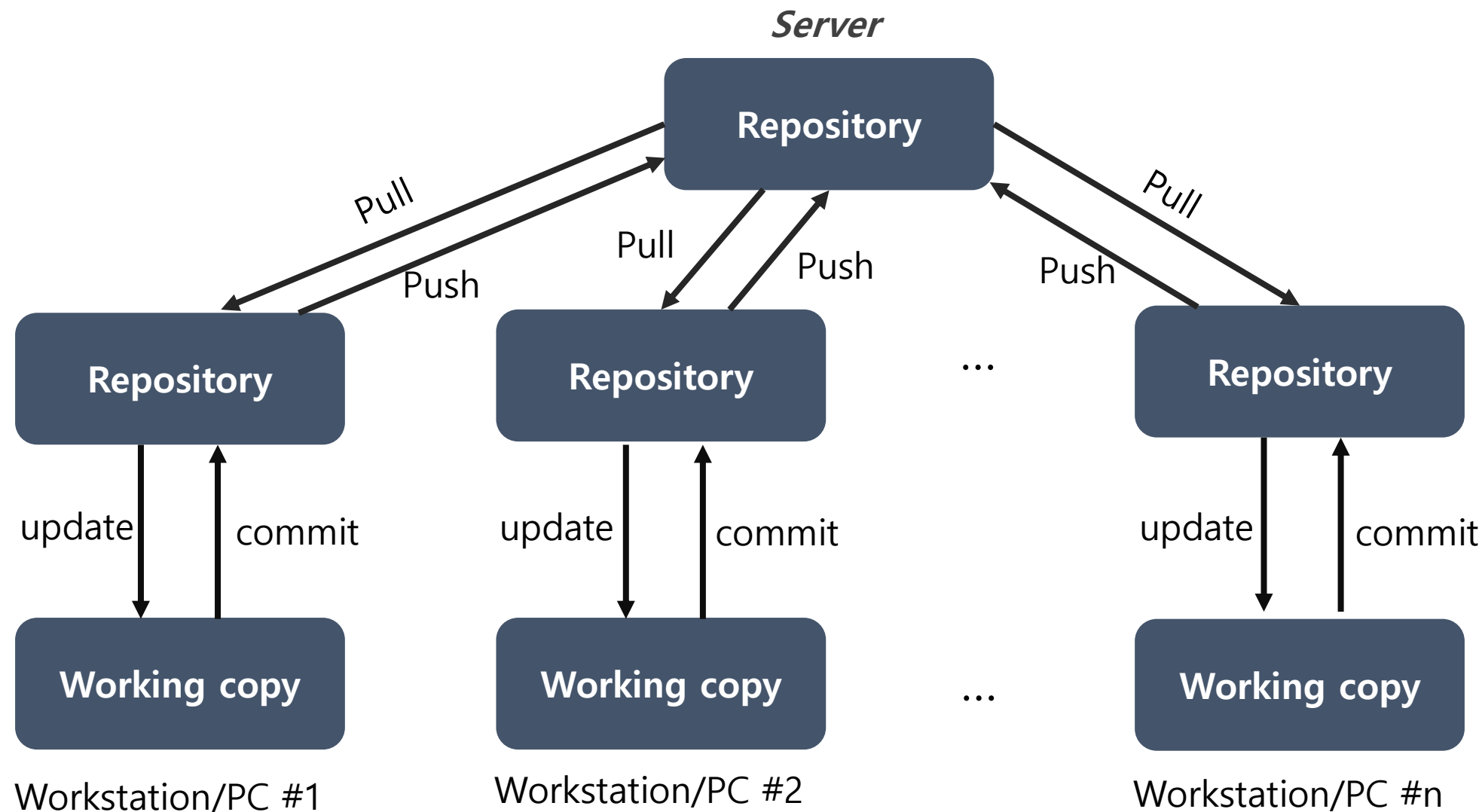


LAB1

What is Git



How to sign in GitLab

1. Go to <http://hconnect.hanyang.ac.kr>, and click [Sign in with Hanyang] button



GitLab Community Edition

Open source software to collaborate on code

Manage Git repositories with fine-grained access controls that keep your code secure. Perform code reviews and enhance collaboration with merge requests. Each project can also have an issue tracker and a wiki.

