Министерство образования Республики Беларусь
Учреждение образования «Белорусский государственный университет информатики и радиоэлектроники»

Факультет компьютерных систем и сетей
Кафедра Информатики
Дисциплина «Избранные главы информатики»

ОТЧЕТ
к лабораторной работе №1
БГУИР 6-05-0612-02 22

Выполнил студент группы 353501
СТАНКЕВИЧ Александр Николаевич

_____
(дата, подпись студента)

Проверил доцент каф. Информатики
ЖВАКИНА Анна Васильевна

_____
(дата, подпись преподавателя)

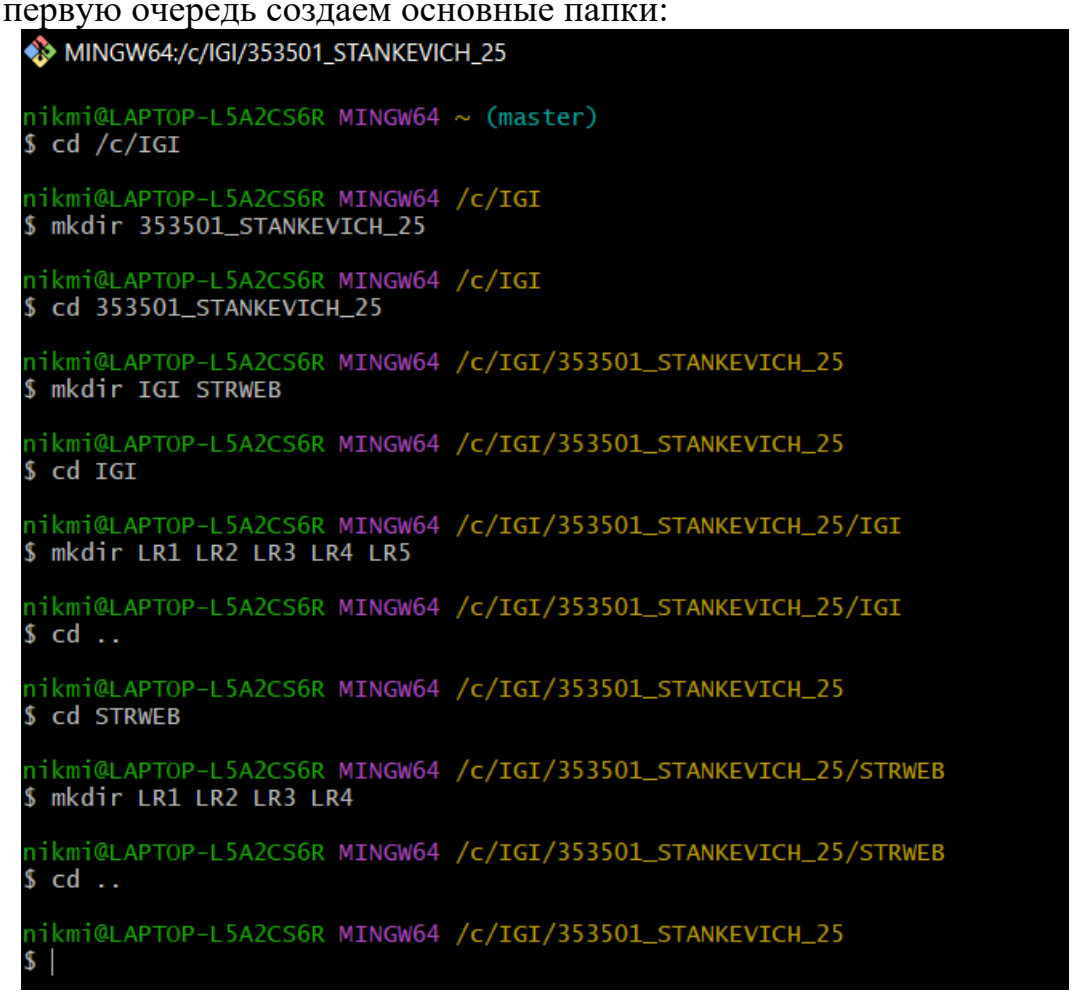
Минск 2025

1 ИНДИВИДУАЛЬНОЕ ЗАДАНИЕ

Задание 1. Вариант 2. Познакомиться с возможностями и получить практические навыки работы с системой контроля версий Git.

2 ВЫПОЛНЕНИЕ РАБОТЫ

В первую очередь создаем основные папки:



Проверяем наше местонахождения

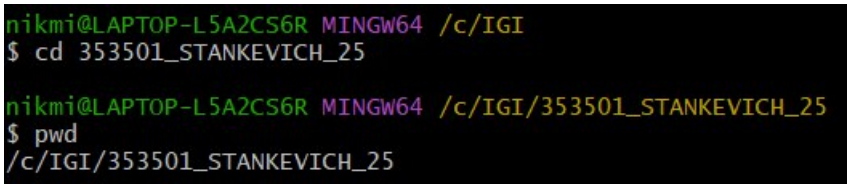


Рисунок 1 – Создание отдельного файла

```
nikmi@LAPTOP-L5A2CS6R MINGW64 ~ (master)
$ cd /c/IGI

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI
$ pwd
/c/IGI

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI
$ cd 353501_STANKEVICH_25

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25
$ pwd
/c/IGI/353501_STANKEVICH_25

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25
$ cd IGI

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25/IGI
$ pwd
/c/IGI/353501_STANKEVICH_25/IGI
```

