>
Date: Mon Feb 16 11:57:17 2026 +0300

branch: main save old versions of files
apple ~ /Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 > P main ?2 > git log --committer="Artem Belchikov"
fatal: unrecognized argument: --committer=Artem Belchikov
apple ~ /Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 > P main ?2 > git log --committer="Artem Belchikov"
commit 51032bd42e277f3d3efc41bd43c13357f6f5f8d4 (HEAD -> main)
Author: Artem Belchikov <artpres444@gmail.com>
Date: Mon Feb 16 13:20:48 2026 +0300

branch main | save renamed file

commit 9d186347926ad362c28f6fd5f2c2fb5ce7c3085b
Author: Artem Belchikov <artpres444@gmail.com>
Date: Mon Feb 16 11:58:30 2026 +0300

branch: main | save changed versions of files

commit 0349e72d5d500aa4376195da8b775a17213a61a7
Author: Artem Belchikov <artpres444@gmail.com>
Date: Mon Feb 16 11:57:17 2026 +0300

branch: main save old versions of files
apple ~ /Doc/4/4th_semester/ИГИ/453501_BELCHIKOV_3 > P main ?2 > git log --grep="branch main | save"
commit 51032bd42e277f3d3efc41bd43c13357f6f5f8d4 (HEAD -> main)
Author: Artem Belchikov <artpres444@gmail.com>
Date: Mon Feb 16 13:20:48 2026 +0300

branch main | save renamed file
apple ~ /Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 > P main ?2 > git log all --grep="branch IGI-LR2"
fatal: ambiguous argument 'all': unknown revision or path not in the working tree.
Use '--' to separate paths from revisions, like this:
'git <command> [<revision>...]' -- [<file>...]'
```

h.исследуйте флаги для git log: p , stat ,shortstat, name-only, name-status, relative-date, pretty, graph,

```

apple ~ /Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 > P main ?2 > git log -p
commit 51032bd42e277f3d3efc41bd43c13357f6f5f8d4 (HEAD -> main)
Author: Artem Belchikov <artpres444@gmail.com>
Date: Mon Feb 16 13:20:48 2026 +0300

branch main | save renamed file

diff --git a/IGI/LR1/photoOfSecretAgent.png b/IGI/LR1/photoOfSecretAgent.png
new file mode 100644
index 000000..9d625bf
Binary files /dev/null and b/IGI/LR1/photoOfSecretAgent.png differ

commit 9d186347926ad362c28f6fd5f2c2fb5ce7c3085b
Author: Artem Belchikov <artpres444@gmail.com>
Date: Mon Feb 16 11:58:30 2026 +0300

branch: main | save changed versions of files

diff --git a/453501_BELCHIKOV_3Test.txt b/453501_BELCHIKOV_3Test.txt
index e69de29..c25b745 100644
--- a/453501_BELCHIKOV_3Test.txt
+++ b/453501_BELCHIKOV_3Test.txt
@@ -0,0 +1 @@
+some text int file 453501_BELCHIKOV3Test.txt
diff --git a/IGI/IGITest.txt b/IGI/IGITest.txt
index e69de29..8d80d7c 100644
--- a/IGI/IGITest.txt
+++ b/IGI/IGITest.txt
@@ -0,0 +1 @@
+some text int file IGITest.txt

commit 0349e72d5d500aa4376195da8b775a17213a61a7
Author: Artem Belchikov <artpres444@gmail.com>
Date: Mon Feb 16 11:57:17 2026 +0300

branch: main save old versions of files

diff --git a/453501_BELCHIKOV_3Test.txt b/453501_BELCHIKOV_3Test.txt
new file mode 100644
index 000000..e69de29
```

```
apple ~ /~/Documents/453501/4th_semester/МГИ/453501_BELCHIKOV_3 git p main ?2 > git log --stat
commit 51032bd42e277f3d3efc41bd43c13357f6f5f8d4 (HEAD -> main)
Author: Artem Belchikov <artpres444@gmail.com>
Date: Mon Feb 16 13:20:48 2026 +0300

branch main | save renamed file

IGI/LR1/photoOfSecretAgent.png | Bin 0 -> 108602 bytes
1 file changed, 0 insertions(+), 0 deletions(-)

commit 9d186347926ad362c28f6fd5f2c2fb5ce7c3085b
Author: Artem Belchikov <artpres444@gmail.com>
Date: Mon Feb 16 11:58:30 2026 +0300

branch: main | save changed versions of files

453501_BELCHIKOV_3Test.txt | 1 +
IGI/IGITest.txt | 1 +
2 files changed, 2 insertions(+)

commit 0349e72d5d500aa4376195da8b775a17213a61a7
Author: Artem Belchikov <artpres444@gmail.com>
Date: Mon Feb 16 11:57:17 2026 +0300

branch: main save old versions of files

453501_BELCHIKOV_3Test.txt | 0
IGI/IGITest.txt | 0
2 files changed, 0 insertions(+), 0 deletions(-)
apple ~ /~/Documents/453501/4th_semester/МГИ/453501_BELCHIKOV_3 git p main ?2 > git log --shortstat
commit 51032bd42e277f3d3efc41bd43c13357f6f5f8d4 (HEAD -> main)
Author: Artem Belchikov <artpres444@gmail.com>
Date: Mon Feb 16 13:20:48 2026 +0300

branch main | save renamed file

1 file changed, 0 insertions(+), 0 deletions(-)

commit 9d186347926ad362c28f6fd5f2c2fb5ce7c3085b
Author: Artem Belchikov <artpres444@gmail.com>
Date: Mon Feb 16 11:58:30 2026 +0300

branch: main | save changed versions of files

2 files changed, 2 insertions(+)

