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

Ястремский Ярослав, гр. 253502.

Задание 1.

```
yarik@antimageking MINGW64 /d/studying
$ git --version
git version 2.41.0.windows.1
```

```
yarik@antimageking MINGW64 /d/studying
$ git config --list
```

```
user.name=Yaroslav Yastremskiy
user.email=yarik_02022005@mail.ru
```

Задание 2.

Для создания папок использовалась команда «mkdir name» Для создания текстового файла с содержимым использовалась команда «echo "text" >> name.txt»

Создаём базовую директорию 253502_Yastremskiy_29 и создадим структура согласно индивидуальному заданию

Задание 3.

Клонируем удалённый репозиторий

```
yarik@antimageking MINGW64 /d/studying/git_igi/253502_Yastremskiy_29/IGI/LR1 (ma
in)
$ git clone https://github.com/smartiqaorg/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.
```

Залание 4.

а. Сделаем индексацию файлов в склонированном репозитории.

arik@antimageking MINGW64 /d/studying/git_igi/253502_Yastremskiy_29/IGI/LR1/geometric_lib (main)/ git add .

b. Внесём изменения в репозитории

```
yarik@antimageking MINGW64 /d/studying/git_igi/253502_Yastremskiy_29/IGI/LR1/geometric_lib (main)
$ echo "print('Hello, World')" >> square.py
yarik@antimageking MINGW64 /d/studying/git_igi/253502_Yastremskiy_29/IGI/LR1/geometric_lib (main)
$ echo "print('Hello, World 2')" >> circle.py
```

с. Проиндексируем изменения и выполним коммит к файлам

```
varik@antimageking MINGW64 /d/studying/git_igi/253502_Yastremskiy_29/IGI/LR1/geometric_lib (main) $ git add . && git commit -m "some changes in 2 files" warning: in the working copy of 'circle.py', LF will be replaced by CRLF the next time Git touches it warning: in the working copy of 'square.py', LF will be replaced by CRLF the next time Git touches it [main 93c8d6e] some changes in 2 files 2 files changed, 2 insertions(+)
```

Добавим файл с расширением *.txt и удалим все файлы *.py

```
yarik@antimageking MINGw64 /d/studying/git_igi/253502_Yastremskiy_29/IGI/LR1/geometric_lib (main)
yarik@antimageking MINGW64 /d/studying/git_igi/253502_Yastremskiy_29/IGI/LR1/geometric_lib (main)
$ rm *.py
```

Hовое содержимое директории geometric lib:

docs/ some.txt

e. Переименуем файл «some.txt»

```
yarik@antimageking MINGw64 /d/studying/git_igi/253502_Yastremskiy_29/IGI/LR1/geometric_lib (main)
$ mv some.txt renamed_file.txt
yarik@antimageking MINGw64 /d/studying/git_igi/253502_Yastremskiy_29/IGI/LR1/geometric_lib (main)
$ ls
docs/
       renamed_file.txt
```

f. Создаем для IGI отдельную ветку.

```
$ cd IGI
yarik@antimagekingMINGW64/d/studying/git igi/253502 Yastremskiy 29/IG
I (main)
$ touch Readme.md
yarik@antimagekingMINGW64/d/studying/git igi/253502 Yastremskiy 29/IG
I (main)
$ git branch IGI
yarik@antimagekingMINGW64/d/studying/git igi/253502 Yastremskiy 29/IG
I (main)
$ git checkout IGI
Switched to branch 'IGI'
yarik@antimagekingMINGW64/d/studying/git igi/253502 Yastremskiy 29/IG
I (IGI)
$ git add Readme.md
yarik@antimagekingMINGW64/d/studying/git igi/253502 Yastremskiy 29/IG
I (IGI)
```

```
$ git commit -m "added readme to IGI"
[IGI f178368] added readme to IGI
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 253502 Yastremskiy 29/IGI/Readme.md
```

Аналогично для STRWEB

```
yarik@antimageking MINGW64 /d/studying/git_igi/253502_Yastremskiy_29/STRWEB (main)
$ git branch STRWEB

yarik@antimageking MINGW64 /d/studying/git_igi/253502_Yastremskiy_29/STRWEB (main)
$ git checkout STRWEB

Switched to branch 'STRWEB'

yarik@antimageking MINGW64 /d/studying/git_igi/253502_Yastremskiy_29/STRWEB (STRWEB)
$ git commit -m "Added readme to STRWEB"

[STRWEB 22c84dc] Added readme to STRWEB
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 253502_Yastremskiy_29/STRWEB/Readme.md
```

