

Отчёт по лабораторной работе №1 по дисциплине избранные главы информатики.

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Задание:

1. Подготовьте рабочее окружение в соответствии с типом вашей операционной системы:

- a. Установите Git

`sudo apt install git`

- b. Выполните базовую настройку

```
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~$ git config --global user.name "Stas Bekarev"
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~$ git config --global user.email "bekarevstanislav@gmail.com"
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~$ git config --global user.defaultBranch "master"

sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~$ git config --global init.defaultBranch "master"
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~$ git config --global --list
user.email=bekarevstanislav@gmail.com
user.defaultbranch=master
user.name=Stas Bekarev
init.defaultbranch=master
```

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

```
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~$ mkdir 253505_Bekarev_3
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~$ cd ~/253505_Bekarev_3
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3$ mkdir IGI
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3$ mkdir STRWEB
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3$ git init
Initialized empty Git repository in /home/sluma/253505_Bekarev_3/.git/
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3$ cd IGI
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/IGI$ mkdir LR1
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/IGI$ mkdir LR2
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/IGI$ mkdir LR3
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/IGI$ mkdir LR4
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/IGI$ mkdir LR5
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/IGI$ cd ~/253505_Bekarev_3/STRWEB
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/STRWEB$ mkdir LR1
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/STRWEB$ mkdir LR2
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/STRWEB$ mkdir LR3
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/STRWEB$ mkdir LR4
```

3. Создайте репозиторий внутри папки LR1 с помощью клонирования проекта с сайта github.com

(https://github.com/smartigaorg/geometric_lib)

```
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/IGI/LR1$ git clone "https://github.com/smartigaorg/geometric_lib"
Cloning into 'geometric_lib'...
remote: Enumerating objects: 35, done.
remote: Total 35 (delta 0), reused 0 (delta 0), pack-reused 35
Receiving objects: 100% (35/35), 4.60 KiB | 4.60 MiB/s, done.
Resolving deltas: 100% (6/6), done.
```

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

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

```
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/IGI/LR1$ touch text1.txt
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/IGI/LR1$ touch binary1.bin
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/IGI/LR1$ git add -A
```

- b. внесите изменения в файлы,

```
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/IGI/LR1$ echo "text in text1" >> text1.txt
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/IGI/LR1$ echo "text in binary1" >> binary1.bin
```

- c. выполните коммиты к проиндексированным файлам,

```
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/IGI/LR1$ git add --all
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/IGI/LR1$ git commit -m "First commit"
[master (root-commit) 10cb52a] First commit
3 files changed, 3 insertions(+)
create mode 100644 IGI/LR1/binary1.bin
create mode 160000 IGI/LR1/geometric_lib
create mode 100644 IGI/LR1/text1.txt
```

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

```
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/IGI/LR1$ touch text2.txt
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/IGI/LR1$ touch binary2.bin
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/IGI/LR1$ rm binary1.bin
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/IGI/LR1$ rm *.txt
```

- e. переименуйте файлы

```
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/IGI/LR1$ mv binary2.bin survivebinary.bin
```

- f. создайте для IGI и STRWEB, а также для каждой ЛР, вложенной в них, отдельные ветки, переместите папки и файлы на соответствующие ветки


```

sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3$ git branch IGI
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3$ git checkout IGI
Switched to branch 'IGI'
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3$ cd IGI
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/IGI$ echo "IGI"
>> README.md
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/IGI$ git add -A
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/IGI$ git commit
-m "IGI commit"
[IGI fce939c] IGI commit
1 file changed, 1 insertion(+)
create mode 100644 IGI/README.md
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/IGI$ git checkout master
Switched to branch 'master'

```

```

sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3$ cd ~/253505_Bekarev_3/STRWEB
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/STRWEB$ git branch STRWEB
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/STRWEB$ git checkout STRWEB
Switched to branch 'STRWEB'
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/STRWEB$ echo "STRWEB" >> README.md
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/STRWEB$ git add -A
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/STRWEB$ git commit -m "STRWEB commit"
[STRWEB ce107dd] STRWEB commit
1 file changed, 1 insertion(+)
create mode 100644 STRWEB/README.md
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/STRWEB$ git checkout master
Switched to branch 'master'