commit 0349e72d5d500aa4376195da8b775a17213a61a7
Author: Artem Belchikov <artpres444@gmail.com>
Date: Mon Feb 16 11:57:17 2026 +0300

branch: main save old versions of files

2 files changed, 0 insertions(+), 0 deletions(-)
apple ~ /~/Documents/453501/4th_semester/МГИ/453501_BELCHIKOV_3 git p main ?2 > git log --name-only
commit 51032bd42e277f3d3efc41bd43c13357f6f5f8d4 (HEAD -> main)
Author: Artem Belchikov <artpres444@gmail.com>
Date: Mon Feb 16 13:20:48 2026 +0300

branch main | save renamed file

IGI/LR1/photoOfSecretAgent.png

commit 9d186347926ad362c28f6fd5f2c2fb5ce7c3085b
Author: Artem Belchikov <artpres444@gmail.com>
Date: Mon Feb 16 11:58:30 2026 +0300

branch: main | save changed versions of files

453501_BELCHIKOV_3Test.txt
IGI/IGITest.txt

commit 0349e72d5d500aa4376195da8b775a17213a61a7
Author: Artem Belchikov <artpres444@gmail.com>
Date: Mon Feb 16 11:57:17 2026 +0300

branch: main save old versions of files

453501_BELCHIKOV_3Test.txt
IGI/IGITest.txt
```

```
apple ~ /Documents/453501/4th_semester/ИГУ/453501_BELCHIKOV_3 ➜ P main ?2 ➤ git log --name-status
commit 51032bd42e277f3d3efc41bd43c13357f6f5f8d4 (HEAD -> main)
Author: Artem Belchikov <artpres444@gmail.com>
Date: Mon Feb 16 13:20:48 2026 +0300

    branch main | save renamed file

A      IGI/LR1/photoOfSecretAgent.png

commit 9d186347926ad362c28f6fd5f2c2fb5ce7c3085b
Author: Artem Belchikov <artpres444@gmail.com>
Date: Mon Feb 16 11:58:30 2026 +0300

    branch: main | save changed versions of files

M      453501_BELCHIKOV_3Test.txt
M      IGI/IGITest.txt

commit 0349e72d5d500aa4376195da8b775a17213a61a7
Author: Artem Belchikov <artpres444@gmail.com>
Date: Mon Feb 16 11:57:17 2026 +0300

    branch: main save old versions of files

A      453501_BELCHIKOV_3Test.txt
A      IGI/IGITest.txt
apple ~ /Documents/453501/4th_semester/ИГУ/453501_BELCHIKOV_3 ➜ P main ?2 ➤ git log --relative-date
commit 51032bd42e277f3d3efc41bd43c13357f6f5f8d4 (HEAD -> main)
Author: Artem Belchikov <artpres444@gmail.com>
Date: 25 hours ago

    branch main | save renamed file

commit 9d186347926ad362c28f6fd5f2c2fb5ce7c3085b
Author: Artem Belchikov <artpres444@gmail.com>
Date: 26 hours ago

    branch: main | save changed versions of files

commit 0349e72d5d500aa4376195da8b775a17213a61a7
Author: Artem Belchikov <artpres444@gmail.com>
Date: 26 hours ago

    branch: main save old versions of files
apple ~ /Documents/453501/4th_semester/ИГУ/453501_BELCHIKOV_3 ➜ P main ?2 ➤ git log --pretty
commit 51032bd42e277f3d3efc41bd43c13357f6f5f8d4 (HEAD -> main)
Author: Artem Belchikov <artpres444@gmail.com>
Date: Mon Feb 16 13:20:48 2026 +0300

    branch main | save renamed file

commit 9d186347926ad362c28f6fd5f2c2fb5ce7c3085b
Author: Artem Belchikov <artpres444@gmail.com>
Date: Mon Feb 16 11:58:30 2026 +0300

    branch: main | save changed versions of files

commit 0349e72d5d500aa4376195da8b775a17213a61a7
Author: Artem Belchikov <artpres444@gmail.com>
Date: Mon Feb 16 11:57:17 2026 +0300

    branch: main save old versions of files
apple ~ /Documents/453501/4th_semester/ИГУ/453501_BELCHIKOV_3 ➜ P main ?2 ➤ git log --pretty=full
commit 51032bd42e277f3d3efc41bd43c13357f6f5f8d4 (HEAD -> main)
Author: Artem Belchikov <artpres444@gmail.com>
Commit: Artem Belchikov <artpres444@gmail.com>

    branch main | save renamed file

commit 9d186347926ad362c28f6fd5f2c2fb5ce7c3085b
Author: Artem Belchikov <artpres444@gmail.com>
Commit: Artem Belchikov <artpres444@gmail.com>

    branch: main | save changed versions of files

commit 0349e72d5d500aa4376195da8b775a17213a61a7
Author: Artem Belchikov <artpres444@gmail.com>
Commit: Artem Belchikov <artpres444@gmail.com>

    branch: main save old versions of files
apple ~ /Documents/453501/4th_semester/ИГУ/453501_BELCHIKOV_3 ➜ P main ?2 ➤ git log --pretty=short
commit 51032bd42e277f3d3efc41bd43c13357f6f5f8d4 (HEAD -> main)
Author: Artem Belchikov <artpres444@gmail.com>

    branch main | save renamed file

commit 9d186347926ad362c28f6fd5f2c2fb5ce7c3085b
Author: Artem Belchikov <artpres444@gmail.com>

    branch: main | save changed versions of files

commit 0349e72d5d500aa4376195da8b775a17213a61a7
Author: Artem Belchikov <artpres444@gmail.com>