Рисунок 2 – переходим в наши папки

```
nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25/IGI/LR1
$ pwd
/c/IGI/353501_STANKEVICH_25/IGI/LR1

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25/IGI/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), 4.60 KiB | 294.00 KiB/s, done.
Resolving deltas: 100% (6/6), done.
```

Рисунок 3 – клонируем проект с github, geometric_lib

```
nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25/IGI/LR1
$ cd geometric_lib

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25/IGI/LR1/geometric_lib
(main)
$ git status
On branch main
Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25/IGI/LR1/geometric_lib
(main)
$ git add circle.py
```

Рисунок 4 – делаем индексацию git add для файлов

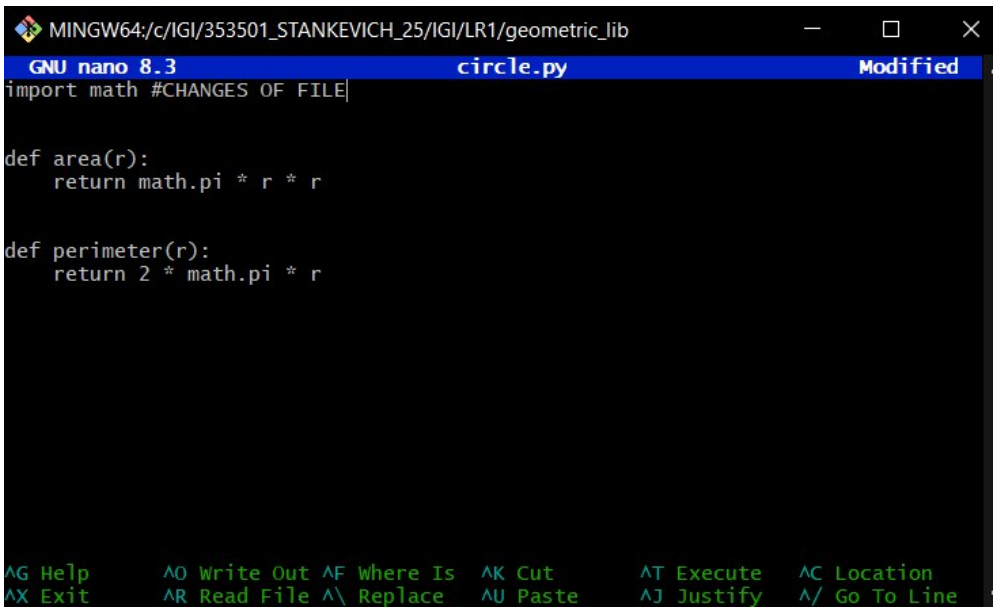


Рисунок 5 – изменили файлы

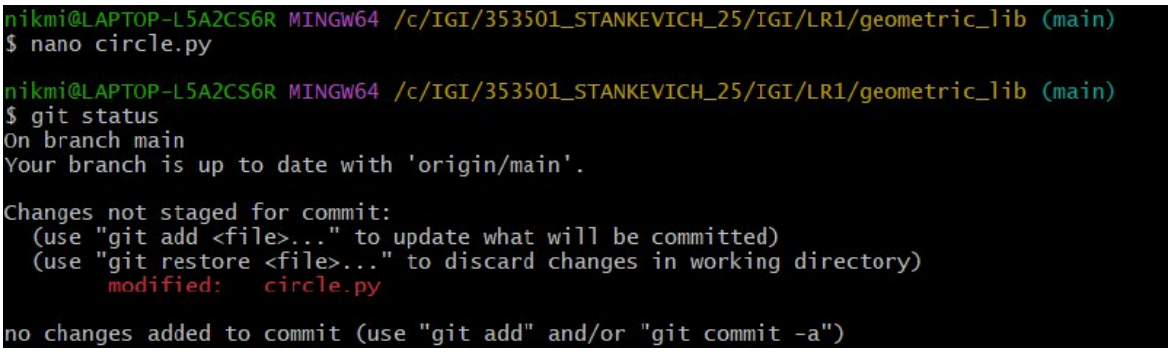


Рисунок 6 – статус после изменения файла

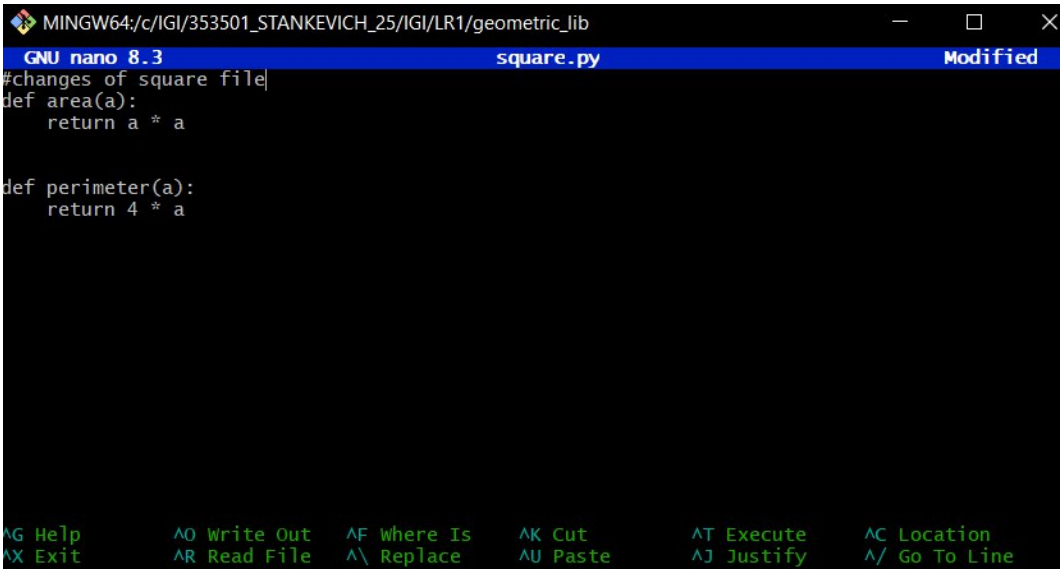


Рисунок 7 – изменение Square файла

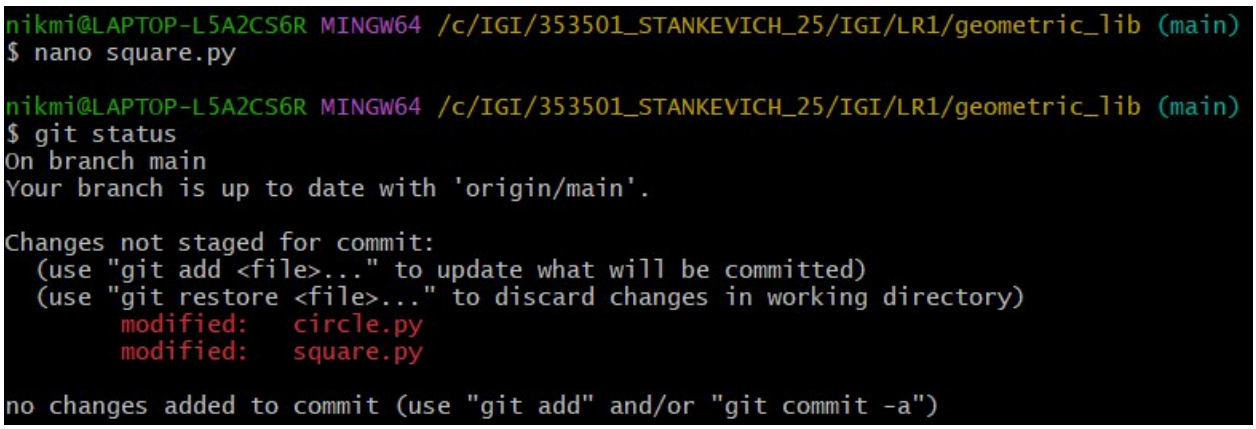


Рисунок 8 – статус после изменения двух файлов

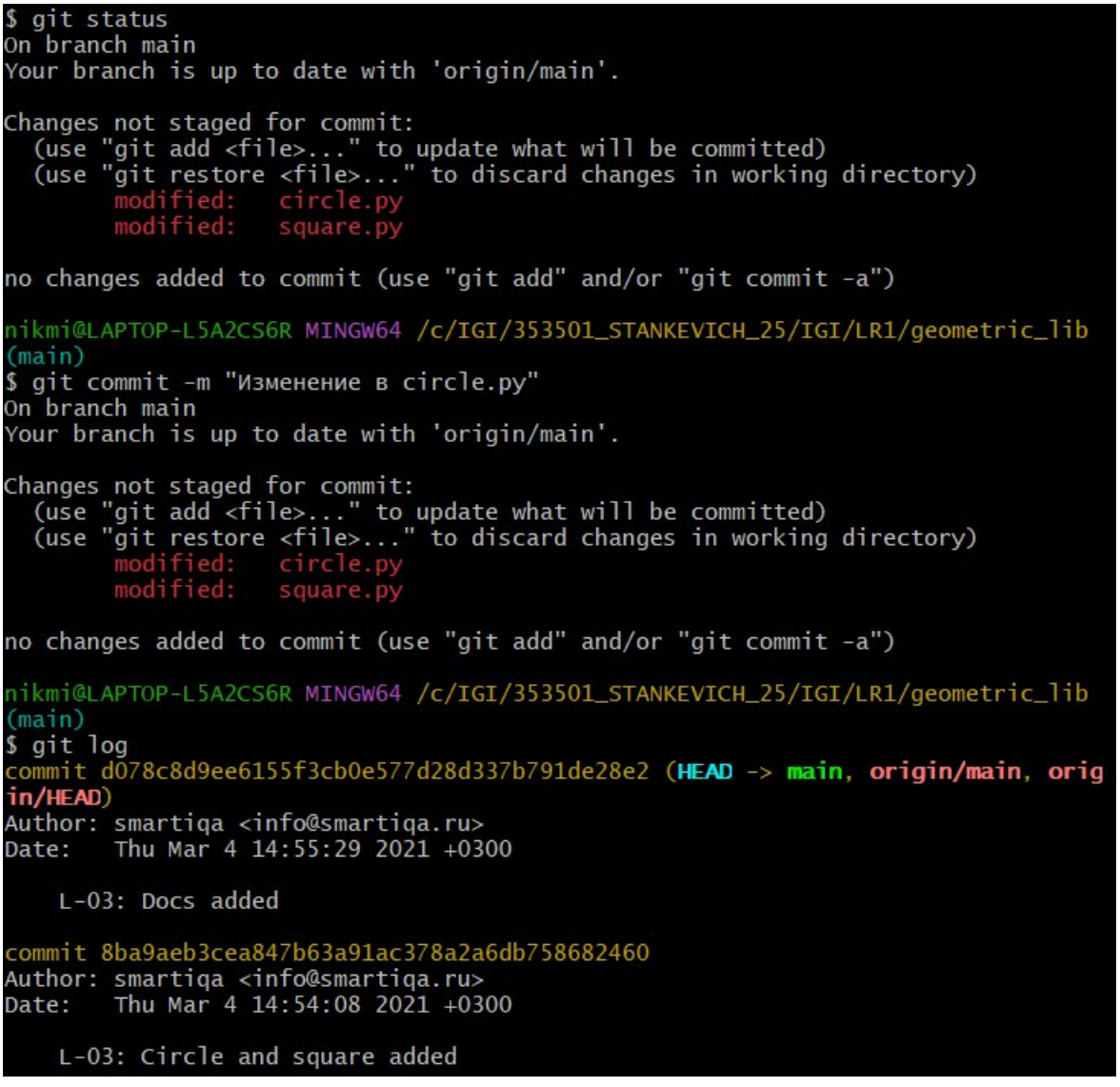


Рисунок 9 – коммитим и смотрим логи

```
nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25/IGI/LR1/geometric_lib (main)
$ git add .

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25/IGI/LR1/geometric_lib (main)
$ git status
On branch main
Your branch is up to date with 'origin/main'.

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        modified:   circle.py
