

# **Шаблон отчёта по лабораторной работе**

## **2**

**Простейший вариант**

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# Содержание

1	Цель работы	5
2	Задание	6
3	Выводы	20
	Список литературы	21

## **Список иллюстраций**

## **Список таблиц**

# 1 Цель работы

Изучить идеологию и применение средств контроля версий. Освоить умения по работе с git.

## 2 Задание

Последовательность работ по установке программного обеспечения -Сначала установили git

```
foot
[babdullakhi@babdullakhi ~]$ sudo dnf install git
[sudo] password for babdullakhi:
Fedora 39 - x86_64 - Updates          37 kB/s | 20 kB      00:00
Fedora 39 - x86_64 - Updates          1.4 MB/s | 3.7 MB    00:02
google-chrome                        16 kB/s | 1.3 kB     00:00
google-chrome                        9.7 kB/s | 3.6 kB    00:00
Last metadata expiration check: 0:00:01 ago on Wed 28 Feb 2024 11:33:16
PM MSK.
Package git-2.43.2-1.fc39.x86_64 is already installed.
Dependencies resolved.
Nothing to do.
Complete!
[babdullakhi@babdullakhi ~]$
```

-затем установил gh Fedora:

```
[babdullakhi@babdullakhi ~]$ sudo dnf install gh
Last metadata expiration check: 0:01:58 ago on Wed 28 Feb 2024 11:33:16 PM MSK.
Dependencies resolved.
=====
Package      Architecture Version                      Repository      Size
=====
Installing:
gh           x86_64        2.43.1-1.fc39              updates        9.1 M
Transaction Summary
=====
Install 1 Package

Total download size: 9.1 M
Installed size: 46 M
Is this ok [y/N]: y
Downloading Packages:
gh-2.43.1-1.fc39.x86_64.rpm      5.6 MB/s | 9.1 MB      00:01
-----
Total                            3.4 MB/s | 9.1 MB      00:02
Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
  Preparing      :                                1/1
  Installing     : gh-2.43.1-1.fc39.x86_64        1/1
  Running scriptlet: gh-2.43.1-1.fc39.x86_64        1/1
  Verifying      : gh-2.43.1-1.fc39.x86_64        1/1

Installed:
gh-2.43.1-1.fc39.x86_64

Complete!
[babdullakhi@babdullakhi ~]$
```

-Теперь базовая настройка git: давайте установим имя владельца репозитория.

```
Complete!
[babdullakhi@babdullakhi ~]$ git config --global user.name "Bahara12"
[babdullakhi@babdullakhi ~]$
```

-Теперь базовая настройка git: давайте установим email владельца репозитория.

```
[babdullakhi@babdullakhi ~]$ git config --global user.email "baharaabdul  
lahi4@gmail.com"  
[babdullakhi@babdullakhi ~]$
```

-Настройка utf-8 в выводе сообщения git -Настройте имя начальной ветки(  
-Параметр autocrlf -параметр Safecrlf

```
[babdullakhi@babdullakhi ~]$ git config --global core.quotepath false  
[babdullakhi@babdullakhi ~]$ git config --global init.defaultBranch mast  
er  
[babdullakhi@babdullakhi ~]$ git config --global core.autocrlf input  
[babdullakhi@babdullakhi ~]$ git config --global core.safecrlf warn  
[babdullakhi@babdullakhi ~]$
```

-Создайте ключи ssh с использованием алгоритма rsa с размером ключа 4096 бит.

```
[babdullakhi@babdullakhi ~]$ ssh-keygen -t rsa -b 4096  
Generating public/private rsa key pair.  
Enter file in which to save the key (/home/babdullakhi/.ssh/id_rsa):  
Created directory '/home/babdullakhi/.ssh'.  
Enter passphrase (empty for no passphrase):  
Enter same passphrase again:  
Your identification has been saved in /home/babdullakhi/.ssh/id_rsa  
Your public key has been saved in /home/babdullakhi/.ssh/id_rsa.pub  
The key fingerprint is:  
SHA256:RCMMvSv8nqFAt6tVye5p040cZieplRx1AYdT4p+vmp4 babdullakhi@babdullak  
hi  
The key's randomart image is:  
+---[RSA 4096]-----+  
|      +B+ o      |  
|     .oo+o   .   |  
|      .. o.     |  
|     .oo+      |  
|    .o..*.S     |  
|   ...o+..     |  
|  ..oo*o   .   |  
|   o+O**=      |  
|   oBE*B+      |  
+-----[SHA256]-----+  
[babdullakhi@babdullakhi ~]$
```