```

```

sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/STRWEB/LR1$ git checkout STRWEB
Switched to branch 'STRWEB'
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/STRWEB/LR1$ git branch STRWEB_LR1
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/STRWEB/LR1$ git checkout STRWEB_LR1
Switched to branch 'STRWEB_LR1'
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/STRWEB/LR1$ echo "STRWEB_LR1" >> README.md
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/STRWEB/LR1$ git add -A
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/STRWEB/LR1$ git commit -m "STRWEB_LR1 commit"
[STRWEB_LR1 b2db2a2] STRWEB_LR1 commit
1 file changed, 1 insertion(+)
create mode 100644 STRWEB/LR1/README.md

```

```
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/STRWEB/LR4$ git
checkout IGI
Switched to branch 'IGI'
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/STRWEB/LR4$ cd
~/253505_Bekarev_3/IGI/LR1
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/IGI/LR1$ git br
anch IGI_LR1
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/IGI/LR1$ git ch
eckout IGI_LR1
Switched to branch 'IGI_LR1'
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/IGI/LR1$ echo "
IGI_LR1" >> README.md
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/IGI/LR1$ git ad
d -A
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/IGI/LR1$ git co
mmit -m "IGI_LR1 commit"
[IGI_LR1 af326ba] IGI_LR1 commit
1 file changed, 1 insertion(+)
create mode 100644 IGI/LR1/README.md
```

- g. 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/> ,

```
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3$ git log --all
--decorate --graph --branches --oneline
* 010bd3f (IGI_LR5) IGI_LR4 commit
| * 458013d (IGI_LR4) IGI_LR4 commit
|/
| * 8426444 (IGI_LR3) IGI_LR3 commit
|/
| * 15a73e2 (IGI_LR2) IGI_LR2 commit
|/
| * af326ba (IGI_LR1) IGI_LR1 commit
|/
* fce939c (IGI) IGI commit
| * 8af68c0 (STRWEB_LR4) STRWEB_LR4 commit
| | * dd81bf5 (STRWEB_LR3) STRWEB_LR3 commit
| | /
| | * 5a4f09a (STRWEB_LR2) STRWEB_LR2 commit
| | /
| | * b2db2a2 (STRWEB_LR1) STRWEB_LR1 commit
| | /
| * ce107dd (STRWEB) STRWEB commit
|/
* 7330948 (HEAD -> master) main
* 10cb52a First commit
```



```
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3$ git log -2
commit 458013daad8d7279b54670ca66e345f80e9f4652 (HEAD -> IGI_LR4)
Author: Stas Bekarev <bekarevstanislav@gmail.com>
Date: Thu Feb 15 19:51:15 2024 +0300
```

IGI_LR4 commit

```
commit fce939c6a1bbbe5b867cb6650c4e7deb1e69bab2 (IGI)
Author: Stas Bekarev <bekarevstanislav@gmail.com>
Date: Thu Feb 15 19:04:41 2024 +0300
```

IGI commit

```
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3$ git log --after="2024-02-15 19:30:00"
commit 458013daad8d7279b54670ca66e345f80e9f4652 (HEAD -> IGI_LR4)
Author: Stas Bekarev <bekarevstanislav@gmail.com>
Date: Thu Feb 15 19:51:15 2024 +0300
```

IGI_LR4 commit

```
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3$ git log --until="2024-02-15 19:30:00"
commit fce939c6a1bbbe5b867cb6650c4e7deb1e69bab2 (IGI)
Author: Stas Bekarev <bekarevstanislav@gmail.com>
Date: Thu Feb 15 19:04:41 2024 +0300
```