    branch: main save old versions of files
```

```

apple ~ /Documents/453501/4th_semester/ИГУ/453501_BELCHIKOV_3 * P main ?2 > git log --graph
* commit 51032bd42e277f3d3efc41bd43c13357f6f5f8d4 (HEAD -> main)
| Author: Artem Belchikov <artpres444@gmail.com>
| Date: Mon Feb 16 13:20:48 2026 +0300
|
|   branch main | save renamed file
|
* commit 9d186347926ad362c28f6fd5f2c2fb5ce7c3085b
| Author: Artem Belchikov <artpres444@gmail.com>
| Date: Mon Feb 16 11:58:30 2026 +0300
|
|   branch: main | save changed versions of files
|
* commit 0349e72d5d500aa4376195da8b775a17213a61a7
| Author: Artem Belchikov <artpres444@gmail.com>
| Date: Mon Feb 16 11:57:17 2026 +0300
|
|   branch: main save old versions of files
* = /Documents/453501/4th_semester/ИГУ/453501_BELCHIKOV_3 * P main ?2 > git log --pretty --graph --oneline --all
* 37ba39e (STRWEB-LR4) branch STRWEB-LR4 | commit files belong to STRWEB/LR4
| + b8fe363 (STRWEB-LR3) branch STRWEB-LR3 | commit files belong to STRWEB/LR3
|/
| * 76e892a (STRWEB-LR2) branch STRWEB-LR2 | commit files belong to STRWEB/LR2
| + 96dd47a (STRWEB-LR1) branch STRWEB-LR1 | commit files belong to STRWEB/LR1
|/
| * cd91ee1 (STRWEB) branch STRWEB | commit files belong to STRWEB
|/
| + 2a8ccb0 (IGI-LR5) branch IGI-LR5 | commit files belong to IGI/LR5
|/
| * bb652c7 (IGI-LR4) branch IGI-LR4 | commit files belong to IGI/LR4
|/
| * d53aea (IGI-LR3) branch IGI-LR3 | commit files belong to IGI/LR3
| + db26e89 (IGI-LR2) branch IGI-LR2 | commit files belong to IGI/LR2
| + 984882a (IGI-LR1) branch IGI-LR1 | commit files belong to IGI/LR1
|/
| * d1125ff (IGI) branch IGI | commit files belong to IGI
|/
* 51032bd (HEAD -> main) branch main | save renamed file
* 0d18634 branch: main | save changed versions of files
* 0349e72 branch: main save old versions of files

```

i. найдите разницу в изменениях для каждого коммита

```

apple ~ /Documents/453501/4th_semester/ИГУ/453501_BELCHIKOV_3 * P main ?2 > git diff HEAD
apple ~ /Documents/453501/4th_semester/ИГУ/453501_BELCHIKOV_3 * P main ?2 > git diff HEAD~1
diff --git a/IGI/LR1/photoOfSecretAgent.png b/IGI/LR1/photoOfSecretAgent.png
new file mode 100644
index 000000..9d625bf
Binary files /dev/null and b/IGI/LR1/photoOfSecretAgent.png differ
apple ~ /Documents/453501/4th_semester/ИГУ/453501_BELCHIKOV_3 * P main ?2 > git diff HEAD~2
diff --git a/453501_BELCHIKOV_3Test.txt b/453501_BELCHIKOV_3Test.txt
index e69de29..c25b745 100644
--- a/453501_BELCHIKOV_3Test.txt
+++ b/453501_BELCHIKOV_3Test.txt
@@ -0,0 +1 @@
+some text int file 453501_BELCHIKOV3Test.txt
diff --git a/IGI/IGITest.txt b/IGI/IGITest.txt
index e69de29..8d80d7c 100644
--- a/IGI/IGITest.txt
+++ b/IGI/IGITest.txt
@@ -0,0 +1 @@
+some text int file IGITest.txt
diff --git a/IGI/LR1/photoOfSecretAgent.png b/IGI/LR1/photoOfSecretAgent.png
new file mode 100644
index 000000..9d625bf
Binary files /dev/null and b/IGI/LR1/photoOfSecretAgent.png differ
apple ~ /Documents/453501/4th_semester/ИГУ/453501_BELCHIKOV_3 * P main ?2 > git diff 9d18634 0349e72
diff --git a/453501_BELCHIKOV_3Test.txt b/453501_BELCHIKOV_3Test.txt
index c25b745..e69de29 100644
--- a/453501_BELCHIKOV_3Test.txt
+++ b/453501_BELCHIKOV_3Test.txt
@@ -1 +0,0 @@
+some text int file 453501_BELCHIKOV3Test.txt
diff --git a/IGI/IGITest.txt b/IGI/IGITest.txt
index 8d80d7c..e69de29 100644
--- a/IGI/IGITest.txt
+++ b/IGI/IGITest.txt
@@ -1 +0,0 @@
+some text int file IGITest.txt
apple ~ /Doc/453501/4th_semester/ИГУ/453501_BELCHIKOV_3 * P IGI-LR1 ?2 > git diff HEAD^
diff --git a/IGI/LR1/_DS_Store b/IGI/LR1/_DS_Store
new file mode 100644
index 000000..5088ddf
Binary files /dev/null and b/IGI/LR1/_DS_Store differ
diff --git a/IGI/LR1/LR1Test.txt b/IGI/LR1/LR1Test.txt
new file mode 100644
index 000000..e69de29
diff --git a/IGI/LR1/bar/755/755Test.txt b/IGI/LR1/bar/755/755Test.txt
new file mode 100644
index 000000..e69de29
diff --git a/IGI/LR1/bar/Test.txt b/IGI/LR1/bar/Test.txt
new file mode 100644
index 000000..e69de29
diff --git a/IGI/LR1/bar/baz/744/744Test.txt b/IGI/LR1/bar/baz/744/744Test.txt
new file mode 100644
index 000000..e69de29
diff --git a/IGI/LR1/bar/baz/BazTest.txt b/IGI/LR1/bar/baz/BazTest.txt
new file mode 100644
index 000000..e69de29
diff --git a/IGI/LR1/bar/baz/example/255/255Test.txt b/IGI/LR1/bar/baz/example/255/255Test.txt
new file mode 100644
index 000000..e69de29
diff --git a/IGI/LR1/bar/baz/example/Test.txt b/IGI/LR1/bar/baz/example/Test.txt
new file mode 100644
index 000000..e69de29
diff --git a/IGI/LR1/bar/baz/readme.txt b/IGI/LR1/bar/baz/readme.txt
new file mode 100644
index 000000..8be84ab
--- /dev/null
+++ b/IGI/LR1/bar/baz/readme.txt
@@ -0,0 +1 @@
+544
\ No newline at end of file
diff --git a/IGI/LR1/foo/711/711Test.txt b/IGI/LR1/foo/711/711Test.txt
new file mode 100644
index 000000..e69de29
diff --git a/IGI/LR1/foo/bin/_DS_Store b/IGI/LR1/foo/bin/_DS_Store
new file mode 100644
index 000000..6fb9446

```

ж. создайте новый файл test.txt и вставьте в него строчку 'номер варианта'.

затем сделайте коммит и отмените его