Для всех остальных папок с лабораторными работами, проводим такую же процедуру

g. Выведем всю историю коммитов

```
* 352c809 (HEAD -> IGI_LR5) 1st commit to IGI_LR5

* 3c945ff (IGI_LR4) 1st commit to IGI_LR4

* d4dad12 (IGI_LR3) 1st commit to IGI_LR3

* b966986 (IGI_LR2) 1st commit to IGI_LR2

* b8a3576 (IGI_LR1) 1st commit to IGI_LR1

* 798d084 (IGI) 1st commit to IGI

* 78258ed (main) Commit to main

* 31b3063 (STRWEB_LR4) 1st commit to STRWEB/LR4

| * d4d0c53 (STRWEB_LR3) 1st commit for STRWEB/LR3

| / 89392b9 (STRWEB_LR2) 1st commit for STRWEB/LR2

| / 9be4d99 (STRWEB_LR1) 1st commit for STRWEB/LR1

| * 22c84dc (STRWEB) Added readme to STRWEB

* 2f8ab52 added readme

* 05e4cb0 (origin/main) first commit
```

Выведем последние 5 коммитов

```
$ git log --branches --graph --oneline -5
* 352c809 (HEAD -> IGI_LR5) 1st commit to IGI_LR
| * 3c945ff (IGI_LR4) 1st commit to IGI_LR4
| * d4dad12 (IGI_LR3) 1st commit to IGI_LR3
| * b966986 (IGI_LR2) 1st commit to IGI_LR2
| * b8a3576 (IGI_LR1) 1st commit to IGI_LR1
```

Выведем коммиты сделанные в определенный промежуток времени

```
$ git log --branches --since="sun Feb 18 20:15:00 2024 +0300" --until="sun Feb 18 20:40:59 2024 +0300" commit 3lb306377a6ec98c749fb9037f29420flac5417c (STRWEB_LR4)
Author: Yaroslav Yastremskiy <yarik_020220005@mail.ru>
Date: Sun Feb 18 20:34:21 2024 +0300

1st commit to STRWEB/LR4

commit 78258ed0b4b497a16d01cf8e6e71f6169ec2725c (main)
Author: Yaroslav Yastremskiy <yarik_02022005@mail.ru>
Date: Sun Feb 18 20:32:13 2024 +0300

Commit to main
```

Выведем историю коммитов, сделанных определенных автором

Выведем коммиты, названия которых содержат определенную строку

```
$ git log --branches --grep="1st" --oneline
352c809 (HEAD -> IGI_LR5) 1st commit to IGI_LR5
3c945ff (IGI_LR4) 1st commit to IGI_LR4
d4dad12 (IGI_LR3) 1st commit to IGI_LR3
b966986 (IGI_LR2) 1st commit to IGI_LR2
b8a3576 (IGI_LR1) 1st commit to IGI_LR1
798d084 (IGI) 1st commit to IGI
31b3063 (STRWEB_LR4) 1st commit to STRWEB/LR4
d4d0c53 (STRWEB_LR3) 1st commit for STRWEB/LR3
89392b9 (STRWEB_LR2) 1st commit for STRWEB/LR2
9be4d99 (STRWEB_LR1) 1st commit for STRWEB/LR1
```

h.

\$ git log --stat

```
$ git log --shortstat
commit 352c80983ad7452df976b079ee303397bf1cc45d (HEAD -> IGI_LR5)
Author: Yaroslav Yastremskiy <yarik_02022005@mail.ru>
Date: Sun Feb 18 20:59:14 2024 +0300

1st commit to IGI_LR5
1 file changed, 0 insertions(+), 0 deletions(-)
```

```
$ git log --name-only --oneline --branches
352c809 (HEAD -> IGI_LR5) 1st commit to IGI_LR5
253502_Yastremskiy_29/IGI/LR5/Readme.md
3c945ff (IGI_LR4) 1st commit to IGI_LR4
253502_Yastremskiy_29/IGI/LR4/Readme.md
d4dad12 (IGI_LR3) 1st commit to IGI_LR3
253502_Yastremskiy_29/IGI/LR3/Readme.md
b966986 (IGI_LR2) 1st commit to IGI_LR2
253502_Yastremskiy_29/IGI/LR2/Readme.md
b8a3576 (IGI_LR1) 1st commit to IGI_LR1
253502_Yastremskiy_29/IGI/LR1/Readme.md
798d084 (IGI) 1st commit to IGI
253502_Yastremskiy_29/IGI/LR1/geometric_lib
253502_Yastremskiy_29/IGI/Readme.md
31b3063 (STRWEB_LR4) 1st commit to STRWEB/LR4
253502_Yastremskiy_29/STRWEB/LR4/Readme.md
```

```
$ git log --relative-date
commit 352c80983ad7452df976b079ee303397bf1cc45d (HEAD -> IGI_LR5)
Author: Yaroslav Yastremskiy <yarik_02022005@mail.ru>
Date: 13 minutes ago

1st commit to IGI_LR5

commit 798d0848142b8a2cb10a77c45bf15763b7ef10ad (IGI)
Author: Yaroslav Yastremskiy <yarik_02022005@mail.ru>
Date: 19 minutes ago

1st commit to IGI

commit 78258ed0b4b497a16d01cf8e6e71f6169ec2725c (main)
Author: Yaroslav Yastremskiy <yarik_02022005@mail.ru>
Date: 40 minutes ago

Commit to main

commit 2f8ab528112080be8044703142c098f41cbc6ec2
Author: Yaroslav Yastremskiy <yarik_02022005@mail.ru>
Date: 85 minutes ago

added readme

commit 05e4cb0f19b815421822ab18547f72ed96d3de52 (origin/main)
Author: Yaroslav Yastremskiy <yarik_02022005@mail.ru>
Date: 2 hours ago

first commit
```