Sign in

Register

Username or email

Password

☐ Remember me

[Forgot your password?](#)

Sign in

Sign in with

Hanyang

☐ Remember me

How to sign in GitLab

2. Login with Hanyang's account



한양대학교 | 로그인

고객님의 정보에 접근하기 위하여 인증이 필요합니다.
한양대학교 포털 한양인(HY-in)계정으로 로그인 하시기 바랍니다.

Portal Login

ID

20XXXXXXXX


Password

***** 입력하세요

로그인

How to sign in GitLab

3. Check agreement

**한양대학교 | 개인정보의 제 3자 제공동의 요청**

한양대학교 OPEN API는 아래와 같은 개인정보를 온라인 소프트웨어 교육 지원 시스템 - QA 에 제공합니다.

제공 받는자

커넥트재단 (온라인 소프트웨어 교육 지원 시스템 - QA)

제공 목적

웹상에서 학생 실습코드를 저장하고 빌드 하며 채점, 코드 리뷰를 수행하는 시스템 입니다.

실습 코드 저장은 GITLABCE를 활용할 예정이고
코드 리뷰는 REVIEW BOARD, 빌드 및 채점은 JENKINS를 사용할 예정입니다.

한양대 도메인을 통해 서비스 하고 한양대 학생 인증을 적용할 예정입니다.
** 개발 후 QA 가 검증하여 버그를 찾는데 사용하는 QA 환경 입니다.

제공 항목

모든 항목에 동의하시어야만 이용 가능합니다.

로그인사용자 정보조회
[포털에서 설정한 대표 신분 정보]
로그인한 사용자의 성명, 사용자ID, 학번(개인번호), 학과(계직) 여부, 소속대학, 소속명, 소속코드, 소속ID, 사용자구분명의 정보를 제공합니다.