        modified:   square.py


nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25/IGI/LR1/geometric_lib (main)
$ git commit -m "Изменение в circle.py и square.py"
[main 510b641] Изменение в circle.py и square.py
 2 files changed, 2 insertions(+), 2 deletions(-)

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25/IGI/LR1/geometric_lib (main)
$ git status
On branch main
Your branch is ahead of 'origin/main' by 1 commit.
  (use "git push" to publish your local commits)

nothing to commit, working tree clean

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25/IGI/LR1/geometric_lib (main)
$ git log
commit 510b641d405d8b846b9ea525944534a501c8dc48 (HEAD -> main)
Author: Stankevich Aleksandr <stankevich.alekss@gmail.com>
Date:   Fri Feb 21 11:41:19 2025 +0300

    Изменение в circle.py и square.py

commit d078c8d9ee6155f3cb0e577d28d337b791de28e2 (origin/main, origin/HEAD)
Author: smartiqa <info@smartiqa.ru>
Date:   Thu Mar 4 14:55:29 2021 +0300

    L-03: Docs added

commit 8ba9aeb3cea847b63a91ac378a2a6db758682460
Author: smartiqa <info@smartiqa.ru>
Date:   Thu Mar 4 14:54:08 2021 +0300

    L-03: Circle and square added
```

Рисунок 10 - выполните коммиты к проиндексированным файлам

```
nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25/IGI/LR1/geometric_lib (main)
$ git status
On branch main
Your branch is ahead of 'origin/main' by 1 commit.
  (use "git push" to publish your local commits)

nothing to commit, working tree clean
```