```
 MacBook-Pro:~/Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ④ P main ?3 > echo "номер варианта 3" > test.txt
 MacBook-Pro:~/Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ④ P main ?3 > git status
On branch main
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    .DS_Store
    IGI/.DS_Store
    test.txt

nothing added to commit but untracked files present (use "git add" to track)
 MacBook-Pro:~/Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ④ P main ?3 > git add test.txt
 MacBook-Pro:~/Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ④ P main +1 ?2 > git status
On branch main
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:   test.txt

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

 MacBook-Pro:~/Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ④ P main +1 ?2 > git commit -m "branch main | add file test.txt with my variant"
[main 6a9c831] branch main | add file test.txt with my variant
 1 file changed, 1 insertion(+)
 create mode 100644 test.txt
 MacBook-Pro:~/Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ④ P main ?2 > git status
On branch main
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    .DS_Store
    IGI/.DS_Store

nothing added to commit but untracked files present (use "git add" to track)
 MacBook-Pro:~/Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ④ P main ?2 > git log
commit 6a9c831b6b384c69a8add27f5e7ce8043bf075ec (HEAD -> main)
Author: Artem Belchikov <artpres444@gmail.com>
Date:   Tue Feb 17 14:40:57 2026 +0300

  branch main | add file test.txt with my variant

commit 51032bd42e277f3d3efc41bd43c13357f6f5f8d4
Author: Artem Belchikov <artpres444@gmail.com>
Date:   Mon Feb 16 13:20:48 2026 +0300

  branch main | save renamed file

commit 9d186347926ad362c28f6fd5f2c2fb5ce7c3085b
Author: Artem Belchikov <artpres444@gmail.com>
Date:   Mon Feb 16 11:58:30 2026 +0300

  branch: main | save changed versions of files

commit 0349e72d5d500aa4376195da8b775a17213a61a7
Author: Artem Belchikov <artpres444@gmail.com>
Date:   Mon Feb 16 11:57:17 2026 +0300

  branch: main save old versions of files
 MacBook-Pro:~/Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ④ P main ?2 > git reset --hard HEAD~1
HEAD is now at 51032bd branch main | save renamed file
 MacBook-Pro:~/Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ④ P main ?2 > git log
commit 51032bd42e277f3d3efc41bd43c13357f6f5f8d4 (HEAD -> main)
Author: Artem Belchikov <artpres444@gmail.com>
Date:   Mon Feb 16 13:20:48 2026 +0300

  branch main | save renamed file

commit 9d186347926ad362c28f6fd5f2c2fb5ce7c3085b
Author: Artem Belchikov <artpres444@gmail.com>
Date:   Mon Feb 16 11:58:30 2026 +0300

  branch: main | save changed versions of files

commit 0349e72d5d500aa4376195da8b775a17213a61a7
Author: Artem Belchikov <artpres444@gmail.com>
Date:   Mon Feb 16 11:57:17 2026 +0300

  branch: main save old versions of files
```

к. проиндексируйте файл в вашем Git-репозитории, затем отмените его

ИНДЕКСАЦИЮ

```
 MacBook-Pro:~/Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ④ P main ?2 > touch somefile.txt
 MacBook-Pro:~/Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ④ P main ?3 > git status
On branch main
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    .DS_Store
    IGI/.DS_Store
    somefile.txt

nothing added to commit but untracked files present (use "git add" to track)
 MacBook-Pro:~/Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ④ P main ?3 > git add somefile.txt
 MacBook-Pro:~/Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ④ P main +1 ?2 > git status
On branch main
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:   somefile.txt

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

 MacBook-Pro:~/Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ④ P main +1 ?2 > git restore --staged somefile.txt
 MacBook-Pro:~/Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ④ P main ?3 > git status
On branch main
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    .DS_Store
    IGI/.DS_Store
    somefile.txt