1

전체 동의합니다. ☐

동의합니다. ☐

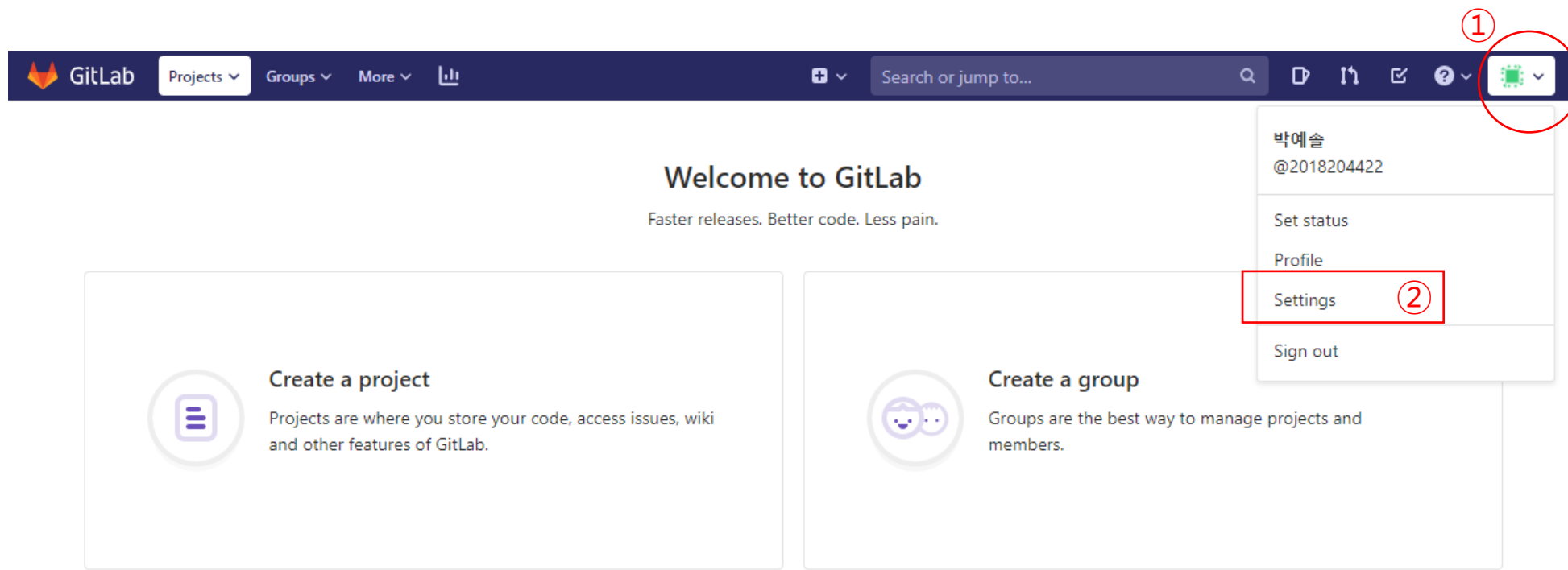
2

동의

거절

GitLab Initial Setting

1. Set password



GitLab Initial Setting

1. Set password

The screenshot shows the GitLab User Settings interface. On the left sidebar, the 'Password' option is highlighted with a red circle and the number 3. The main content area is titled 'User Settings > Edit Password' and 'Password'. It includes a red circle with the number 4 around the 'Change your password' section, which contains 'New password' and 'Password confirmation' input fields. A red circle with the number 5 is around the 'Save password' button.

GitLab Projects Groups More

User Settings

Profile

Account

Applications

Chat

Access Tokens

Emails

Password

Notifications

SSH Keys

GPG Keys

Preferences

Active Sessions

Authentication log

User Settings > Edit Password

Password

After a successful password update, you will be redirected to the login page where you can log in with your new password.

Change your password

New password

Password confirmation

Save password

GitLab Initial Setting

2. Set Email

The screenshot shows the GitLab web interface. The top navigation bar includes the GitLab logo, 'Projects', 'Groups', 'More', and a search bar. The left sidebar contains 'User Settings' with sub-items: Profile, Account, Applications, Chat, Access Tokens, **Emails** (circled with a red circle and labeled '1'), Password, Notifications, and SSH Keys. The main content area is titled 'User Settings > Emails' and 'Emails'. It includes the subtitle 'Control emails linked to your account'. Below this is the 'Add email address' section, which has a text input field (circled with a red circle and labeled '2') and a green 'Add email address' button (circled with a red circle and labeled '3'). At the bottom is the 'Linked emails (1)' section, which contains a list of five bullet points explaining the use of different email addresses.

GitLab Projects Groups More

User Settings

Profile

Account

Applications

Chat

Access Tokens

Emails

Password

Notifications

SSH Keys

User Settings > Emails

Emails

Control emails linked to your account

Add email address

Email

Add email address

Linked emails (1)

- Your Primary Email will be used for avatar detection.
- Your Commit Email will be used for web based operations, such as edits and merges.
- Your Default Notification Email will be used for account notifications if a [group-specific email address](#) is not set.
- Your Public Email will be displayed on your public profile.
- All email addresses will be used to identify your commits.

GitLab Initial Setting

3. Login



GitLab Community Edition

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Sign in

Register

Username or email

username@email.com

Password

☐ Remember me

[Forgot your password?](#)