Рисунок 11 – статус показал, что появился коммит

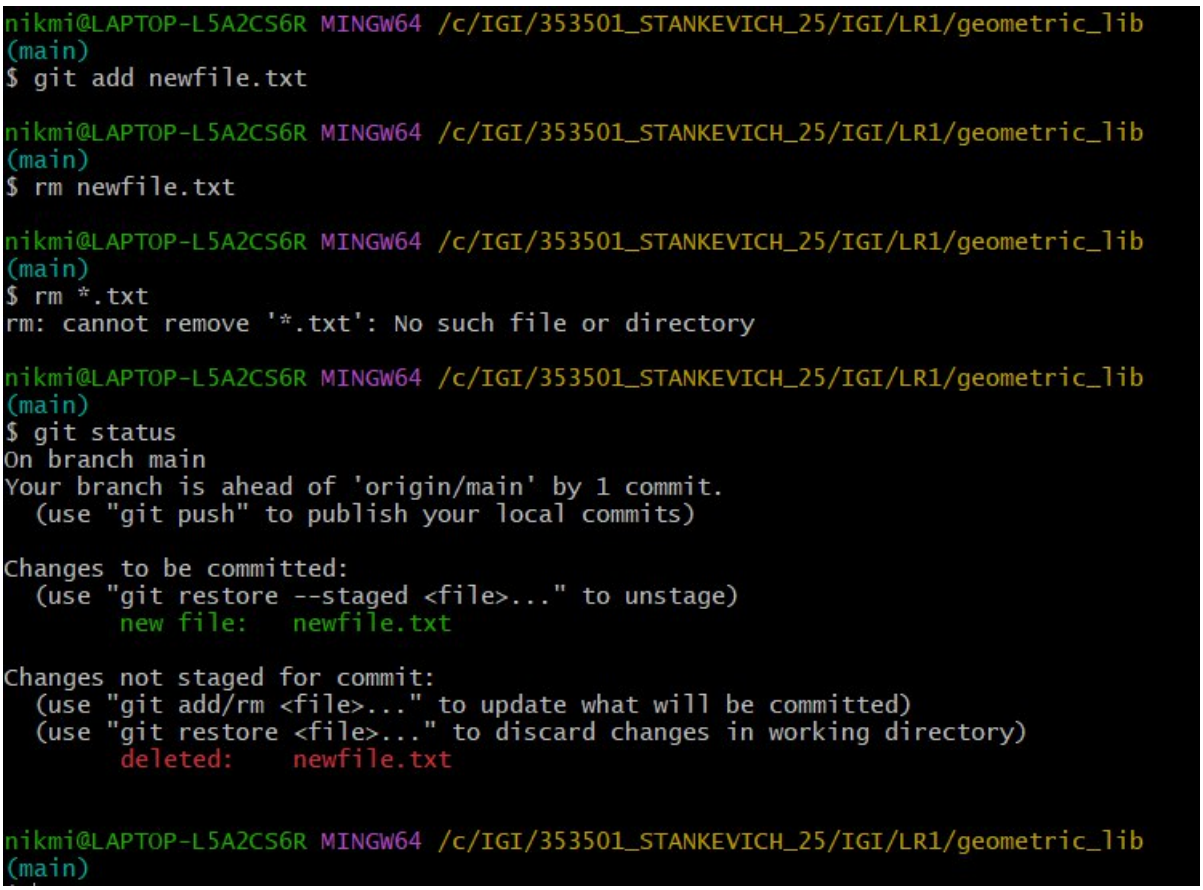


Рисунок 12 – добавили и удалили файлы

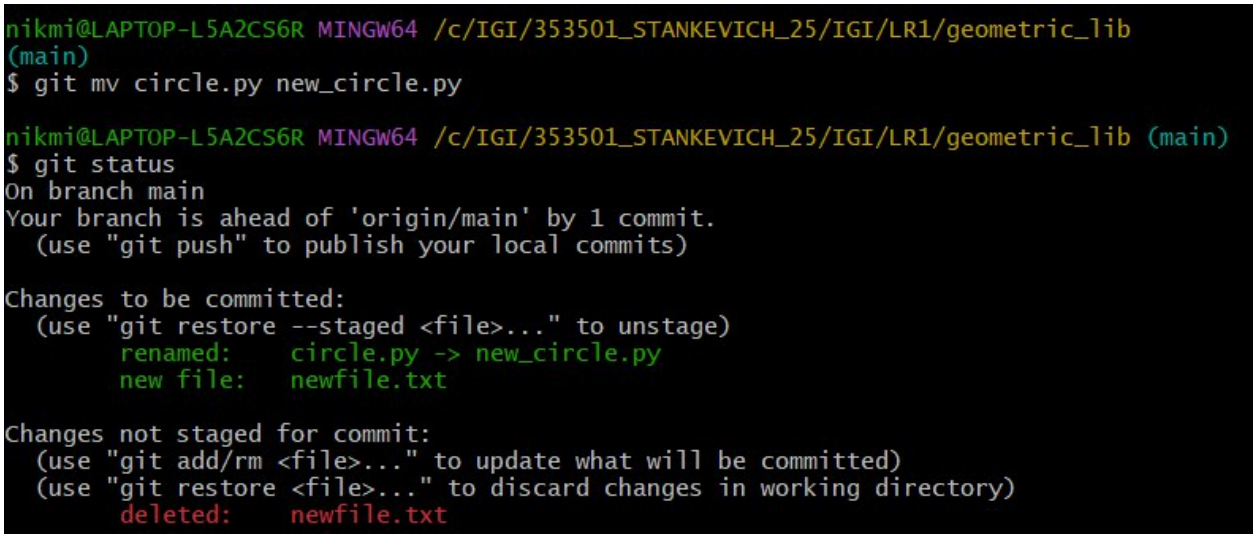


Рисунок 13 – переименовали файлы

Создаем ветки для каждого IGI и STRWEB LR

```
nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25 (IGI_LR1)
$ git mv 353501_STANKEVICH_25/IGI/LR1 .

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25 (IGI_LR1)
$ git branch
  IGI
* IGI_LR1
  IGI_LR2
  IGI_LR3
  IGI_LR4
  IGI_LR5
  STRWEB
  STRWEB_LR1
  STRWEB_LR2
  STRWEB_LR3
  STRWEB_LR4
  branch1
  main

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25 (IGI_LR1)
$ ls
353501_STANKEVICH_25/  LR1/

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25 (IGI_LR1)
$ ls LR1
geometric_lib/  indiv/
```

Переносим файлы из LR1 в ветку IGI_LR1
И так с каждой

```
nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25 (main)
$ git branch
  IGI
  IGI_LR1
  IGI_LR2
  IGI_LR3
  IGI_LR4
  IGI_LR5
  STRWEB
  STRWEB_LR1
  STRWEB_LR2
  STRWEB_LR3
  STRWEB_LR4
  branch1
* main

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25 (main)
$ git checkout IGI_LR2
Switched to branch 'IGI_LR2'

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25 (IGI_LR2)
$ git mv 353501_STANKEVICH_25/IGI/LR2 .

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25 (IGI_LR2)
$ ls
353501_STANKEVICH_25/  LR2/

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25 (IGI_LR2)
$ ls LR1
ls: cannot access 'LR1': No such file or directory