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

1. внесите изменения в файл в вашем Git-репозитории и затем верните его в исходное состояние.

```
apple ~ /Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 * P main ?3 > cat 453501_BELCHIKOV_3Test.txt
some text int file 453501_BELCHIKOV_3Test.txt
apple ~ /Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 * P main ?3 > nano 453501_BELCHIKOV_3Test.txt
apple ~ /Doc/4/4th_semester/ИГИ/453501_BELCHIKOV_3 * P main !1 ?3 > cat 453501_BELCHIKOV_3Test.txt
delete all text

apple ~ /Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 * P main !1 ?3 > git status
On branch main
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
    modified:   453501_BELCHIKOV_3Test.txt

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

no changes added to commit (use "git add" and/or "git commit -a")
apple ~ /Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 * P main !1 ?3 > git restore 453501_BELCHIKOV_3Test.txt
apple ~ /Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 * P main ?3 > cat 453501_BELCHIKOV_3Test.txt
some text int file 453501_BELCHIKOV_3Test.txt
apple ~ /Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 * P main ?3 > git status
On branch main
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    .DS_Store
    IGI/.DS_Store
    somefile.txt

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

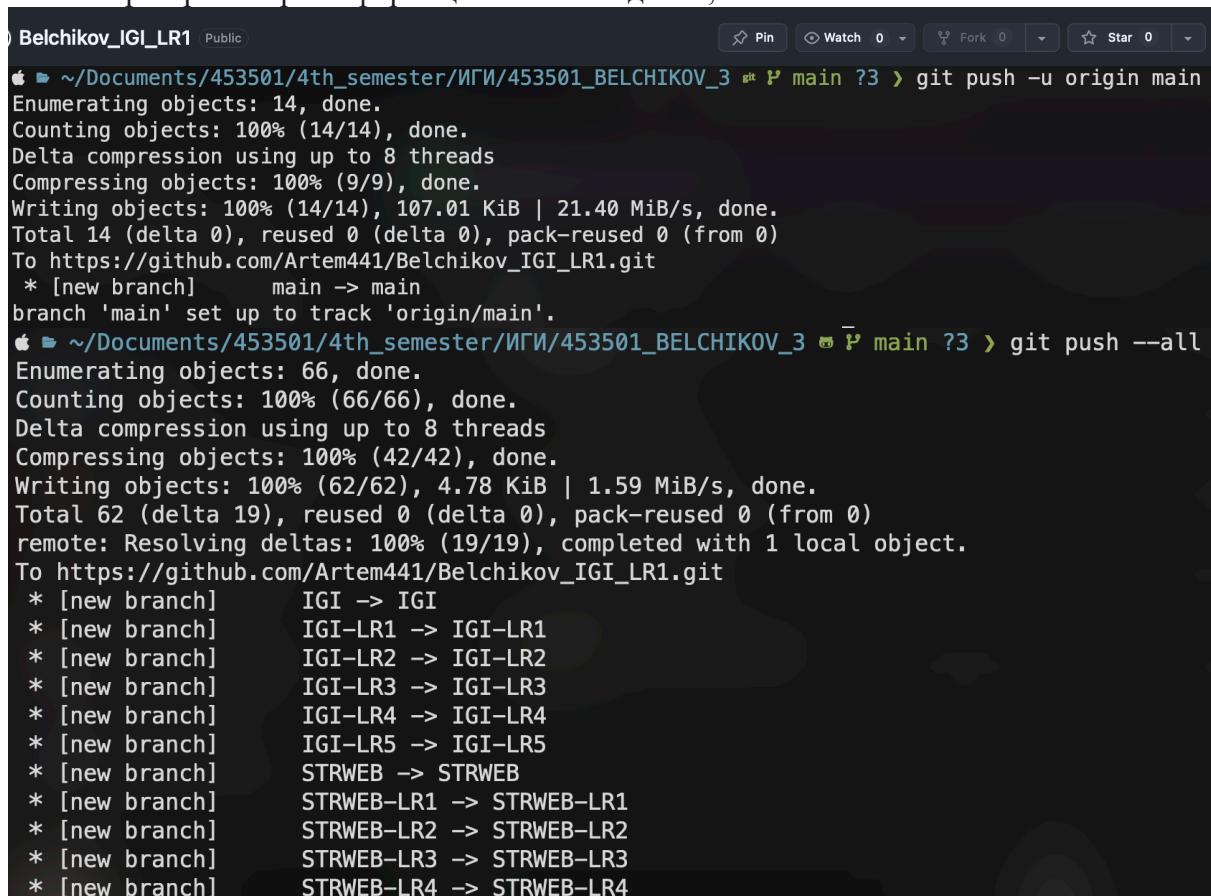
5. Выполните следующие действия с удаленным репозиторием:

а. создайте удаленный репозиторий (на github.com)

удаленный репозиторий был создан на github при помощи графического интерфейса на данном сайте

б. просмотрите информацию о нем, внесите изменения и опять просмотрите (remote, fetch).

При просмотре информации после создания, ничего на нем не было