Sign in

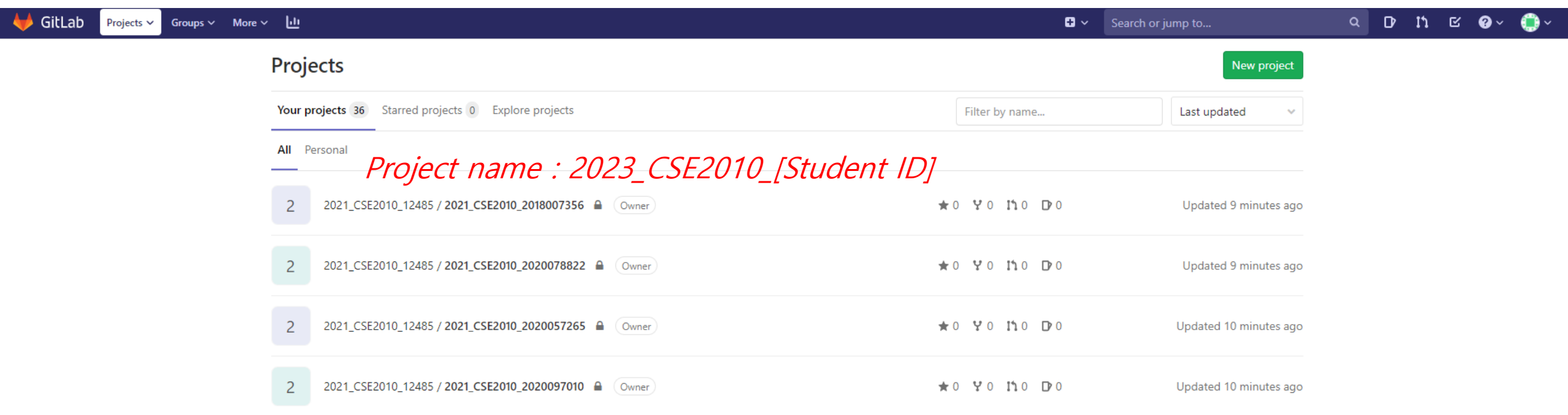
Sign in with

Hanyang

☐ Remember me

GitLab Initial Setting

4. Check if project exist



The screenshot shows the GitLab web interface. At the top is a dark blue navigation bar with the GitLab logo, 'Projects' dropdown, 'Groups' dropdown, 'More' dropdown, and a search bar. Below the navigation bar, the 'Projects' section is visible. It includes a 'New project' button and tabs for 'Your projects' (36), 'Starred projects' (0), and 'Explore projects'. A filter bar with 'Filter by name...' and 'Last updated' is present. The 'All' tab is selected, showing a list of projects. A red handwritten note is overlaid on the first project entry.

Projects New project

Your projects **36** Starred projects **0** Explore projects

Filter by name... Last updated

All Personal

Project name : 2023_CSE2010_[Student ID]

2	2021_CSE2010_12485 / 2021_CSE2010_2018007356	Owner	★ 0	👤 0	🔍 0	📄 0	Updated 9 minutes ago
2	2021_CSE2010_12485 / 2021_CSE2010_2020078822	Owner	★ 0	👤 0	🔍 0	📄 0	Updated 9 minutes ago
2	2021_CSE2010_12485 / 2021_CSE2010_2020057265	Owner	★ 0	👤 0	🔍 0	📄 0	Updated 10 minutes ago
2	2021_CSE2010_12485 / 2021_CSE2010_2020097010	Owner	★ 0	👤 0	🔍 0	📄 0	Updated 10 minutes ago

Download

- Oracle VM Virtual Box
- Ubuntu 20.04.3 LTS
- gcc 9.3.0
- git

Install Git(Linux)

Ubuntu \$ sudo apt-get install git

Fedora \$ sudo yum install git



```
mrbin2002@ubuntu:~$ sudo apt-get install git
[sudo] password for mrbin2002:
Reading package lists... Done
Building dependency tree
Reading state information... Done
git is already the newest version.
0 upgraded, 0 newly installed, 0 to remove and 51 not upgraded.
mrbin2002@ubuntu:~$
```

The image shows a terminal window with a title bar that reads "mrbin2002 — mrbin2002@ubuntu: ~ — ssh mrbin2002@10.211.55.7 — 74x21". The terminal content shows the command "sudo apt-get install git" being executed. It prompts for a password, then shows the progress of reading package lists, building the dependency tree, and reading state information. The output indicates that git is already the newest version and that no packages were upgraded, newly installed, or removed, with 51 packages not upgraded. The prompt returns to the user.

