

Лабораторна 2

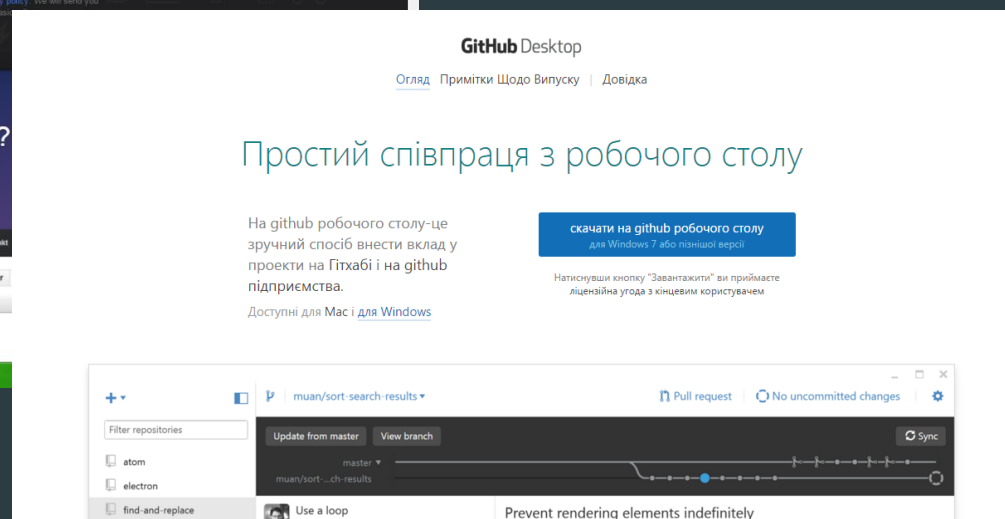
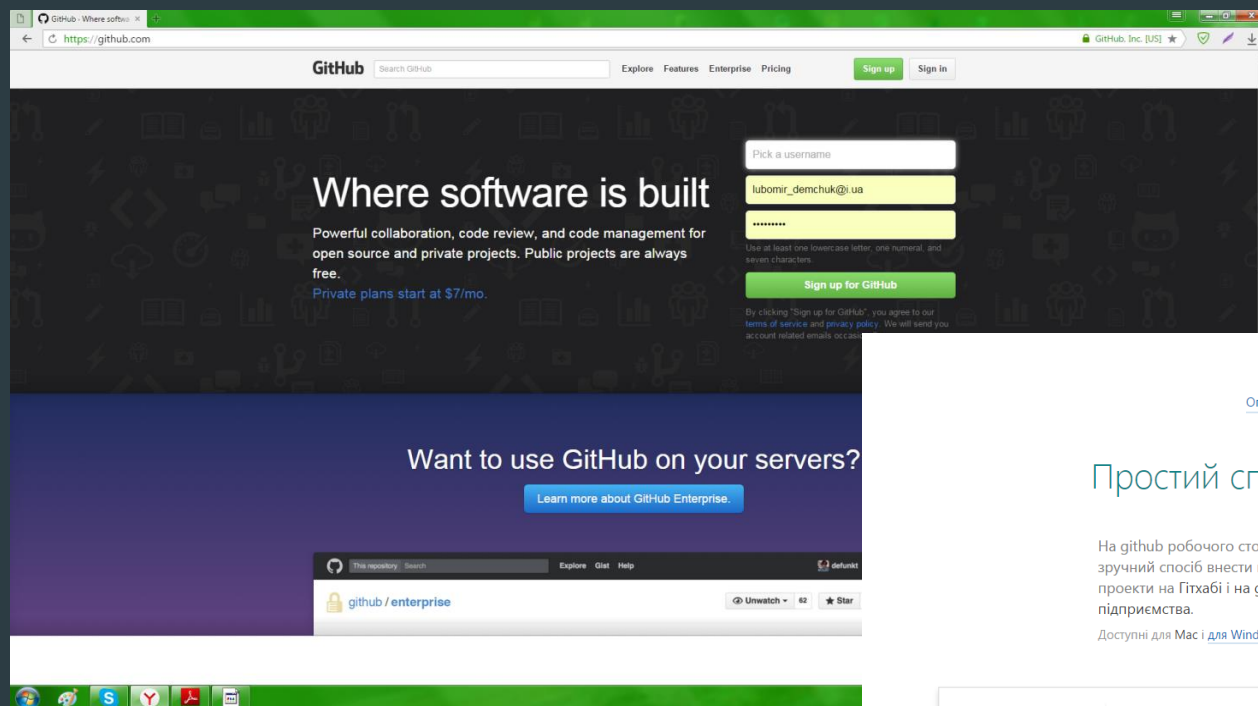
Git і проекти