IGI commit

```
commit 733094885cc8c95e51267fe5b9a0f30d3e54cc59 (master)
Author: Stas Bekarev <bekarevstanislav@gmail.com>
Date: Thu Feb 15 19:01:39 2024 +0300
```

main

```
commit 10cb52ac56bbce9b7cad16dd20fdff46fdb138e2
Author: Stas Bekarev <bekarevstanislav@gmail.com>
Date: Thu Feb 15 18:51:55 2024 +0300
```

First commit

```
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3$ git log --grep=commit
commit 458013daad8d7279b54670ca66e345f80e9f4652 (HEAD -> IGI_LR4)
Author: Stas Bekarev <bekarevstanislav@gmail.com>
Date: Thu Feb 15 19:51:15 2024 +0300
```

IGI_LR4 commit

```
commit fce939c6a1bbbe5b867cb6650c4e7deb1e69bab2 (IGI)
Author: Stas Bekarev <bekarevstanislav@gmail.com>
Date: Thu Feb 15 19:04:41 2024 +0300
```

IGI commit

```
commit 10cb52ac56bbce9b7cad16dd20fdff46fdb138e2
Author: Stas Bekarev <bekarevstanislav@gmail.com>
Date: Thu Feb 15 18:51:55 2024 +0300
```

First commit

```

sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3$ git log -p --o
neline -2
458013d (HEAD -> IGI_LR4) IGI_LR4 commit
diff --git a/IGI/LR4/README.md b/IGI/LR4/README.md
new file mode 100644
index 00000000..7912cf7
--- /dev/null
+++ b/IGI/LR4/README.md
@@ -0,0 +1 @@
+IGI_LR4
fce939c (IGI) IGI commit
diff --git a/IGI/README.md b/IGI/README.md
new file mode 100644
index 00000000..0642b3b
--- /dev/null
+++ b/IGI/README.md
@@ -0,0 +1 @@
+IGI

```

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

```

sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3$ git log --pret
ty=format:"%h-%an"
458013d-Stas Bekarev
fce939c-Stas Bekarev
7330948-Stas Bekarev
10cb52a-Stas Bekarev

```

```

sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3$ git diff IGI..
IGI_LR4
diff --git a/IGI/LR4/README.md b/IGI/LR4/README.md
new file mode 100644
index 00000000..7912cf7
--- /dev/null
+++ b/IGI/LR4/README.md
@@ -0,0 +1 @@
+IGI_LR4

```

```

sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3$ git log --stat
-2
commit 458013daad8d7279b54670ca66e345f80e9f4652 (HEAD -> IGI_LR4)
Author: Stas Bekarev <bekarevstanislav@gmail.com>
Date: Thu Feb 15 19:51:15 2024 +0300

```

IGI_LR4 commit

IGI/LR4/README.md | 1 +
1 file changed, 1 insertion(+)

```

commit fce939c6a1bbbe5b867cb6650c4e7deb1e69bab2 (IGI)
Author: Stas Bekarev <bekarevstanislav@gmail.com>
Date: Thu Feb 15 19:04:41 2024 +0300

```

IGI commit

IGI/README.md | 1 +
1 file changed, 1 insertion(+)

```
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3$ git log --shortstat -2
commit 458013daad8d7279b54670ca66e345f80e9f4652 (HEAD -> IGI_LR4)
Author: Stas Bekarev <bekarevstanislav@gmail.com>
Date: Thu Feb 15 19:51:15 2024 +0300
```

IGI_LR4 commit

1 file changed, 1 insertion(+)

```
commit fce939c6a1bbbe5b867cb6650c4e7deb1e69bab2 (IGI)
Author: Stas Bekarev <bekarevstanislav@gmail.com>
Date: Thu Feb 15 19:04:41 2024 +0300
```

IGI commit

1 file changed, 1 insertion(+)

```
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3$ git log --name-only -2
commit 458013daad8d7279b54670ca66e345f80e9f4652 (HEAD -> IGI_LR4)
Author: Stas Bekarev <bekarevstanislav@gmail.com>
Date: Thu Feb 15 19:51:15 2024 +0300
```