Git Usage

1. Set user info

```
$ git config --global user.name "20000000000"
```

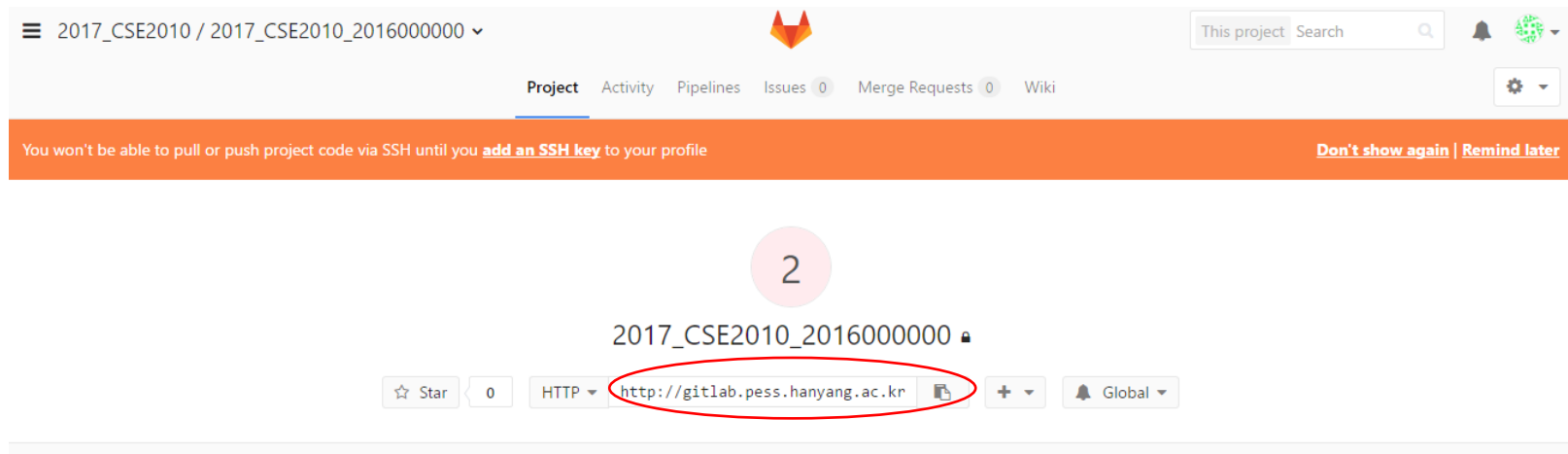
```
$ git config --global user.email "20000000000@hanyang.ac.kr"
```

Git Usage

2. Clone project

```
$ git clone http://hconnect.hanyang.ac.kr/2023_[Course no.]_20XXXXXXXXX.git
```

You can check the address of your git at GitLab webpage. GitLab 사이트에서 주소 확인 가능

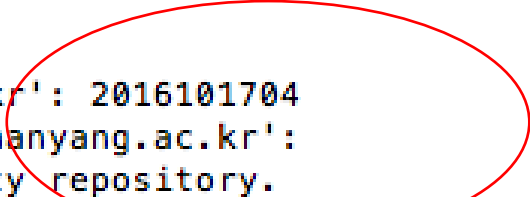


Git Usage

2. Clone project

And type your username and password

```
[YSPARKui-MacBook-Air:~ YS$ git clone http://hconnect.hanyang.ac.kr/2017_CSE2010_13058/2017_CSE2010_0000000000.git
Cloning into '2017_CSE2010_0000000000'...
Username for 'http://hconnect.hanyang.ac.kr': 2016101704
>Password for 'http://2016101704@hconnect.hanyang.ac.kr':
warning: You appear to have cloned an empty repository.
```



Git Usage

3. Move to project directory

```
$ cd 2023_[Course no.]_20XXXXXXX
```

```
YSPARKui-MacBook-Air:GitLab YS$ ls  
2017_CSE2010_2016000000  
YSPARKui-MacBook-Air:GitLab YS$ cd 2017_CSE2010_2016000000/
```

4. Create a directory

```
$ mkdir [directory name]
```

```
YSPARKui-MacBook-Air:2017_CSE2010_2016000000 YS$ mkdir Assignment0  
YSPARKui-MacBook-Air:2017_CSE2010_2016000000 YS$ ls  
Assignment0
```