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25 (IGI_LR2)
$ ls LR2
Check.txt
```

```
nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25/IGI/LR1/geometric_lib (main)
$ git branch IGI

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25/IGI/LR1/geometric_lib (main)
$ git branch STRWEB

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25/IGI/LR1/geometric_lib (main)
$ git checkout IGI
D       circle.py
A       new_circle.py
Switched to branch 'IGI'

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25/IGI/LR1/geometric_lib (IGI)
$ git add
Nothing specified, nothing added.
hint: Maybe you wanted to say 'git add .'?
hint: Disable this message with "git config set advice.addEmptyPathspec false"

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25/IGI/LR1/geometric_lib (IGI)
$ git add .

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25/IGI/LR1/geometric_lib (IGI)
$ git commit -m "перемещение LR1 в ветку IGI"
[IGI b8a0704] перемещение LR1 в ветку IGI
 1 file changed, 0 insertions(+), 0 deletions(-)
 rename circle.py => new_circle.py (100%)

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25/IGI/LR1/geometric_lib (IGI)
$ git checkout STRWEB
Switched to branch 'STRWEB'

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25/IGI/LR1/geometric_lib (STRWEB)
$ git add .

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25/IGI/LR1/geometric_lib (STRWEB)
$ git commit -m "перемещение LR1 в ветку STRWEB"
On branch STRWEB
nothing to commit, working tree clean
```