s git log --pretty=format:"%Cred%h%Creset -%C(blue)%d%Creset %s %Cblue(%cr) %C(blue)<%an>%Creset" 352c809 - (HEAD -> IGI_LR5) 1st commit to IGI_LR5 (17 minutes ago) <Yaroslav Yastremskiy>

```
| Solid policy | Soli
```

```
J.

yarik@antimageking MINGw64 /d/studying/git_igi/253502_Yastremskiy_29 (main)
$ git add test.txt
warning: in the working copy of '253502_Yastremskiy_29/test.txt', LF will be replaced by CRLF the next time Git touches it

yarik@antimageking MINGw64 /d/studying/git_igi/253502_Yastremskiy_29 (main)
$ git commit -m "Added test.txt"

I file changed, I insertion(+)
create mode 100644 253502_Yastremskiy_29/test.txt

yarik@antimageking MINGw64 /d/studying/git_igi/253502_Yastremskiy_29 (main)
$ git
Readme.md STRWEB test.txt

yarik@antimageking MINGw64 /d/studying/git_igi/253502_Yastremskiy_29 (main)
$ git status
on branch main
your branch is ahead of 'origin/main' by 3 commits.

(use "git push" to publish your local commits)

Untracked files:

(use "git add cfile»..." to include in what will be committed)

yarik@antimageking MINGw64 /d/studying/git_igi/253502_Yastremskiy_29 (main)
$ git reset HEAD-1

yarik@antimageking MINGw64 /d/studying/git_igi/253502_Yastremskiy_29 (main)
$ git reset HEAD-1

varik@antimageking MINGw64 /d/studying/git_igi/253502_Yastremskiy_29 (main)
$ git reset HEAD-1

varik@antimageking MINGw64 /d/studying/git_igi/253502_Yastremskiy_29 (main)
$ git raset HEAD-1

varik@antimageking MINGw64 /d/studying/git_igi/253502_Yastremskiy_29 (main)
$ git r
```

k.

```
S git status
on branch main
Your branch is shead of 'erigin/main' by 2 commits.
(use "git add sfiles..." to include in what will be committed)
131/RR//geometric_lib/
1251/RR//geometric_lib/
1251/RR/
```

1.

```
Secho "$(<test.txt)"

varik@antimageking MINGW64 /d/studying/git_igi/253502_Yastremskiy_29 (main)
$ git add test.txt

warning: in the working copy of '253502_Yastremskiy_29/test.txt', LF will be replaced by CRLF the next time Git touches it

yarik@antimageking MINGW64 /d/studying/git_igi/253502_Yastremskiy_29 (main)
$ echo "$(ctest.txt)"

varik@antimageking MINGW64 /d/studying/git_igi/253502_Yastremskiy_29 (main)
$ echo "$(ctest.txt)"

varik@antimageking MINGW64 /d/studying/git_igi/253502_Yastremskiy_29 (main)
$ secho "$(ctest.txt)"

varik@antimageking MINGW64 /d/studying/git_igi/253502_Yastremskiy_29 (main)
$ git status
on branch main
vour branch is ahead of 'origin/main' by 2 commits.

(use "git push" to publish your local commits)

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 discard changes in working directory)

modified: test.txt

Untracked files:

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

1GJ/RI/geometric_lib/
.../dgas

yarik@antimageking MINGW64 /d/studying/git_igi/253502_Yastremskiy_29 (main)
$ git restore .

yarik@antimageking MINGW64 /d/studying/git_igi/253502_Yastremskiy_29 (main)
$ git restore.

yarik@antimageking MINGW64 /d/studying/git_igi/253502_Yastremskiy_29 (main)
$ git restore.
```

Задание 5.