```
Belchikov_IGI_LR1 Public
Pin Watch 0 Fork 0 Star 0

apple ~ /Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 * P main ?3 > git push -u origin main
Enumerating objects: 14, done.
Counting objects: 100% (14/14), done.
Delta compression using up to 8 threads
Compressing objects: 100% (9/9), done.
Writing objects: 100% (14/14), 107.01 KiB | 21.40 MiB/s, done.
Total 14 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/Artem441/Belchikov_IGI_LR1.git
 * [new branch]      main -> main
branch 'main' set up to track 'origin/main'.
apple ~ /Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 * P main ?3 > git push --all
Enumerating objects: 66, done.
Counting objects: 100% (66/66), done.
Delta compression using up to 8 threads
Compressing objects: 100% (42/42), done.
Writing objects: 100% (62/62), 4.78 KiB | 1.59 MiB/s, done.
Total 62 (delta 19), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (19/19), completed with 1 local object.
To https://github.com/Artem441/Belchikov_IGI_LR1.git
 * [new branch]      IGI -> IGI
 * [new branch]      IGI-LR1 -> IGI-LR1
 * [new branch]      IGI-LR2 -> IGI-LR2
 * [new branch]      IGI-LR3 -> IGI-LR3
 * [new branch]      IGI-LR4 -> IGI-LR4
 * [new branch]      IGI-LR5 -> IGI-LR5
 * [new branch]      STRWEB -> STRWEB
 * [new branch]      STRWEB-LR1 -> STRWEB-LR1
 * [new branch]      STRWEB-LR2 -> STRWEB-LR2
 * [new branch]      STRWEB-LR3 -> STRWEB-LR3
 * [new branch]      STRWEB-LR4 -> STRWEB-LR4
```

Branches

New branch

Overview Yours Active Stale All

Search branches...

Default

Branch	Updated	Check status	Behind	Ahead	Pull request
main	(⌚) 7 minutes ago	Default	0	1	...

Your branches

Branch	Updated	Check status	Behind	Ahead	Pull request
IGI	(⌚) 1 minute ago	0 1	0	1	...
IGI-LR1	(⌚) 1 minute ago	0 1	0	1	...
IGI-LR2	(⌚) 1 minute ago	0 1	0	1	...
IGI-LR3	(⌚) 1 minute ago	0 1	0	1	...
IGI-LR4	(⌚) 1 minute ago	0 1	0	1	...

[View more branches >](#)

Active branches

Branch	Updated	Check status	Behind	Ahead	Pull request
IGI	(⌚) 1 minute ago	0 1	0	1	...
IGI-LR1	(⌚) 1 minute ago	0 1	0	1	...
IGI-LR2	(⌚) 1 minute ago	0 1	0	1	...
IGI-LR3	(⌚) 1 minute ago	0 1	0	1	...
IGI-LR4	(⌚) 1 minute ago	0 1	0	1	...

После того как была выполнена команда `push -all` все ветки с локального перенеслись на удалённый

с. измените несколько файлов в вашем проекте и перенесите их в удаленный репозиторий,

```

$ cd ~/453501/4th_semester/МГИ/453501_BELCHIKOV_3
$ nano main ?3
$ nano IGI/IGITest.txt
$ git status
On branch main
Your branch is up to date with 'origin/main'.

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
    modified:   453501_BELCHIKOV_3Test.txt
    modified:   IGI/IGITest.txt

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

no changes added to commit (use "git add" and/or "git commit -a")
$ git add main ?3
$ git commit -m "branch main | change 2 files"
[main 7f7b4f0] branch main | change 2 files
 2 files changed, 2 insertions(+)
$ git status
On branch main
Your branch is ahead of 'origin/main' by 1 commit.
  (use "git push" to publish your local commits)

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    modified:   453501_BELCHIKOV_3Test.txt
    modified:   IGI/IGITest.txt

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

$ git commit -m "branch main | change 2 files"
[main 51032bd..7f7b4f0] branch main | change 2 files
 2 files changed, 2 insertions(+)
$ git push
Enumerating objects: 9, done.
Delta compression using up to 8 threads
Compressing objects: 100% (5/5), done.
Writing objects: 100% (5/5), 587 bytes | 587.00 KiB/s, done.
Total 5 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/Artem441/Belchikov_IGI_LR1.git
  51032bd..7f7b4f0  main -> main
$ git status
On branch main
Your branch is up to date with 'origin/main'.

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

nothing added to commit but untracked files present (use "git add" to track)
$ git push
Enumerating objects: 9, done.
Counting objects: 100% (9/9), done.
Delta compression using up to 8 threads
Compressing objects: 100% (5/5), done.
Writing objects: 100% (5/5), 587 bytes | 587.00 KiB/s, done.
Total 5 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/Artem441/Belchikov_IGI_LR1.git
  51032bd..7f7b4f0  main -> main
$ git status
On branch main
Your branch is up to date with 'origin/main'.

```

d. переименуйте свой удаленный репозиторий

```
➔ ~/Documents/453501/4th_semester/MW/453501_BELCHIKOV_3 ➔ P main ?3 > git remote -v
origin https://github.com/Artem441/Belchikov_IGI_LR1.git (fetch)
origin https://github.com/Artem441/Belchikov_IGI_LR1.git (push)
➔ ~/Documents/453501/4th_semester/MW/453501_BELCHIKOV_3 ➔ P main ?3 > git remote rename github
usage: git remote rename [-[no-]progress] <old> <new>
      --[no-]progress      force progress reporting

➔ ~/Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ➔ P main ?3 > git remote rename origin github
➔ ~/Documents/453501/4th_semester/MW/453501_BELCHIKOV_3 ➔ P main ?3 > git remote -v
github https://github.com/Artem441/Belchikov_IGI_LR1.git (fetch)
github https://github.com/Artem441/Belchikov_IGI_LR1.git (push)
```

e. получите данные из удаленного репозитория

```
➔ ~/Documents/453501/4th_semester/MW/453501_BELCHIKOV_3 ➔ P main ?3 > git fetch
➔ ~/Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ➔ P main ?3 > git pull
Already up to date.
```

f. просмотреть историю изменений