Рисунок 14 – создали отдельные ветки

git branch -d <имя_ветки> для безопасного удаления ветки, -D для небезопасного
git branch (-a/-r) для просмотра всех веток

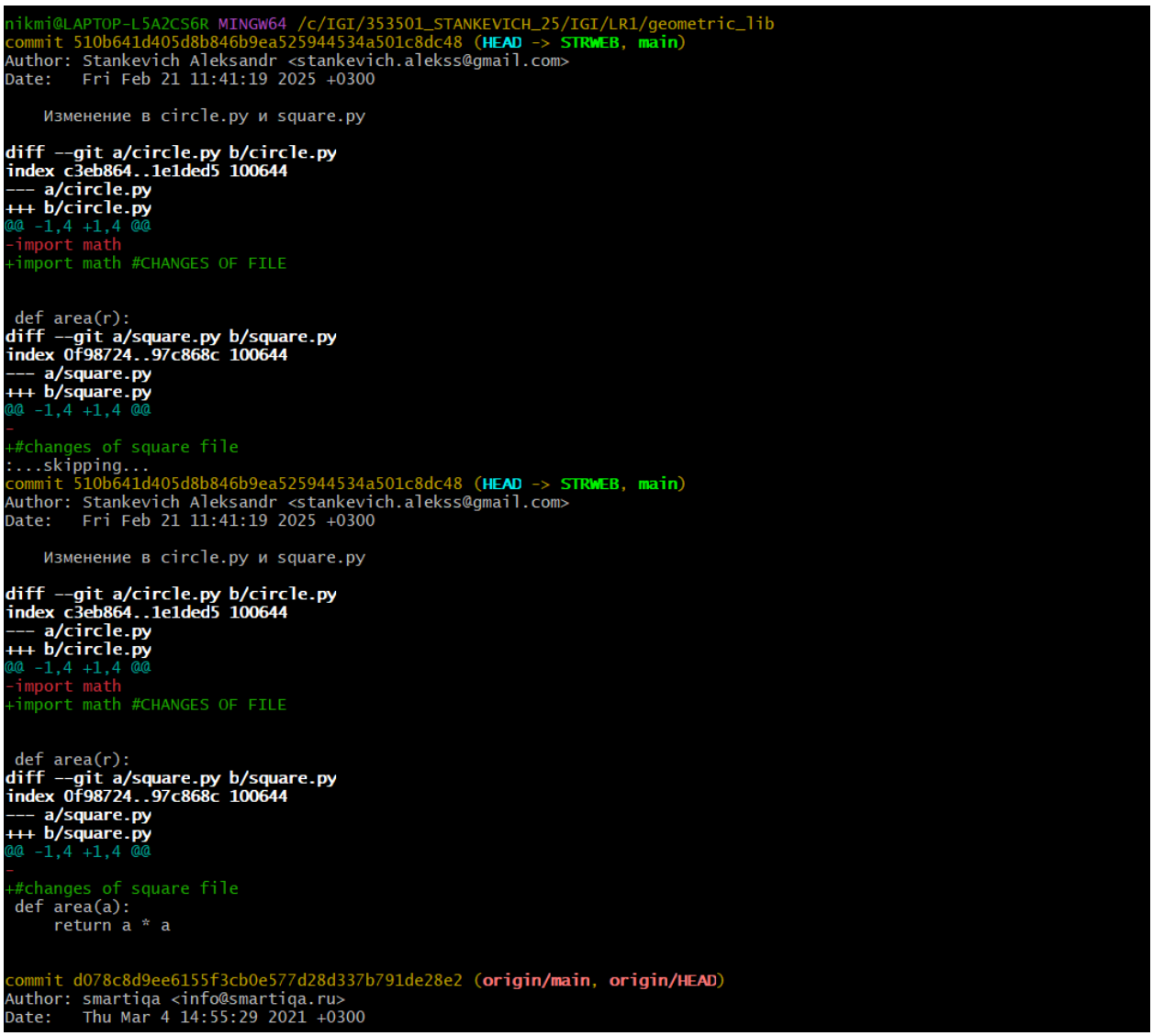


Рисунок – разница в изменениях для каждого коммита git log -p

```
nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25/IGI/LR1/geometric_lib (STRWEB)
$ echo '25' > test.txt

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25/IGI/LR1/geometric_lib (STRWEB)
$ git add test.txt
warning: in the working copy of 'test.txt', LF will be replaced by CRLF the next time Git touches it

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25/IGI/LR1/geometric_lib (STRWEB)
$ git commit -m "добавлен text.txt"
[STRWEB a4b350c] добавлен text.txt
 1 file changed, 1 insertion(+)
 create mode 100644 test.txt

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25/IGI/LR1/geometric_lib (STRWEB)
$ git reset --soft HEAD~1

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25/IGI/LR1/geometric_lib (STRWEB)
$ git log
commit 510b641d405d8b846b9ea525944534a501c8dc48 (HEAD -> STRWEB, main)
Author: Stankevich Aleksandr <stankevich.alekss@gmail.com>
Date:   Fri Feb 21 11:41:19 2025 +0300

    Изменение в circle.py и square.py

commit d078c8d9ee6155f3cb0e577d28d337b791de28e2 (origin/main, origin/HEAD)
Author: smartiqa <info@smartiqa.ru>
Date:   Thu Mar 4 14:55:29 2021 +0300

    L-03: Docs added

commit 8ba9aeb3cea847b63a91ac378a2a6db758682460
Author: smartiqa <info@smartiqa.ru>
Date:   Thu Mar 4 14:54:08 2021 +0300

    L-03: Circle and square added
```

Рисунок - Создали файл, затем коммит и удалили коммит

```
nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25/IGI/LR1/geometric_lib (STRWEB)
$ git add test.txt

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25/IGI/LR1/geometric_lib (STRWEB)
$ git reset test.txt

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25/IGI/LR1/geometric_lib (STRWEB)
$ git status
On branch STRWEB
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)
```

Рисунок – добавили и убрали индексирование

```
nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25/IGI/LR1/geometric_lib
(STRWEB)
$ echo 'новые изменения' >> test.txt

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25/IGI/LR1/geometric_lib
(STRWEB)
$ git status
On branch STRWEB
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)

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25/IGI/LR1/geometric_lib
(STRWEB)
$ git checkout -- test.txt
error: pathspec 'test.txt' did not match any file(s) known to git
```

Рисунок – Создали новые изменения и вернули в исходное положение

Все задания в локальном репозитории были выполнены Для вида каждой папки мы добавим файл Check.txt, чтобы каждая папка отображалась в удаленном репозитории
echo "Это файл Check.txt" > Check.txt

ЗАДАНИЯ В УДАЛЕННОМ РЕПОЗИТОРИИ:

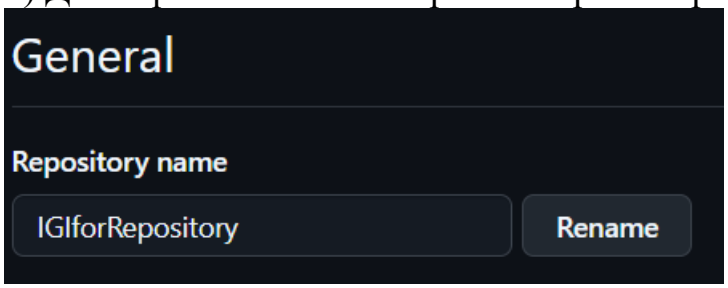
Посмотрим информацию об удаленном репозитории:

```
nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25 (main)
$ git remote -v
origin  https://github.com/ZerrTheMan/IGIforRepository.git (fetch)
origin  https://github.com/ZerrTheMan/IGIforRepository.git (push)
```

Для отправления изменений на удаленный репозиторий:

```
nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25 (main)
$ git push origin main
Everything up-to-date
```

Или просто git push для отправления всех изменений
d) Для переименовывания репозитория открываем настройки на github



А затем изменяем ссылку в локальном репозитории:
git remote set-url origin https://github.com/ваш_username/my-renamed-repo.git
И на всякий случай проверяем git remote -v
e)

```
nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25 (main)
$ git fetch origin

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25 (main)
$ git pull origin main
From https://github.com/ZerrTheMan/IGIforRepository
 * branch            main       -> FETCH_HEAD
Already up to date.
```

Получили данные из удаленного репозитория и затем синхронизировали ветки
f) Для просмотра истории использовали git log
Или для поиска определенных данных
git log --since="2023-01-01"
Или git log -n 2 (Для последних двух коммитов)
git rm ...

git push -u origin branch
git commit -m ""
git rm -r
git mv stariy.txt novii.txt
echo "Отчёт по ЛР1" > report.txt
mkdir task1 task2
touch report.txt

g) Переместили 2 файла с ветки main в branch

```
nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25/353501_STANKEVICH_25/IGI (main)
$ git status
On branch main
Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25/353501_STANKEVICH_25/IGI (main)
$ git checkout branch1
Switched to branch 'branch1'

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25/353501_STANKEVICH_25/IGI (branch1)
$ git checkout main -- file001.txt file002.txt
```

Для удаления ветки с удаленного репозитория
git push origin --delete <имя_ветки>

```
nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25/353501_STANKEVICH_25/IGI (branch1)
$ rm file001.txt

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25/353501_STANKEVICH_25/IGI (branch1)
$ ls
LR1/  LR2/  LR3/  LR4/  LR5/  file002.txt  file1.txt.txt  file2.txt.txt  newfile.txt

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25/353501_STANKEVICH_25/IGI (branch1)
$ git status
On branch branch1
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        new file:   file001.txt
        new file:   file002.txt

Changes not staged for commit:
  (use "git add/rm <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        deleted:    file001.txt


nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25/353501_STANKEVICH_25/IGI (branch1)
$ git commit -m "Удален file001"
[branch1 f68feea] Удален file001
 2 files changed, 2 insertions(+)
 create mode 100644 353501_STANKEVICH_25/IGI/file001.txt
 create mode 100644 353501_STANKEVICH_25/IGI/file002.txt
```