а. Создадим и подключим удаленный репозиторий к данному проекту.

```
yarik@antimageking MINGW64 /d/studying/git_igi/253502_Yastremskiy_29 (main)
$ git remote add origin https://github.com/whiteprincewithobsession/IGI-LR1.git
yarik@antimageking MINGW64 /d/studying/git_igi/253502_Yastremskiy_29 (main)
$ git remote add originssh git@github.com:whiteprincewithobsession/IGI-LR1.git
```

b.

с. Вносим изменения и сохраняем их

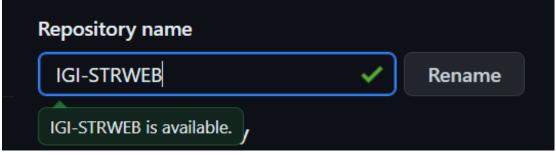
```
yarik@antimageking MINGw64 /d/studying/git_igi (main)
$ echo "Labs for IGI and STRWEB 4sem" >> Readme.md

yarik@antimageking MINGw64 /d/studying/git_igi (main)
$ git add Readme.md

warning: in the working copy of 'Readme.md', LF will be replaced by CRLF the nex
t time Git touches it

yarik@antimageking MINGw64 /d/studying/git_igi (main)
$ git commit -m "Changes in readme"
[main 8c4cb31] Changes in readme
2 files changed, 2 insertions(+)
create mode 100644 253502_Yastremskiy_29/test.txt
create mode 100644 Readme.md
$ git push origin
Enumerating objects: 7, done.
Counting objects: 100% (7/7), done.
Delta compression using up to 8 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (5/5), 431 bytes | 431.00 KiB/s, done.
Total 5 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/whiteprincewithobsession/IGI.git
    78258ed..8c4cb31 main -> main
```

d. Переимунем репозиторий



```
IGI-STRWEB / README.md
           Edit
                        Preview
                                               Code 55% faster with GitHub Copilot
                     Labs for IGI and STRWEB
remote: Enumerating objects: 4, done.
remote: Counting objects: 100% (4/4), done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (3/3), 1015 bytes | 253.00 KiB/s, done.
From https://github.com/whiteprincewithobsession/IGI-STRWEB
* [new branch] main -> originssh/main
 $ git fetch
```

```
f. История изменений
git log --branches --graph
commit 8c4cb3196e6fbe08d806bdfb4d197108a9636b26 (HEAD -> main)
Author: Yaroslav Yastremskiy <yarik_02022005@mail.ru>
Date: Sun Feb 18 22:10:25 2024 +0300
       Changes in readme
 * commit 352c80983ad7452df976b079ee303397bf1cc45d (IGI_LR5)
| Author: Yaroslav Yastremskiy <yarik_02022005@mail.ru>
| Date: Sun Feb 18 20:59:14 2024 +0300
           1st commit to IGI_LR5
   * commit 3c945ff00d4434a5239f5885fcb9fcc26db14fe9 (IGI_LR4)
  / Author: Yaroslav Yastremskiy <yarik_02022005@mail.ru>
Date: Sun Feb 18 20:58:40 2024 +0300
               1st commit to IGI_LR4
   * commit d4dad12e3cf15a9c061edaeda5176cbe1a774375 (IGI_LR3)
/ Author: Yaroslav Yastremskiy <yarik_02022005@mail.ru>
Date: Sun Feb 18 20:57:05 2024 +0300
               1st commit to IGI_LR3
  * commit b966986538410ab493d1fd3149de11fae0f05be4 (IGI_LR2)
/ Author: Yaroslav Yastremskiy <yarik_02022005@mail.ru>
Date: Sun Feb 18 20:55:39 2024 +0300
               1st commit to TGT LR2
    * commit b8a357632bd828ae77a69c86cfa7addd72bc2766 (IGT_LR1)
Author: Yaroslav Yastremskiy <yarik_02022005@mail.ru>
Date: Sun Feb 18 20:54:37 2024 +0300
               1st commit to IGI_LR1
   commit 798d0848142b8a2cb10a77c45bf15763b7ef10ad (IGI)
Author: Yaroslav Yastremskiy <yarik_02022005@mail.ru>
Date: Sun Feb 18 20:53:13 2024 +0300
           1st commit to IGI
commit 78258ed0b4b497a16d01cf8e6e71f6169ec2725c
Author: Yaroslav Yastremskiy <yarik_02022005@mail.ru>
Date: Sun Feb 18 20:32:13 2024 +0300
       Commit to main
* commit 31b306377a6ec98c749fb9037f29420f1ac5417c (STRWEB_LR4)
| Author: Yaroslav Yastremskiy <yarik_02022005@mail.ru>
| Date: Sun Feb 18 20:34:21 2024 +0300
              1st commit to STRWEB/LR4
     * commit d4d0c5363468b1620a77996313f18d10d616fec8 (STRWEB_LR3)
```