Виконав:

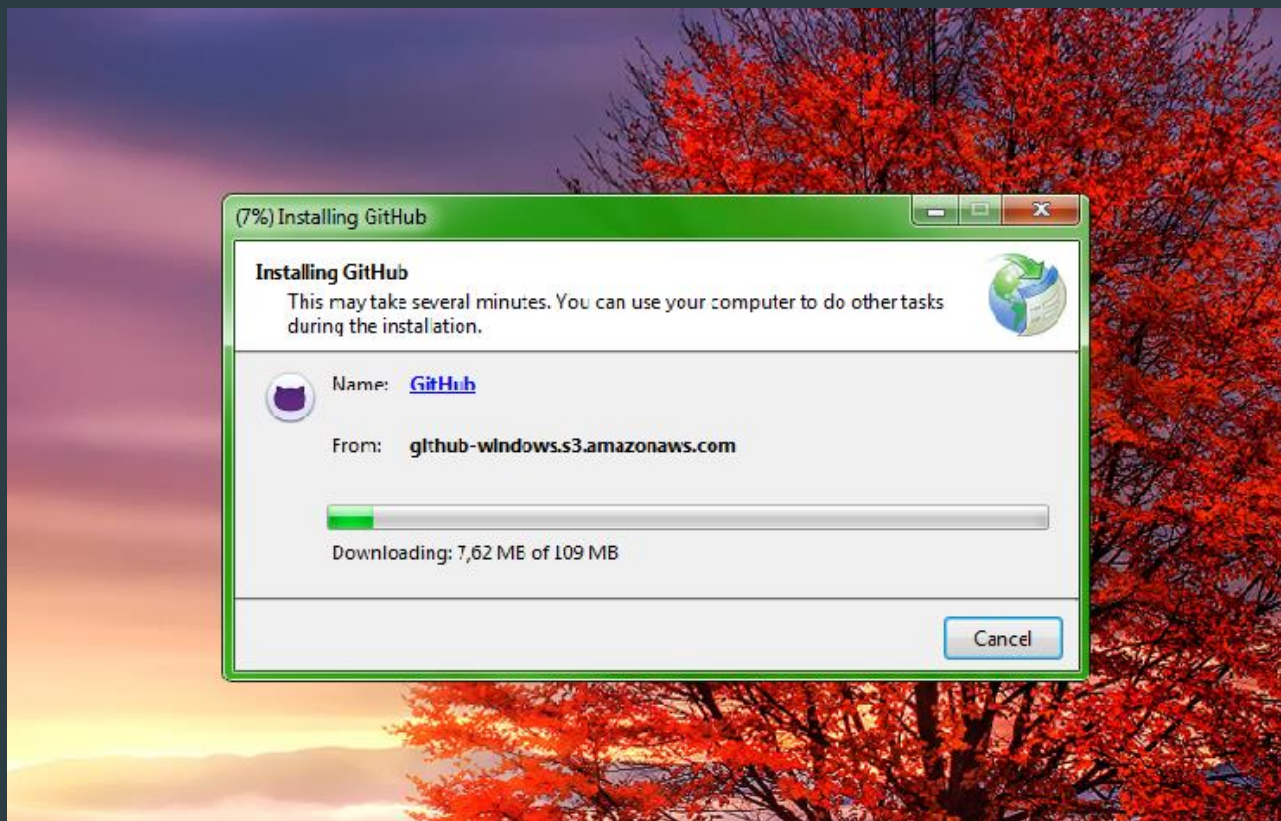
Демчук Любомир

ПІ-14-1

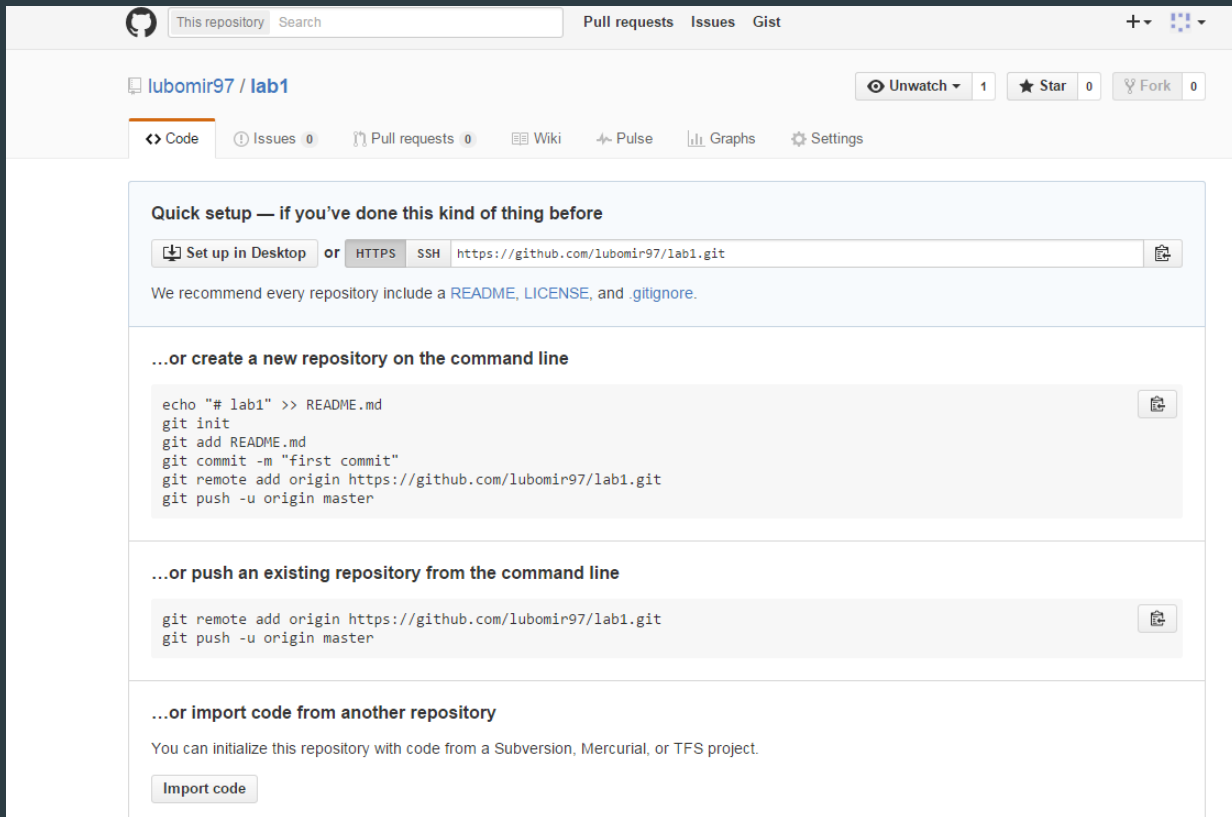
Реєстрація на Git і завантаження ПЗ



Встановлення на робочий комп'ютер:



Створення репозиторія на GitHub



The screenshot shows the GitHub interface for a new repository named 'lab1' by user 'lubomir97'. The page is titled 'Quick setup — if you've done this kind of thing before'. It offers two main options: 'Set up in Desktop' and 'HTTPS SSH'. The 'HTTPS SSH' option is selected, showing the URL 'https://github.com/lubomir97/lab1.git'. Below this, there are instructions for creating a new repository on the command line, including the following commands:

```
echo "# lab1" >> README.md
git init
git add README.md
git commit -m "first commit"
git remote add origin https://github.com/lubomir97/lab1.git
git push -u origin master
```

There is also a section for pushing an existing repository from the command line, with the following commands:

```
git remote add origin https://github.com/lubomir97/lab1.git
git push -u origin master
```

At the bottom, there is a section for importing code from another repository, with a note that you can initialize the repository with code from a Subversion, Mercurial, or TFS project. An 'Import code' button is visible.

Створення локального репозиторія та додавання файлів

```
posh~git ~ NewWork [master]
Windows PowerShell
<C> Корпорация Майкрософт, 2009. Все права защищены.

C:\Users\Lion\Documents\GitHub> cd NewWork
C:\Users\Lion\Documents\GitHub\NewWork> git init
Initialized empty Git repository in C:/Users/Lion/Documents/GitHub/NewWork/.git/

C:\Users\Lion\Documents\GitHub\NewWork [master]>
```

```
C:\Users\Lion\Documents\GitHub\NewWork [master]> git add work.txt
C:\Users\Lion\Documents\GitHub\NewWork [master +1 ~0 -0]> git status
On branch master

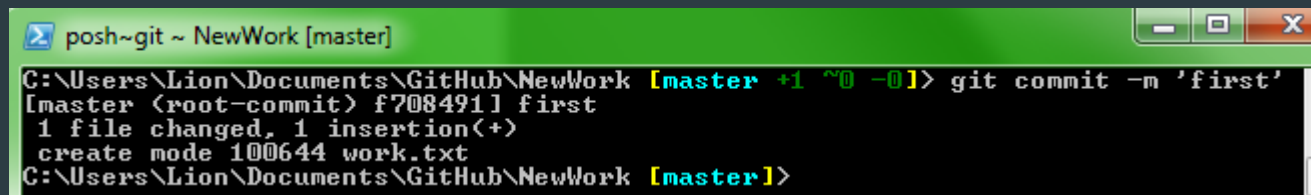
Initial commit

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)

        new file:   work.txt

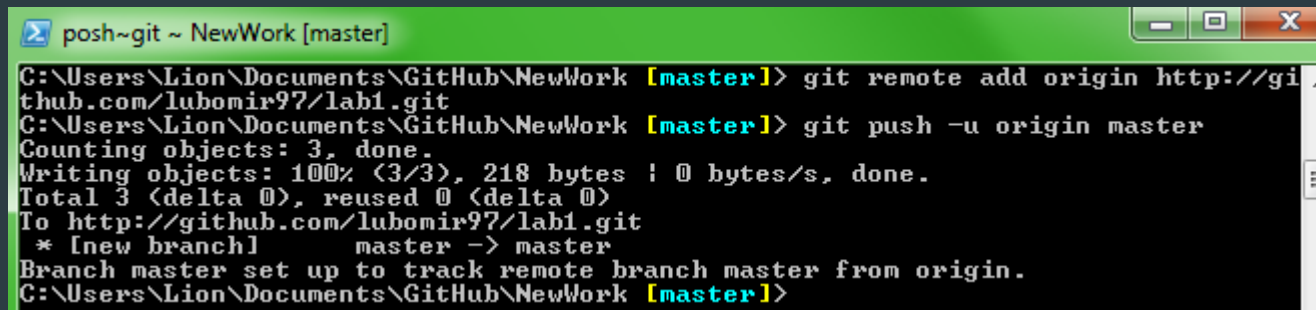
C:\Users\Lion\Documents\GitHub\NewWork [master +1 ~0 -0]>
```