Удалили один файл с ветки

Потом просто запушили git push -u origin branch1

h) git branch -d <>

git branch -r для просмотра всех веток

```
nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25/353501_STANKEVICH_25/IGI (branch2)
$ git commit -m "В бранч2 перемещены файл 3 и 4"
[branch2 5961878] В бранч2 перемещены файл 3 и 4
 2 files changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 353501_STANKEVICH_25/IGI/file3.txt
 create mode 100644 353501_STANKEVICH_25/IGI/file4.txt

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25/353501_STANKEVICH_25/IGI (branch2)
$ git checkout main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25/353501_STANKEVICH_25/IGI (main)
$ git branch -a
  IGI
  IGI_LR1
  IGI_LR2
  IGI_LR3
  IGI_LR4
  IGI_LR5
  STRWEB
  STRWEB_LR1
  STRWEB_LR2
  STRWEB_LR3
  STRWEB_LR4
  branch1
  branch2
* main
  remotes/origin/HEAD -> origin/main
  remotes/origin/branch1
  remotes/origin/main

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25/353501_STANKEVICH_25/IGI (main)
$ git merge branch2
Merge made by the 'ort' strategy.
 353501_STANKEVICH_25/IGI/file1.txt.txt | 0
 353501_STANKEVICH_25/IGI/file2.txt.txt | 0
 353501_STANKEVICH_25/IGI/file3.txt     | 0
 353501_STANKEVICH_25/IGI/file4.txt     | 0
 4 files changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 353501_STANKEVICH_25/IGI/file1.txt.txt
 create mode 100644 353501_STANKEVICH_25/IGI/file2.txt.txt
 create mode 100644 353501_STANKEVICH_25/IGI/file3.txt
 create mode 100644 353501_STANKEVICH_25/IGI/file4.txt

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25/353501_STANKEVICH_25/IGI (main)
$ git branch -d branch 2
error: branch 'branch' not found
error: branch '2' not found

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25/353501_STANKEVICH_25/IGI (main)
$ git branch -d branch2
Deleted branch branch2 (was 5961878).
```

Замерджили 2 ветки и удалили branch2

Индивидуальное задание:

Создаем папки в файле indiv:

```
nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25/353501_STANKEVICH_25/IGI/LR1/indiv (main
)
$ mkdir -p bar/676/less/676

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25/353501_STANKEVICH_25/IGI/LR1/indiv (main
)
$ mkdir -p bin/766/baz/777
```

Коммитим все изменения:

```
nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25 (main)
$ 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)
  (commit or discard the untracked or modified content in submodules)
        modified:   353501_STANKEVICH_25/IGI/LR1/geometric_lib (untracked content)

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        353501_STANKEVICH_25/IGI/LR1/indiv/

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

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25 (main)
$ git add .
warning: in the working copy of '353501_STANKEVICH_25/IGI/LR1/indiv/bin/766/baz/777/readme.txt', LF will be replaced by CRLF the next time Git touches it
warning: in the working copy of '353501_STANKEVICH_25/IGI/LR1/indiv/foo/777/test.txt', LF will be replaced by CRLF the next time Git touches it

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25 (main)
$ git status
On branch main
Your branch is up to date with 'origin/main'.

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        new file:   353501_STANKEVICH_25/IGI/LR1/indiv/bin/766/baz/777/readme.txt
        new file:   353501_STANKEVICH_25/IGI/LR1/indiv/foo/777/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)
  (commit or discard the untracked or modified content in submodules)
        modified:   353501_STANKEVICH_25/IGI/LR1/geometric_lib (untracked content)


nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25 (main)
$ git commit -m "Созданы папки для индивидуального задания"
[main 709d302] Созданы папки для индивидуального задания
 2 files changed, 2 insertions(+)
 create mode 100644 353501_STANKEVICH_25/IGI/LR1/indiv/bin/766/baz/777/readme.txt
 create mode 100644 353501_STANKEVICH_25/IGI/LR1/indiv/foo/777/test.txt
```

```
nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25 (main)
$ git status
On branch main
Your branch is ahead of 'origin/main' by 1 commit.
  (use "git push" to publish your local commits)

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)
  (commit or discard the untracked or modified content in submodules)
        modified:   353501_STANKEVICH_25/IGI/LR1/geometric_lib (untracked content)

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

nikmi@LAPTOP-L5A2CS6R MINGW64 /c/IGI/353501_STANKEVICH_25 (main)
$ git push
Enumerating objects: 18, done.
Counting objects: 100% (18/18), done.
Delta compression using up to 8 threads
Compressing objects: 100% (5/5), done.
Writing objects: 100% (14/14), 884 bytes | 147.00 KiB/s, done.
Total 14 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/ZerrTheMan/IGIforRepository.git
   607db04..709d302  main -> main
```

Рисунок – запушили все в удаленный репозиторий

Все папки согласно индивидуальному заданию:

ВЫВОД

В ходе лабораторной работы получили навыки проектирования git проектов и научились важным командам для работы.