```
➔ ~/Documents/453501/4th_semester/MW/453501_BELCHIKOV_3 ➔ P main ?3 > git log origin/main
commit 77b4f0f426df42135db967edb406e3e227be7ba (HEAD -> main, origin/main, origin/HEAD)
Author: Artem Belchikov <artpres44@gmail.com>
Date: Tue Feb 17 19:19:44 2026 +0300

  branch main | change 2 files

commit 51032bd42e277f3d3efc41bd43c13357f6f5f8d4
Author: Artem Belchikov <artpres44@gmail.com>
Date: Mon Feb 16 13:20:48 2026 +0300

    branch main | save renamed file

commit 9d186347926ad362c28f6fd5f2c2fb5ce7c3085b
Author: Artem Belchikov <artpres44@gmail.com>
Date: Mon Feb 16 11:58:30 2026 +0300

        branch: main | save changed versions of files

commit 0349e72d5d500aa4376195da8b775a17213a61a7
Author: Artem Belchikov <artpres44@gmail.com>
Date: Mon Feb 16 11:57:17 2026 +0300

    branch: main save old versions of files
```

g. создайте дополнительную ветку 1 в удаленном репозитории, перенесите

в нее два файла из другой ветки, удалите один из файлов

```
➔ ~/Documents/453501/4th_semester/MW/453501_BELCHIKOV_3 ➔ P main ?3 > echo "some text 1" > textfile1.txt
➔ ~/Documents/453501/4th_semester/MW/453501_BELCHIKOV_3 ➔ P main ?3 > ls
453501_BELCHIKOV_3/test.txt          IGI                     somefile.txt           textfile1.txt
➔ ~/Documents/453501/4th_semester/MW/453501_BELCHIKOV_3 ➔ P main ?4 > echo "some text 2" > textfile2.txt
➔ ~/Documents/453501/4th_semester/MW/453501_BELCHIKOV_3 ➔ P main ?5 > git add textfile1.txt textfile2.txt
➔ ~/Doc/453501/4th_semester/MW/453501_BELCHIKOV_3 ➔ P main +2 ?3 > git commit -m "branch main | add 2 new text files"
[main 4305a93] branch main | add 2 new text files
2 files changed, 2 insertions(+)
create mode 100644 textfile1.txt
create mode 100644 textfile2.txt
➔ ~Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ➔ P main +1 ?3 > git checkout IGI-LR1
Switched to branch 'IGI-LR1'
➔ ~Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ➔ P IGI-LR1 ?3 > git checkout -b 1
Switched to a new branch '1'
➔ ~Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ➔ P 1 ?3 > git cherry-pick main
git: 'cherry-pick' is not a git command. See 'git --help'.

The most similar command is
  cherry-pick
➔ ~Documents/453501/4th_semester/MW/453501_BELCHIKOV_3 ➔ P 1 ?3 > git cherry-pick main
[1 50fdc17] branch main | add 2 new text files
Date: Tue Feb 17 20:40:44 2026 +0300
2 files changed, 2 insertions(+)
create mode 100644 textfile1.txt
create mode 100644 textfile2.txt
➔ ~Documents/453501/4th_semester/MW/453501_BELCHIKOV_3 ➔ P 1 ?3 > git commit --amend -m "branch 1 | transfer 2 files from main to this branch(1)"
[1 9fd1c96] branch 1 | transfer 2 files from main to this branch(1)
Date: Tue Feb 17 20:40:44 2026 +0300
2 files changed, 2 insertions(+)
create mode 100644 textfile1.txt
create mode 100644 textfile2.txt
➔ ~Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ➔ P 1 ?3 > rm textfile1.txt
➔ ~Documents/453501/4th_semester/MW/453501_BELCHIKOV_3 ➔ P 1 !1 ?3 > git status
On branch 1
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)
      deleted:   textfile1.txt

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

no changes added to commit (use "git add" and/or "git commit -a")
➔ ~Documents/453501/4th_semester/MW/453501_BELCHIKOV_3 ➔ P 1 !1 ?3 > git add textfile1.txt
➔ ~Documents/453501/4th_semester/MW/453501_BELCHIKOV_3 ➔ P 1 +1 ?3 > git status
On branch 1
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    deleted:   textfile1.txt

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

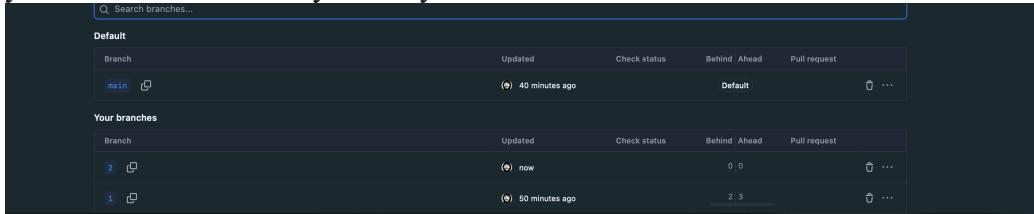
➔ ~Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ➔ P 1 ?3 > git commit -m "branch 1 | delete textfile1.txt"
[1 56818b6] branch 1 | delete textfile1.txt
1 file changed, 1 deletion(-)
delete mode 100644 textfile1.txt
```

```

apple ~ ~/Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ✘ p 1 ?3 > git push --set-upstream origin 1
Enumerating objects: 7, done.
Counting objects: 100% (7/7), done.
Delta compression using up to 8 threads
Compressing objects: 100% (4/4), done.
Writing objects: 100% (6/6), 614 bytes | 614.00 KiB/s, done.
Total 6 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (1/1), done.
remote:
remote: Create a pull request for '1' on GitHub by visiting:
remote:     https://github.com/Artem441/Belchikov_IGI_LR1/pull/new/1
remote:
To https://github.com/Artem441/Belchikov_IGI_LR1.git
 * [new branch]      1 -> 1
branch '1' set up to track 'origin/1'.

```

h. создайте дополнительную ветку 2 в удаленном репозитории, перенесите в нее два файла из вашего проекта, слить изменения в основную ветку, удалить дополнительную ветку 2



```

Q Search branches...
Default
Branch Updated Check status Behind Ahead Pull request
main (⌚) 40 minutes ago Default ⌂ ...
Your branches
Branch Updated Check status Behind Ahead Pull request
2 (⌚) now 0 0 ⌂ ...
1 (⌚) 50 minutes ago 2 3 ⌂ ...

```