-затем используйте алгоритм ed25519

```
[babdullakhi@babdullakhi ~]$ ssh-keygen -t ed25519
Generating public/private ed25519 key pair.
Enter file in which to save the key (/home/babdullakhi/.ssh/id_ed25519):

Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /home/babdullakhi/.ssh/id_ed25519
Your public key has been saved in /home/babdullakhi/.ssh/id_ed25519.pub
The key fingerprint is:
SHA256:PD0QffUK8A8C+mojebH7s60DYRDjj3/7VDS+RhpHxYI babdullakhi@babdullak
hi
The key's randomart image is:
+--[ED25519 256]--+
|    o.  o... oo  |
|    ... . oEoo... |
|    ... . ..B.   |
|    ooo o = = .  |
|    ..o.S + = o  |
|    o.+ . B .    |
|    o B.. o o    |
|    + +o+ .      |
|    ..=*o        |
+-----[SHA256]-----+
[babdullakhi@babdullakhi ~]$
```

-Создание ключей ргр. Генерация ключа.

```
[babdullakhi@babdullakhi ~]$ gpg --full-generate-key

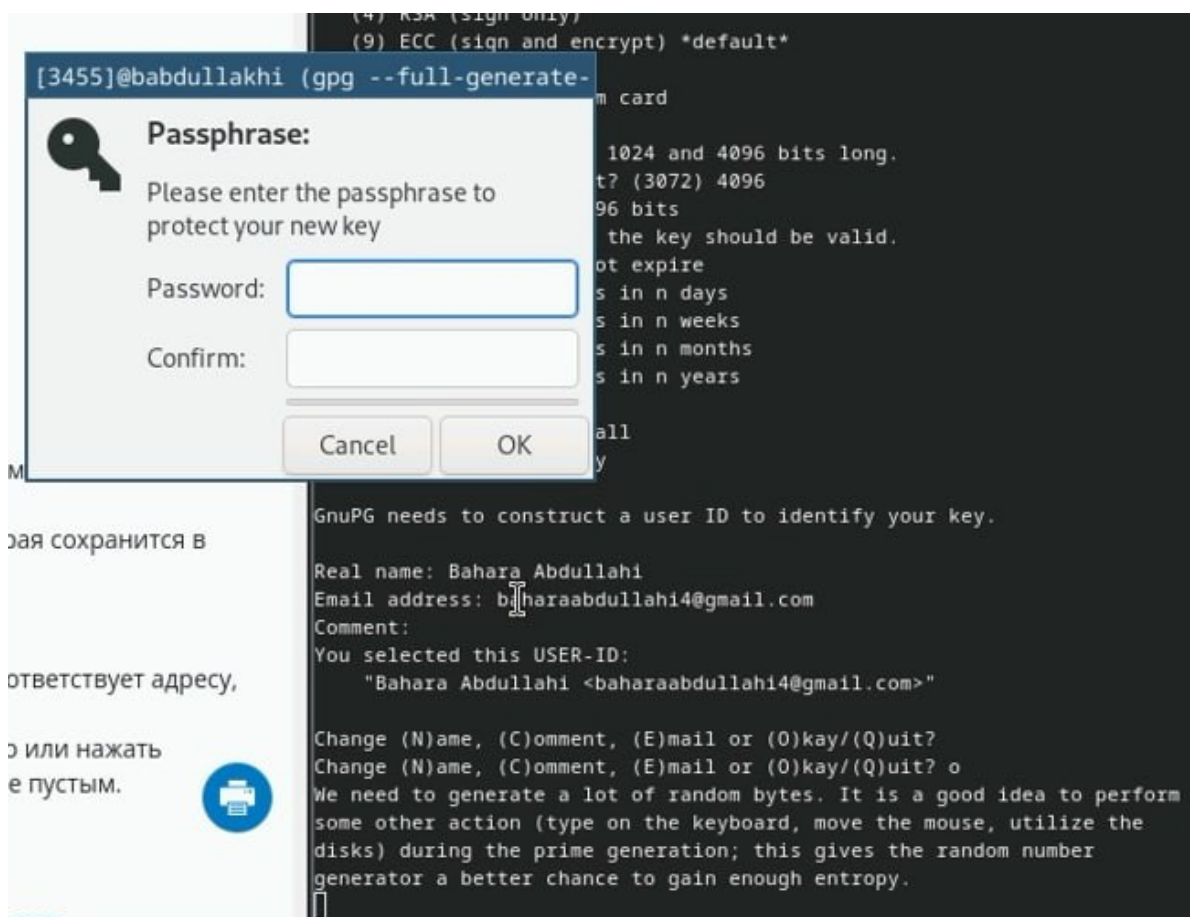
gpg (GnuPG) 2.4.3; Copyright (C) 2023 g10 Code GmbH
This is free software: you are free to change and redistribute it.
There is NO WARRANTY, to the extent permitted by law.

gpg: directory '/home/babdullakhi/.gnupg' created
Please select what kind of key you want:
  (1) RSA and RSA
  (2) DSA and Elgamal
  (3) DSA (sign only)
  (4) RSA (sign only)
  (9) ECC (sign and encrypt) *default*
 (10) ECC (sign only)
 (14) Existing key from card
Your selection? 1
RSA keys may be between 1024 and 4096 bits long.
What keysize do you want? (3072) 4096
Requested keysize is 4096 bits
Please specify how long the key should be valid.
    0 = key does not expire
    <n>  = key expires in n days
    <n>w  = key expires in n weeks
    <n>m  = key expires in n months
    <n>y  = key expires in n years
Key is valid for? (0) 0
Key does not expire at all
Is this correct? (y/N) y

GnuPG needs to construct a user ID to identify your key.

Real name: Bahara Abdullahi
Email address: baharaabdullahi4@gmail.com
Comment:
You selected this USER-ID:
    "Bahara Abdullahi <baharaabdullahi4@gmail.com>"

Change (N)ame, (C)omment, (E)mail or (O)kay/(Q)uit?
Change (N)ame, (C)omment, (E)mail or (O)kay/(Q)uit? █
```