Git Usage

5. Move to project directory

```
$ cd [directory name]
```

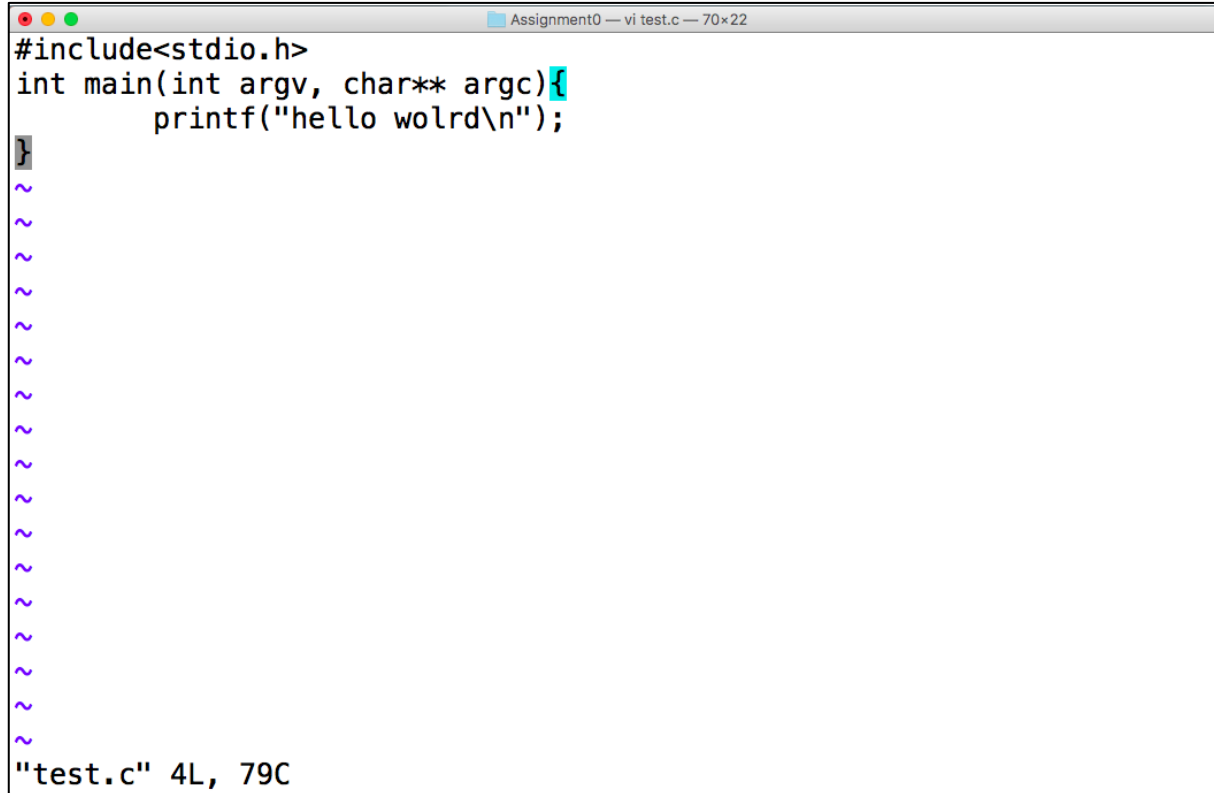
```
YSPARKui-MacBook-Air:2017_CSE2010_2016000000 YS$ cd Assignment0/  
YSPARKui-MacBook-Air:Assignment0 YS$ ls
```

6-1. Create a file

```
$ vi [file name]
```

Git Usage

6-2. Type your code



The image shows a screenshot of a vi editor window. The title bar at the top reads "Assignment0 — vi test.c — 70x22". The editor contains the following C code:

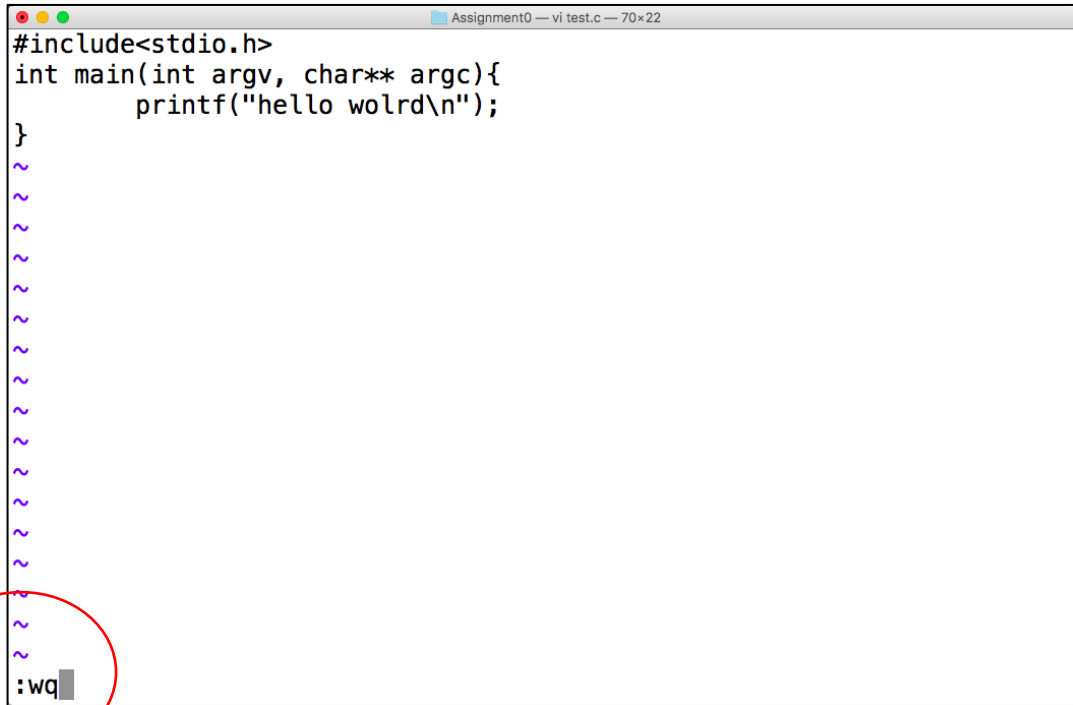
```
#include<stdio.h>
int main(int argv, char** argc){
    printf("hello wolrd\n");
}
```

Below the code, there are several lines of tilde (~) characters, indicating that the code is being typed or edited. At the bottom left of the editor, the status line shows "`test.c`" 4L, 79C".

Git Usage

6-3. Save the file

press [ESC] ► type ":wq"

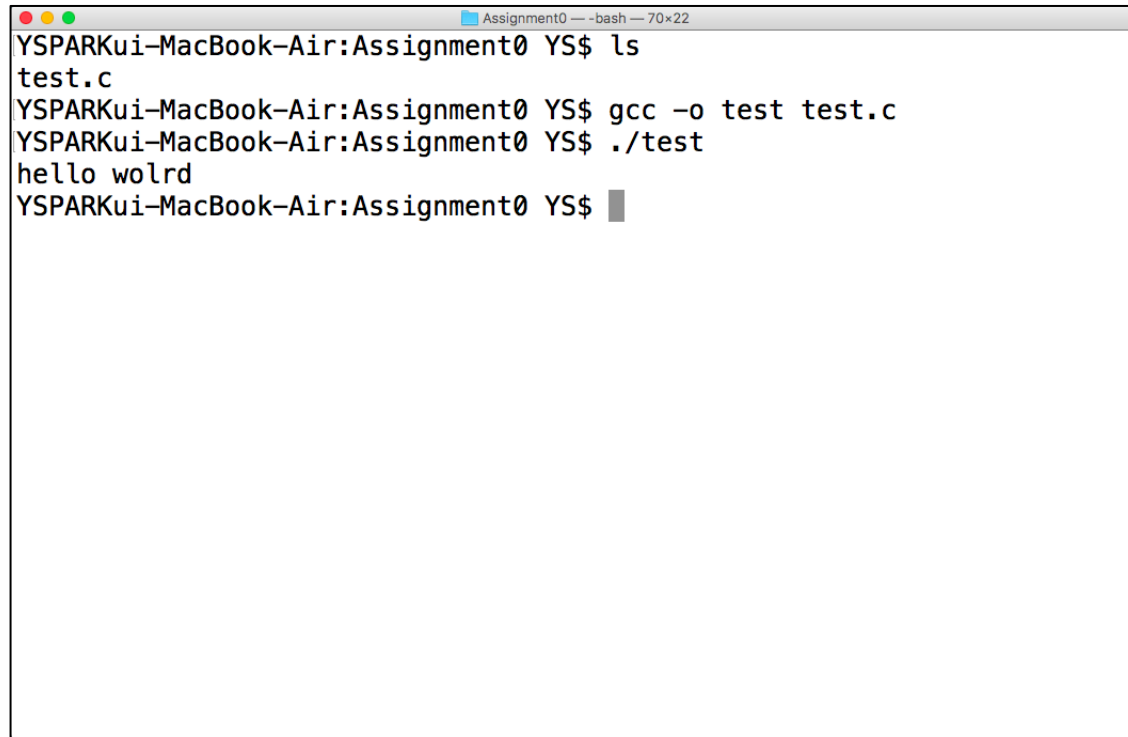


```
Assignment0 — vi test.c — 70x22
#include<stdio.h>
int main(int argv, char** argc){
    printf("hello wolrd\n");
}
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
:wq
```