```

apple ~ ~/Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ✘ p main ?3 > git fetch
From https://github.com/Artem441/Belchikov_IGI_LR1
 * [new branch] 2 -> origin/2
apple ~ ~/Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ✘ p main ?3 > git checkout 2
branch '2' set up to track 'origin/2'.
Switched to a new branch '2'
apple ~ ~/Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ✘ p 2 ?3 > git cherry-pick IGI-LR2
[2 b72a62b] branch IGI-LR2 | commit files belong to IGI/LR2
Date: Mon Feb 16 23:02:44 2026 +0300
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 IGI/LR2/LR2Test.txt
apple ~ ~/Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ✘ p 2 +1 ?3 > git status
On branch 2
Your branch is ahead of 'origin/2' by 1 commit.
  (use "git push" to publish your local commits)

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

nothing added to commit but untracked files present (use "git add" to track)
apple ~ ~/Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ✘ p 2 +1 ?3 > git commit --amend -m "branch IGI-LR2 | transfer 1 files from main to this branch(2)"
[2 b50b7bd] branch IGI-LR2 | transfer 1 files from main to this branch(2)
Date: Mon Feb 16 23:02:44 2026 +0300
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 IGI/LR2/LR2Test.txt
apple ~ ~/Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ✘ p 2 +1 ?3 > git cherry-pick IGI-LR3
[2 eef8ea7] branch IGI-LR3 | commit files belong to IGI/LR3
Date: Mon Feb 16 23:03:58 2026 +0300
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 IGI/LR3/LR3Test.txt
apple ~ ~/Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ✘ p 2 +2 ?3 > git commit --amend -m "branch IGI-LR3 | transfer 1 files from main to this branch(2)"
[2 51381dc] branch IGI-LR3 | transfer 1 files from main to this branch(2)
Date: Mon Feb 16 23:03:58 2026 +0300
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 IGI/LR3/LR3Test.txt
apple ~ ~/Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ✘ p 2 +2 ?3 > git checkout main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.
apple ~ ~/Documents/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ✘ p main ?3 > git merge 2
Updating 4305a93..51381dc
Fast-forward
  IGI/LR2/LR2Test.txt | 0
  IGI/LR3/LR3Test.txt | 0
  2 files changed, 0 insertions(+), 0 deletions(-)
  create mode 100644 IGI/LR2/LR2Test.txt
  create mode 100644 IGI/LR3/LR3Test.txt
apple ~ ~/Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ✘ p main +2 ?3 > git branch -D 2
Deleted branch 2 (was 51381dc).

```

```

apple: ~ /Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ➜ main ↵ 2 ↵ 3 ➜ git push
Enumerating objects: 11, done.
Counting objects: 100% (11/11), done.
Delta compression using up to 8 threads
Compressing objects: 100% (6/6), done.
Writing objects: 100% (9/9), 816 bytes | 816.00 KiB/s, done.
Total 9 (delta 3), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (3/3), completed with 1 local object.
To https://github.com/Artem441/Belchikov_IGI_LR1.git
  4305a93..51381dc main -> main

apple: ~ /Doc/453501/4th_semester/ИГИ/453501_BELCHIKOV_3 ➜ main ↵ 3 ➜ git log --pretty --oneline --all --graph
* 51381dc (HEAD -> main, origin/main, origin/HEAD) branch IGI-LR3 | transfer 1 files from main to this branch(2)
* b50b7bd branch IGI-LR2 | transfer 1 files from main to this branch(2)
* 4305a93 (origin/2) branch main | add 2 new text files
* 7f7b4f0 branch main | change 2 files
| * 56818b6 (origin/1, 1) branch 1 | delete textfile1.txt
| * 9fd1c96 branch 1 | transfer 2 files from main to this branch(1)
| * 984882a (origin/IGI-LR1, IGI-LR1) branch IGI-LR1 | commit files belong to IGI/LR1
|
| * 378a39e (origin/STRWEB-LR4, STRWEB-LR4) branch STRWEB-LR4 | commit files belong to STRWEB/LR4
|
| * b8fe363 (origin/STRWEB-LR3, STRWEB-LR3) branch STRWEB-LR3 | commit files belong to STRWEB/LR3
|
| * 76e892a (origin/STRWEB-LR2, STRWEB-LR2) branch STRWEB-LR2 | commit files belong to STRWEB/LR2
|
| * 96dd47a (origin/STRWEB-LR1, STRWEB-LR1) branch STRWEB-LR1 | commit files belong to STRWEB/LR1
|
| * cd91ee1 (origin/STRWEB, STRWEB) branch STRWEB | commit files belong to STRWEB
|
| * 2a8cbb0 (origin/IGI-LR5, IGI-LR5) branch IGI-LR5 | commit files belong to IGI/LR5
|
| * bb652c7 (origin/IGI-LR4, IGI-LR4) branch IGI-LR4 | commit files belong to IGI/LR4
|
| * d53eaee (origin/IGI-LR3, IGI-LR3) branch IGI-LR3 | commit files belong to IGI/LR3
|
| * db26e89 (origin/IGI-LR2, IGI-LR2) branch IGI-LR2 | commit files belong to IGI/LR2
|
| * d1125ff (origin/IGI, IGI) branch IGI | commit files belong to IGI
|
* 51032bd branch main | save renamed file

```

6. Сгенерируйте в DeepSeek файл html и файл css для сайта визитки компании или человека с областью занятости на выбор.

При помощи Grok сгенерировал сайт визитку и захостил его в github pages

<https://arTEM441.github.io/IGI-Grok-Lumina/>