IGI_LR4 commit

IGI/LR4/README.md

```
commit fce939c6a1bbbe5b867cb6650c4e7deb1e69bab2 (IGI)
Author: Stas Bekarev <bekarevstanislav@gmail.com>
Date: Thu Feb 15 19:04:41 2024 +0300
```

IGI commit

IGI/README.md

```
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3$ git log --name-status -2
commit 458013daad8d7279b54670ca66e345f80e9f4652 (HEAD -> IGI_LR4)
Author: Stas Bekarev <bekarevstanislav@gmail.com>
Date: Thu Feb 15 19:51:15 2024 +0300
```

IGI_LR4 commit

A IGI/LR4/README.md

```
commit fce939c6a1bbbe5b867cb6650c4e7deb1e69bab2 (IGI)
Author: Stas Bekarev <bekarevstanislav@gmail.com>
Date: Thu Feb 15 19:04:41 2024 +0300
```

IGI commit

A IGI/README.md


```
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3$ git log --relative-date -2
commit 458013daad8d7279b54670ca66e345f80e9f4652 (HEAD -> IGI_LR4)
Author: Stas Bekarev <bekarevstanislav@gmail.com>
Date: 2 hours ago
```

IGI_LR4 commit

```
commit fce939c6a1bbbe5b867cb6650c4e7deb1e69bab2 (IGI)
Author: Stas Bekarev <bekarevstanislav@gmail.com>
Date: 2 hours ago
```

IGI commit

- i. найдите разницу в изменениях для каждого коммита

```
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3$ git diff IGI..IGI_LR4
diff --git a/IGI/LR4/README.md b/IGI/LR4/README.md
new file mode 100644
index 00000000..7912cf7
--- /dev/null
+++ b/IGI/LR4/README.md
@@ -0,0 +1 @@
+IGI_LR4
```

- j. создайте новый файл test.txt и вставьте в него строчку 'номер варианта'. затем сделайте коммит и отмените его

```
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/IGI/LR1$ echo "number of variant: 3" >> test.txt
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/IGI/LR1$ git add -A
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/IGI/LR1$ git commit -m "IGI_LR1 test.txt"
[IGI_LR1 089aa92] IGI_LR1 test.txt
1 file changed, 1 insertion(+)
create mode 100644 IGI/LR1/test.txt
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/IGI/LR1$ git reset HEAD~
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/IGI/LR1$ git status
On branch IGI_LR1
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    test.txt

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

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

```
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/IGI/LR1$ git add "test.txt"
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/IGI/LR1$ git status
On branch IGI_LR1
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:   test.txt
```



```
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/IGI/LR1$ git re
store --staged "test.txt"
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/IGI/LR1$ git st
atus
On branch IGI_LR1
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    test.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.

```
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/IGI/LR1$ git st
atus
On branch IGI_LR1
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:   test.txt

sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/IGI/LR1$ echo "
мама любит папу" >> test.txt
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/IGI/LR1$ git st
atus
On branch IGI_LR1
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:   test.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:   test.txt

sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3/IGI/LR1$ git ch
eckout -- test.txt
```

5. Выполните следующие действия с удаленным репозиторием:

- а. создайте удаленный репозиторий (на github.com)

```
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3$ git remote add
origin https://github.com/StaniSlavSluma/IGI.git
```

```

sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3$ git push -u origin --all
Username for 'https://github.com': StanislavSluma
Password for 'https://StanislavSluma@github.com':
Enumerating objects: 43, done.
Counting objects: 100% (43/43), done.
Delta compression using up to 16 threads
Compressing objects: 100% (23/23), done.
Writing objects: 100% (39/39), 2.58 KiB | 882.00 KiB/s, done.
Total 39 (delta 9), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (9/9), done.
To https://github.com/StaniSlavSluma/IGI.git
* [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
branch 'IGI' set up to track 'origin/IGI'.
branch 'IGI_LR1' set up to track 'origin/IGI_LR1'.
branch 'IGI_LR2' set up to track 'origin/IGI_LR2'.
branch 'master' set up to track 'origin/master'.
branch 'IGI_LR3' set up to track 'origin/IGI_LR3'.
branch 'IGI_LR4' set up to track 'origin/IGI_LR4'.
branch 'IGI_LR5' set up to track 'origin/IGI_LR5'.
branch 'STRWEB' set up to track 'origin/STRWEB'.
branch 'STRWEB_LR1' set up to track 'origin/STRWEB_LR1'.
branch 'STRWEB_LR2' set up to track 'origin/STRWEB_LR2'.
branch 'STRWEB_LR3' set up to track 'origin/STRWEB_LR3'.
branch 'STRWEB_LR4' set up to track 'origin/STRWEB_LR4'.