Закомічення файла в локальному репозиторії



```
posh~git ~ NewWork [master]  
C:\Users\Lion\Documents\GitHub\NewWork [master +1 ~0 -0]> git commit -m 'first'  
[master (root-commit) f708491] first  
1 file changed, 1 insertion(+)  
create mode 100644 work.txt  
C:\Users\Lion\Documents\GitHub\NewWork [master]>
```

Закидання змін з лок. репозиторію в репозиторій, створений в пункті 4

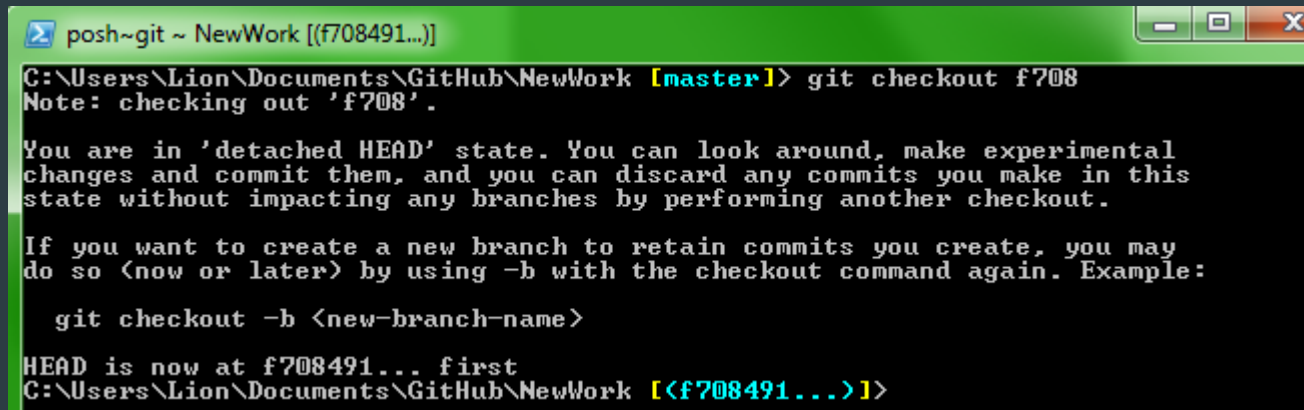


```
posh~git ~ NewWork [master]
C:\Users\Lion\Documents\GitHub\NewWork [master]> git remote add origin http://github.com/lubomir97/lab1.git
C:\Users\Lion\Documents\GitHub\NewWork [master]> git push -u origin master
Counting objects: 3, done.
Writing objects: 100% (3/3), 218 bytes | 0 bytes/s, done.
Total 3 (delta 0), reused 0 (delta 0)
To http://github.com/lubomir97/lab1.git
 * [new branch]      master -> master
Branch master set up to track remote branch master from origin.
C:\Users\Lion\Documents\GitHub\NewWork [master]>
```

Додавання двох файлів в лок.репозиторій із закоміченням і пушанням на GitHub

```
posh~git ~ NewWork [master]
C:\Users\Lion\Documents\GitHub\NewWork [master]> git add *.txt
C:\Users\Lion\Documents\GitHub\NewWork [master +2 ~0 -0]> git commit -m 'twofiles'
[master c62e84a] twofiles
 2 files changed, 2 insertions(+)
 create mode 100644 function.txt
 create mode 100644 program.txt
C:\Users\Lion\Documents\GitHub\NewWork [master]> git push -u origin master
Counting objects: 4, done.
Delta compression using up to 2 threads.
Compressing objects: 100% (2/2), done.
Writing objects: 100% (4/4), 351 bytes | 0 bytes/s, done.
Total 4 (delta 0), reused 0 (delta 0)
To http://github.com/lubomir97/lab1.git
 f708491..c62e84a  master -> master
Branch master set up to track remote branch master from origin.
C:\Users\Lion\Documents\GitHub\NewWork [master]>
```