-Настройка Github: я создала GitHub в прошлом семестре.

-Добавьте ключи PGP в GitHub, затем покажите нам список ключей и скопируйте отпечаток закрытого ключа:

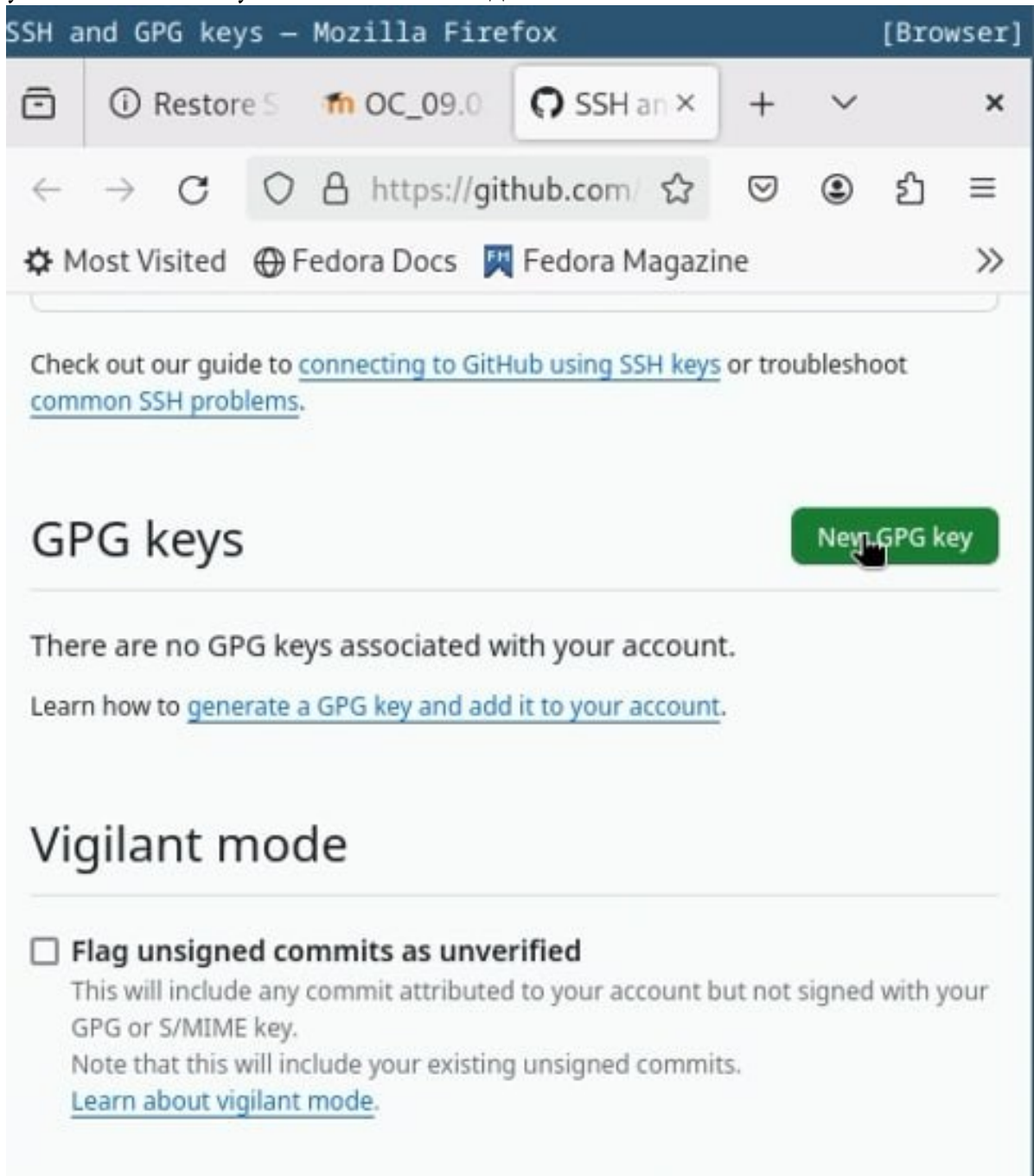
```
[babdullakhi@babdullakhi ~]$ gpg --list-secret-keys --keyid-format LONG
gpg: checking the trustdb
gpg: marginals needed: 3 completes needed: 1 trust model: pgp
gpg: depth: 0 valid: 1 signed: 0 trust: 0-, 0q, 0n, 0m, 0f, 1u
[keyboxd]
-----
sec   rsa4096/54D0D1024F510A01 2024-02-28 [SC]
      01EC06789E1A51E463BF246854D0D1024F510A01
uid           [ultimate] Bahara Abdullahi <baharaabdullahi4@gmail.com>
ssb   rsa4096/F68013A61E3AE2E8 2024-02-28 [E]

[babdullakhi@babdullakhi ~]$
```