```

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

```

sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3$ git pull
Updating 7330948..45ae76b
Fast-forward
 README.md | 2 +-
 1 file changed, 1 insertion(+), 1 deletion(-)
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3$

```



```

sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3$ git remote show origin
* remote origin
Fetch URL: https://github.com/StanislawSluma/IGI.git
Push URL: https://github.com/StanislawSluma/IGI.git
HEAD branch: master
Remote branches:
  IGI          tracked
  IGI_LR1      tracked
  IGI_LR2      tracked
  IGI_LR3      tracked
  IGI_LR4      tracked
  IGI_LR5      tracked
  STRWEB       tracked
  STRWEB_LR1   tracked
  STRWEB_LR2   tracked
  STRWEB_LR3   tracked
  STRWEB_LR4   tracked
  master       tracked
Local branches configured for 'git pull':
  IGI          merges with remote IGI
  IGI_LR1      merges with remote IGI_LR1

```

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

```

sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3$ echo "It is just change" >> README.md
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3$ git add -A
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3$ git commit -m "change README"
[master 752f396] change README
 1 file changed, 1 insertion(+)
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3$ git push origin master
Username for 'https://github.com': StanislawSluma
Password for 'https://StanislawSluma@github.com':
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 16 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 320 bytes | 320.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/StanislawSluma/IGI.git
 45ae76b..752f396 master -> master

```

- d. переименуйте свой удаленный репозиторий

```

sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3$ git remote rename origin new_origin
Renaming remote references: 100% (12/12), done.
sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3$ git remote
new_origin

```

- e. получите данные из удаленного репозитория

```

sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3$ git remote show origin
* remote origin
Fetch URL: https://github.com/StanislawSluma/IGI.git
Push URL: https://github.com/StanislawSluma/IGI.git
HEAD branch: master
Remote branches:
  IGI          tracked
  IGI_LR1      tracked
  IGI_LR2      tracked
  IGI_LR3      tracked
  IGI_LR4      tracked
  IGI_LR5      tracked
  STRWEB       tracked
  STRWEB_LR1   tracked
  STRWEB_LR2   tracked
  STRWEB_LR3   tracked
  STRWEB_LR4   tracked
  master       tracked
Local branches configured for 'git pull':
  IGI          merges with remote IGI
  IGI_LR1      merges with remote IGI_LR1

```

f. посмотреть историю изменений

```

sluma@sluma-ASUS-TUF-Dash-F15-FX517ZE-FX517ZE:~/253505_Bekarev_3$ git log --pretty=format:"%h%x09%an%x09%s" --graph --all
* 752f396      Stas Bekarev      change README
* 45ae76b      StanislawSluma    Update README.md
| * d4ec7c6     Stas Bekarev      merge
| * 8426444     Stas Bekarev      IGI_LR3 commit
| | * 010bd3f    Stas Bekarev      IGI_LR4 commit
| | /
| | * 458013d    Stas Bekarev      IGI_LR4 commit
| | /
| | * 15a73e2    Stas Bekarev      IGI_LR2 commit
| | /
| | * af326ba    Stas Bekarev      IGI_LR1 commit
| | /
| * fce939c     Stas Bekarev      IGI commit
| /

```

Индивидуальное задание:

3.	<pre> / --bar/755 --baz/744 --README.txt/544 --example/255 --foo/711 --test.txt/000 --bin/766 --touch/777 </pre>
4	4