Відновлення до стану, який був в пункті 8



```
posh~git ~ NewWork [(f708491...)]
C:\Users\Lion\Documents\GitHub\NewWork [master]> git checkout f708
Note: checking out 'f708'.

You are in 'detached HEAD' state. You can look around, make experimental
changes and commit them, and you can discard any commits you make in this
state without impacting any branches by performing another checkout.

If you want to create a new branch to retain commits you create, you may
do so (now or later) by using -b with the checkout command again. Example:

    git checkout -b <new-branch-name>

HEAD is now at f708491... first
C:\Users\Lion\Documents\GitHub\NewWork [<f708491...>]>
```

Створення клона репозиторія з GitHub та створення нової гілки

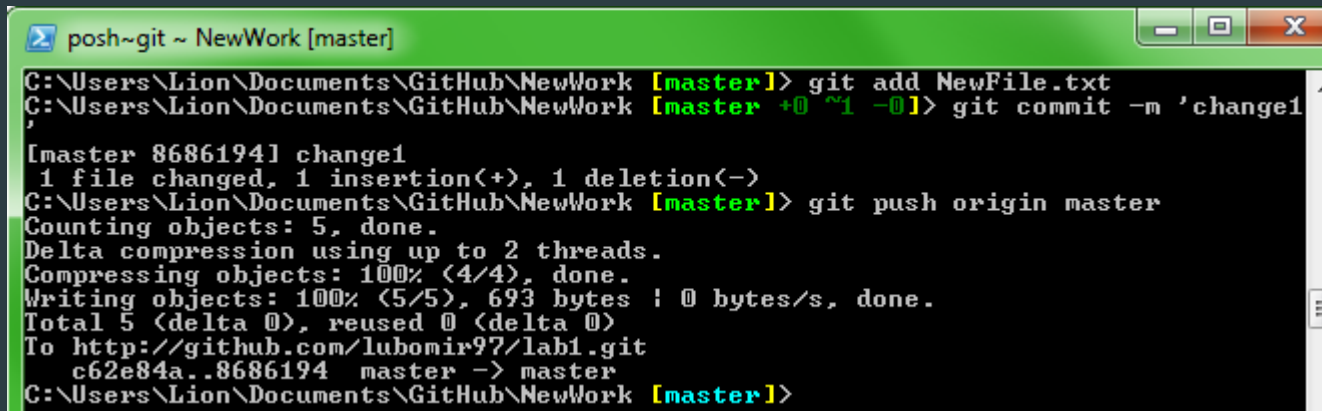
```
posh~git ~ NewWork [(f708491...)]
C:\Users\Lion\Documents\GitHub\NewWork [(f708491...)]> git clone http://github.com/lubomir97/lab1.git d:/lab1
Cloning into 'd:/lab1'...
remote: Counting objects: 7, done.
remote: Compressing objects: 100% (3/3), done.
remote: Total 7 (delta 0), reused 7 (delta 0), pack-reused 0
Unpacking objects: 100% (7/7), done.
Checking connectivity... done.
C:\Users\Lion\Documents\GitHub\NewWork [(f708491...)]>
```

```
posh~git ~ NewWork [Second]
C:\Users\Lion\Documents\GitHub\NewWork [(f708491...)]> git checkout -b Second
Switched to a new branch 'Second'
C:\Users\Lion\Documents\GitHub\NewWork [Second]> git add NewFile.txt
C:\Users\Lion\Documents\GitHub\NewWork [Second +1 ~0 -0]>
```