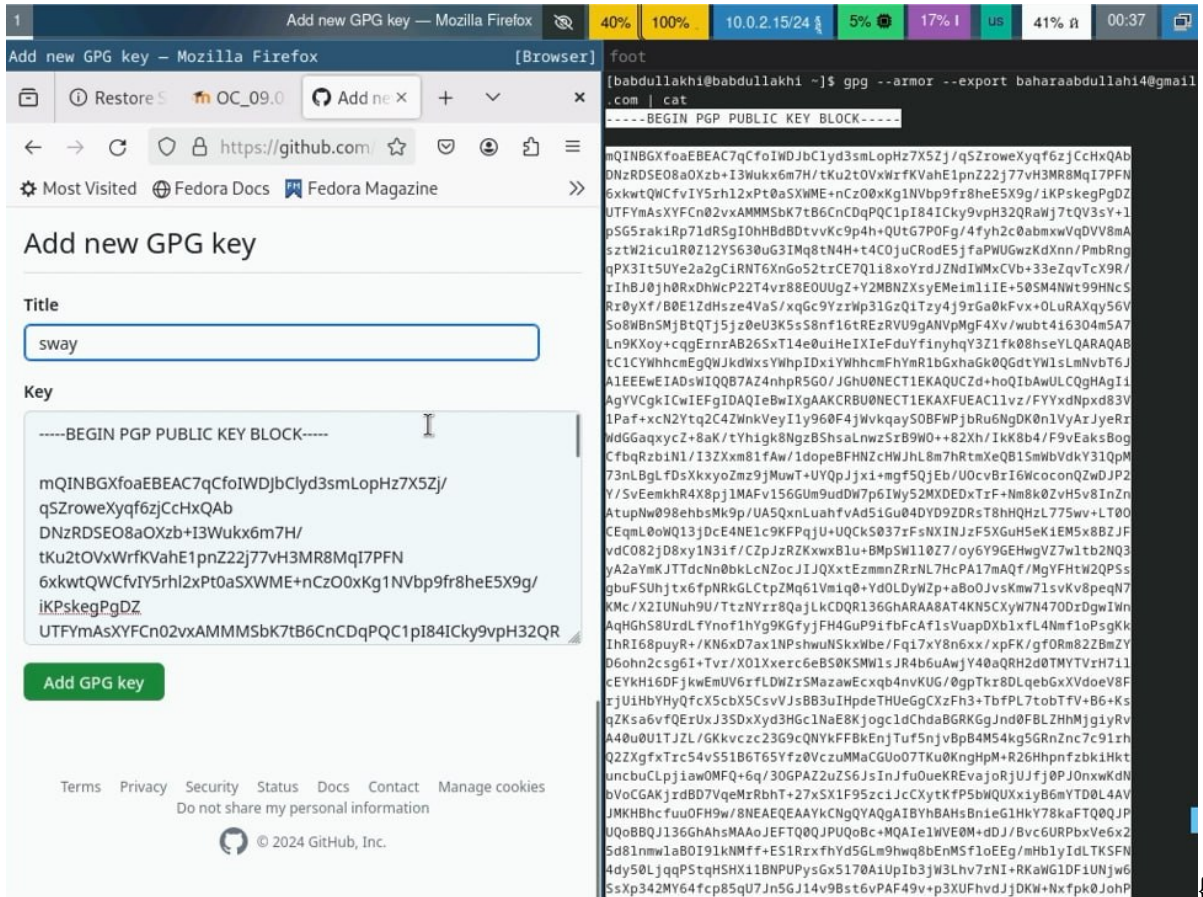
-Скопируйте сгенерированный ключ PGP в буфер обмена:

```
[babdullakhi@babdullakhi ~]$ gpg --armor --export baharaabdullahi4@gmail.com | xclip -sel clip  
[babdullakhi@babdullakhi ~]$
```

-Заходим на GitHub(<http://github.com/setting/key>), нажимаем кнопку New GPG key и вставляем полученный в поле ввода.








width100%}

## GPG keys

[New GPG key](#)

This is a list of GPG keys associated with your account. Remove any keys that you do not recognize.



**sway**  
**Email address:** baharaabdullahi4@gmail.com  
**Key ID:** 54D0D1024F510A01  
**Subkeys:** F68013A61E3AE2E8  
Added on Feb 29, 2024