Комічення змін в новій гілці і синхронізація з репозиторієм на GitHub

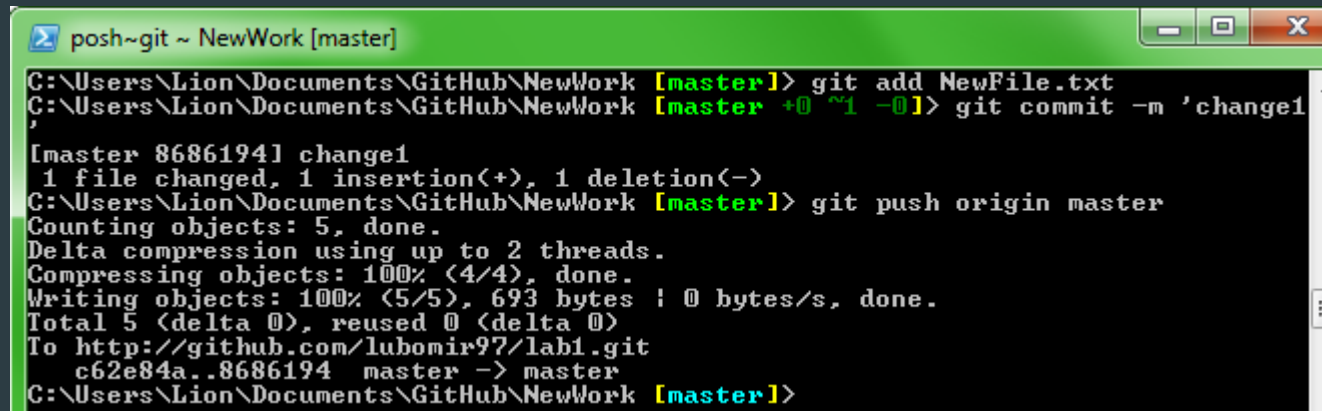
```
posh~git ~ NewWork [Second]
C:\Users\Lion\Documents\GitHub\NewWork [Second +1 ~0 -0]> git commit -m 'New1'
[Second b67dde0] New1
1 file changed, 1 insertion(+)
create mode 100644 NewFile.txt
C:\Users\Lion\Documents\GitHub\NewWork [Second]> git push origin Second
Counting objects: 3, done.
Delta compression using up to 2 threads.
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 285 bytes | 0 bytes/s, done.
Total 3 (delta 0), reused 0 (delta 0)
To http://github.com/lubomir97/lab1.git
 * [new branch]      Second -> Second
C:\Users\Lion\Documents\GitHub\NewWork [Second]>
```

Об'єднання створеної гілки з основною



```
posh~git ~ NewWork [master]
C:\Users\Lion\Documents\GitHub\NewWork [master]> git add NewFile.txt
C:\Users\Lion\Documents\GitHub\NewWork [master +0 ^1 -0 1]> git commit -m 'change1'
[master 8686194] change1
1 file changed, 1 insertion(+), 1 deletion(-)
C:\Users\Lion\Documents\GitHub\NewWork [master]> git push origin master
Counting objects: 5, done.
Delta compression using up to 2 threads.
Compressing objects: 100% (4/4), done.
Writing objects: 100% (5/5), 693 bytes | 0 bytes/s, done.
Total 5 (delta 0), reused 0 (delta 0)
To http://github.com/lubomir97/lab1.git
 c62e84a..8686194 master -> master
C:\Users\Lion\Documents\GitHub\NewWork [master]>
```

Змінення файлу, який був доданий в пункті 12 в основній гілці



```
posh~git ~ NewWork [master]
C:\Users\Lion\Documents\GitHub\NewWork [master]> git add NewFile.txt
C:\Users\Lion\Documents\GitHub\NewWork [master +0 ~1 -0 1]> git commit -m 'change1'
[master 8686194] change1
1 file changed, 1 insertion(+), 1 deletion(-)
C:\Users\Lion\Documents\GitHub\NewWork [master]> git push origin master
Counting objects: 5, done.
Delta compression using up to 2 threads.
Compressing objects: 100% (4/4), done.
Writing objects: 100% (5/5), 693 bytes | 0 bytes/s, done.
Total 5 (delta 0), reused 0 (delta 0)
To http://github.com/lubomir97/lab1.git
 c62e84a..8686194 master -> master
C:\Users\Lion\Documents\GitHub\NewWork [master]>
```

Переключення на гілку, яка була створена в пункті 12 а також змінення файлу, що був доданий в пункті 12

```
posh~git ~ NewWork [Second]
C:\Users\Lion\Documents\GitHub\NewWork [master]> git checkout Second
Switched to branch 'Second'
C:\Users\Lion\Documents\GitHub\NewWork [Second]> git add NewFile.txt
C:\Users\Lion\Documents\GitHub\NewWork [Second +0 ~1 -0]> git commit -m 'change2'
[Second 4ecffc9] change2
1 file changed, 1 insertion(+), 1 deletion(-)
C:\Users\Lion\Documents\GitHub\NewWork [Second]> git push origin Second
error: src refspec Second does not match any.
error: failed to push some refs to 'http://github.com/lubomir97/lab1.git'
C:\Users\Lion\Documents\GitHub\NewWork [Second]> git push origin Second
Counting objects: 3, done.
Delta compression using up to 2 threads.
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 290 bytes | 0 bytes/s, done.
Total 3 (delta 0), reused 0 (delta 0)
To http://github.com/lubomir97/lab1.git
b67dde0..4ecffc9 Second -> Second
C:\Users\Lion\Documents\GitHub\NewWork [Second]>
```

Об'єднання створеної гілки з основною. Вирішення конфлікту в ручну(1)

```
posh~git ~ NewWork [master]
C:\Users\Lion\Documents\GitHub\NewWork [Second]> git checkout master
Switched to branch 'master'
Your branch is up-to-date with 'origin/master'.
C:\Users\Lion\Documents\GitHub\NewWork [master]> git merge Second
Auto-merging NewFile.txt
CONFLICT (content): Merge conflict in NewFile.txt
Automatic merge failed; fix conflicts and then commit the result.
C:\Users\Lion\Documents\GitHub\NewWork [master +0 ~0 -0 !1 ! +0 ~0 -0 !1]>
```

```
NewFile.txt — Блокнот
Файл  Правка  Формат  Вид  Справка
<<<<<<< HEAD
i like football
=====
i like football|
>>>>>> Second
```

Об'єднання створеної гілки з основною. Вирішення конфлікту в ручну(2)

```
posh~git ~ NewWork [Second]
C:\Users\Lion\Documents\GitHub\NewWork [master +0 ~0 -0 ?1 ! +0 ~0 -0 ?1]> git add NewFile.txt
C:\Users\Lion\Documents\GitHub\NewWork [master +0 ~1 -0]> git commit -m 'Fixed conflict'
[master 18d37f1] Fixed conflict
C:\Users\Lion\Documents\GitHub\NewWork [master]> git push origin master
Counting objects: 3, done.
Delta compression using up to 2 threads.
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 410 bytes | 0 bytes/s, done.
Total 3 (delta 0), reused 0 (delta 0)
To http://github.com/lubomir97/lab1.git
   8686194..18d37f1  master -> master
C:\Users\Lion\Documents\GitHub\NewWork [master]> git checkout Second
Switched to branch 'Second'
C:\Users\Lion\Documents\GitHub\NewWork [Second]> git push origin Second
Everything up-to-date
C:\Users\Lion\Documents\GitHub\NewWork [Second]> git status
On branch Second
nothing to commit, working directory clean
C:\Users\Lion\Documents\GitHub\NewWork [Second]> git add NewFile.txt
C:\Users\Lion\Documents\GitHub\NewWork [Second]> git merge master
Updating 4ecffc9..18d37f1
Fast-forward
 NewFile.txt    | 6 +++++-
 function.txt   | 1 +
 program.txt    | 1 +
 3 files changed, 7 insertions(+), 1 deletion(-)
 create mode 100644 function.txt
 create mode 100644 program.txt
C:\Users\Lion\Documents\GitHub\NewWork [Second]>
```


Висновки

На цій лабораторній роботі я здобув необхідні
знання та навички для роботи з системою
керування версіями Git