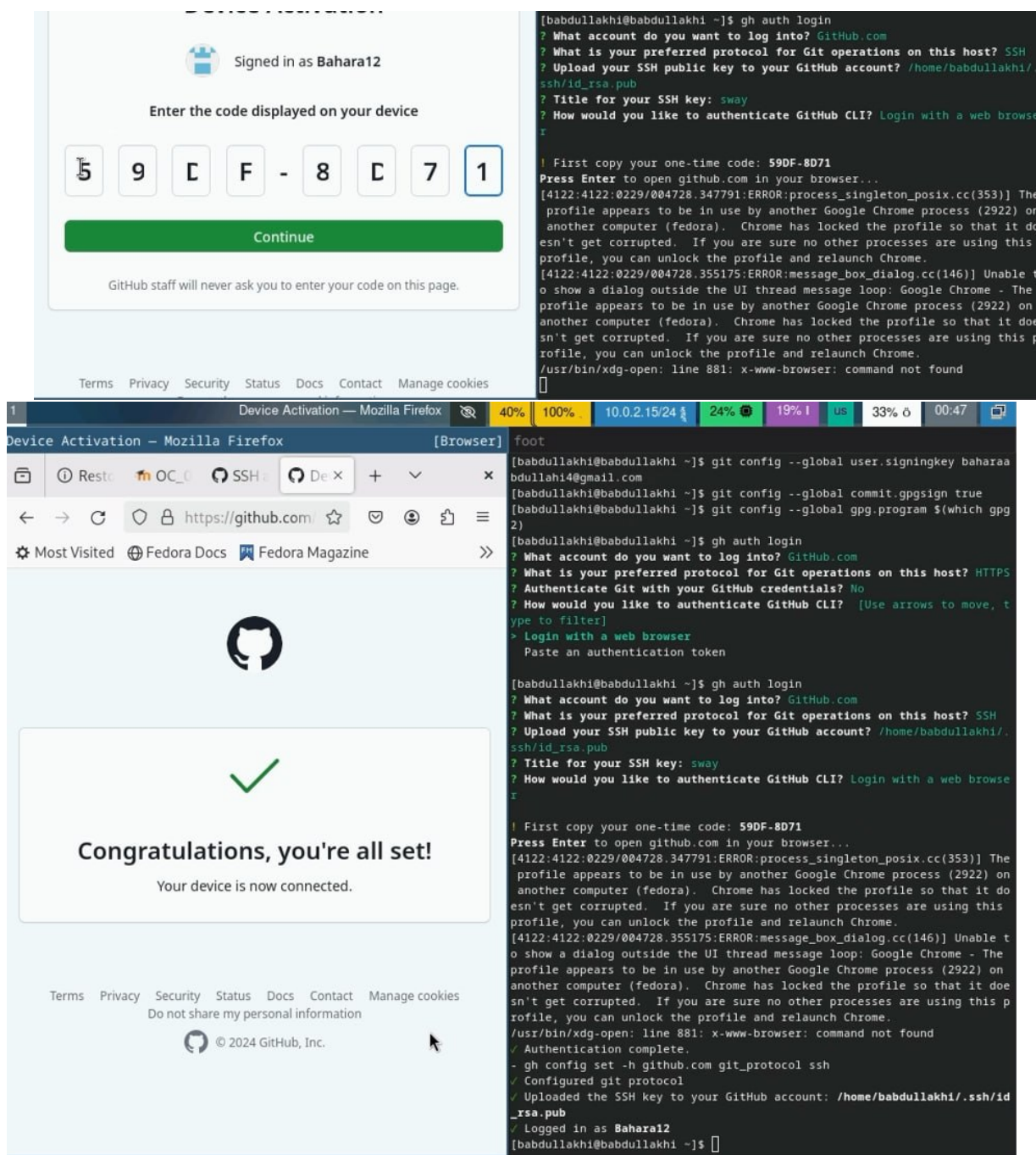
[Delete](#)

Learn how to [generate a GPG key and add it to your account.](#)

-Настройка автоматического подписания коммитов git, введенный адрес электронной почты, скажите Git использовать его при подписании коммитов:

```
[babdullahi@babdullahi ~]$ git config --global user.signingkey baharaa  
bdullahi4@gmail.com  
[babdullahi@babdullahi ~]$ git config --global commit.gpgsign true  
[babdullahi@babdullahi ~]$ git config --global gpg.program $(which gpg  
2)  
[babdullahi@babdullahi ~]$
```

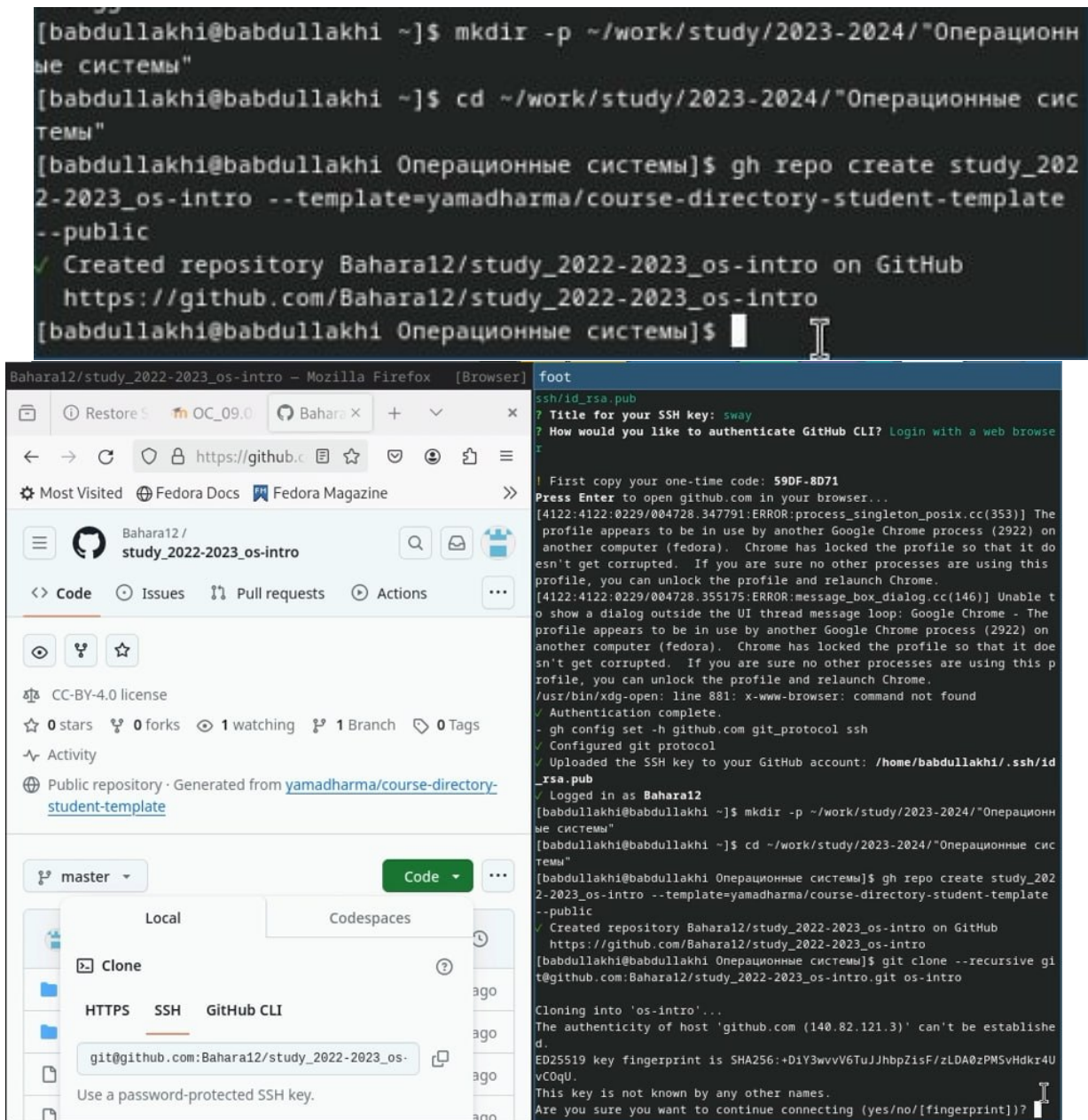
-Настройка gh Сначала необходимо войти в систему.



Шаблон для рабочего пространства -Необходимо создать шаблон рабочего пространства (см. Рабочее пространство для лабораторной работы).

-Например, для 2022–2023 учебного года и предмета «Операционные системы» (код предмета os-intro) создание репозитория примет следующий вид:





- Настройка каталога курса. Перейдите в каталог курса:

```
[bahardullakhi@bahardullakhi Операционные системы]$ cd ~/work/study/2023-2024/"Операционные системы"/os-intro
[bahardullakhi@bahardullakhi os-intro]$
```

- Удалите ненужные файлы и создайте необходимые каталоги:



```

[abdullakhi@abdullakhi Операционные системы]$ cd ~/work/study/2023-2024/"Операционные системы"/os-intro
[abdullakhi@abdullakhi os-intro]$ rm package.json
[abdullakhi@abdullakhi os-intro]$ echo os-intro > COURSE
[abdullakhi@abdullakhi os-intro]$ make
Usage:
  make <target>

Targets:
  list                List of courses
  prepare             Generate directories structure
  submodule            Update submodules

[abdullakhi@abdullakhi os-intro]$ █
[abdullakhi@abdullakhi os-intro]$ make
Usage:
  make <target>

Targets:
  list                List of courses
  prepare             Generate directories structure
  submodule            Update submodules

[abdullakhi@abdullakhi os-intro]$ Makes prepare
bash: Makes: command not found
[abdullakhi@abdullakhi os-intro]$ makea prepare
bash: makea: command not found
[abdullakhi@abdullakhi os-intro]$ make prepare
[abdullakhi@abdullakhi os-intro]$ █

```

-Загрузить файлы на сервер.

```

[abdullakhi@abdullakhi os-intro]$ git add .
[abdullakhi@abdullakhi os-intro]$ █
[abdullakhi@abdullakhi os-intro]$ git commit -am 'feat(main): make course structure'

```

```

eqnos.py
create mode 100755 project-personal/stage5/report/pandoc/filters/pandoc
fignos.py
create mode 100755 project-personal/stage5/report/pandoc/filters/pandoc
secnos.py
create mode 100755 project-personal/stage5/report/pandoc/filters/pandoc
tablenos.py
create mode 100644 project-personal/stage5/report/pandoc/filters/pandoc
xncs/__init__.py
create mode 100644 project-personal/stage5/report/pandoc/filters/pandoc
xncs/core.py
create mode 100644 project-personal/stage5/report/pandoc/filters/pandoc
xncs/main.py
create mode 100644 project-personal/stage5/report/pandoc/filters/pandoc
xncs/pandocattributes.py
create mode 100644 project-personal/stage5/report/report.md
create mode 100644 project-personal/stage6/presentation/Makefile
create mode 100644 project-personal/stage6/presentation/image/kulyabov.
jpg
create mode 100644 project-personal/stage6/presentation/presentation.md
create mode 100644 project-personal/stage6/report/Makefile
create mode 100644 project-personal/stage6/report/bib/cite.bib
create mode 100644 project-personal/stage6/report/image/placeimg_800_60
0_tech.jpg
create mode 100644 project-personal/stage6/report/pandoc/csl/gost-r-7-0
5-2008-numeric.csl
create mode 100755 project-personal/stage6/report/pandoc/filters/pandoc
eqnos.py
create mode 100755 project-personal/stage6/report/pandoc/filters/pandoc
fignos.py
create mode 100755 project-personal/stage6/report/pandoc/filters/pandoc
secnos.py
create mode 100755 project-personal/stage6/report/pandoc/filters/pandoc
tablenos.py
create mode 100644 project-personal/stage6/report/pandoc/filters/pandoc
xncs/__init__.py
create mode 100644 project-personal/stage6/report/pandoc/filters/pandoc
xncs/core.py
create mode 100644 project-personal/stage6/report/pandoc/filters/pandoc
xncs/main.py
create mode 100644 project-personal/stage6/report/pandoc/filters/pandoc
xncs/pandocattributes.py
create mode 100644 project-personal/stage6/report/report.md
[babdullakhi@babdullakhi os-intro]$ █

```

```
[babdullakhi@babdullakhi os-intro]$ git push
Enumerating objects: 40, done.
Counting objects: 100% (40/40), done.
Delta compression using up to 4 threads
Compressing objects: 100% (30/30), done.
Writing objects: 100% (38/38), 342.11 KiB | 2.21 MiB/s, done.
Total 38 (delta 4), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (4/4), completed with 1 local object.
To github.com:Bahara12/study_2022-2023_os-intro.git
   06f4a01..1638336  master -> master
[babdullakhi@babdullakhi os-intro]$
```

## **3 Выводы**

Здесь кратко описываются итоги проделанной работы.

## **Список литературы**