Git Usage

6-4. Compile and execute

```
$ gcc -o [object file name] [code file name]
```

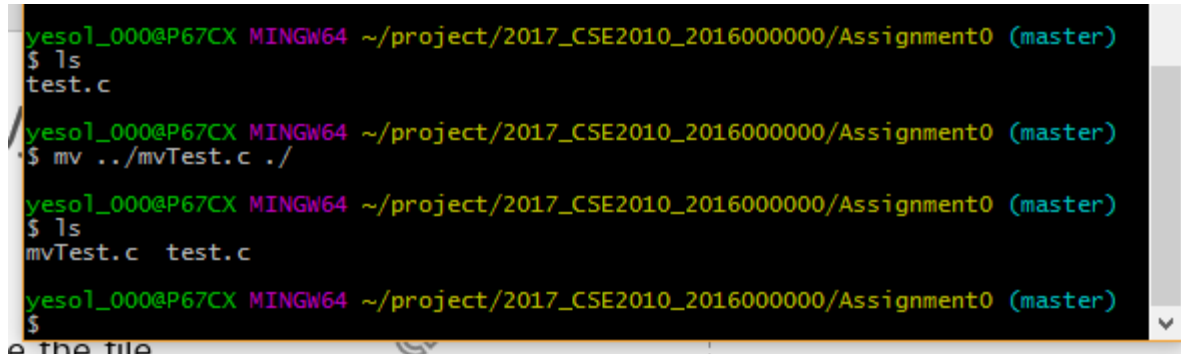


```
YSPARKui-MacBook-Air:Assignment0 YS$ ls
test.c
YSPARKui-MacBook-Air:Assignment0 YS$ gcc -o test test.c
YSPARKui-MacBook-Air:Assignment0 YS$ ./test
hello world
YSPARKui-MacBook-Air:Assignment0 YS$
```

Git Usage

7. Move the file

```
$ mv [old location] [new location]
```

A terminal window screenshot showing a sequence of commands and outputs. The prompt is 'yesol_000@P67CX MINGW64 ~/project/2017_CSE2010_2016000000/Assignment0 (master)'. The first command is '\$ ls' with output 'test.c'. The second command is '\$ mv ../mvTest.c ./' with no output. The third command is '\$ ls' with output 'mvTest.c test.c'. The prompt is repeated at the end.

```
yesol_000@P67CX MINGW64 ~/project/2017_CSE2010_2016000000/Assignment0 (master)
$ ls
test.c

yesol_000@P67CX MINGW64 ~/project/2017_CSE2010_2016000000/Assignment0 (master)
$ mv ../mvTest.c ./

yesol_000@P67CX MINGW64 ~/project/2017_CSE2010_2016000000/Assignment0 (master)
$ ls
mvTest.c test.c

yesol_000@P67CX MINGW64 ~/project/2017_CSE2010_2016000000/Assignment0 (master)
$
```

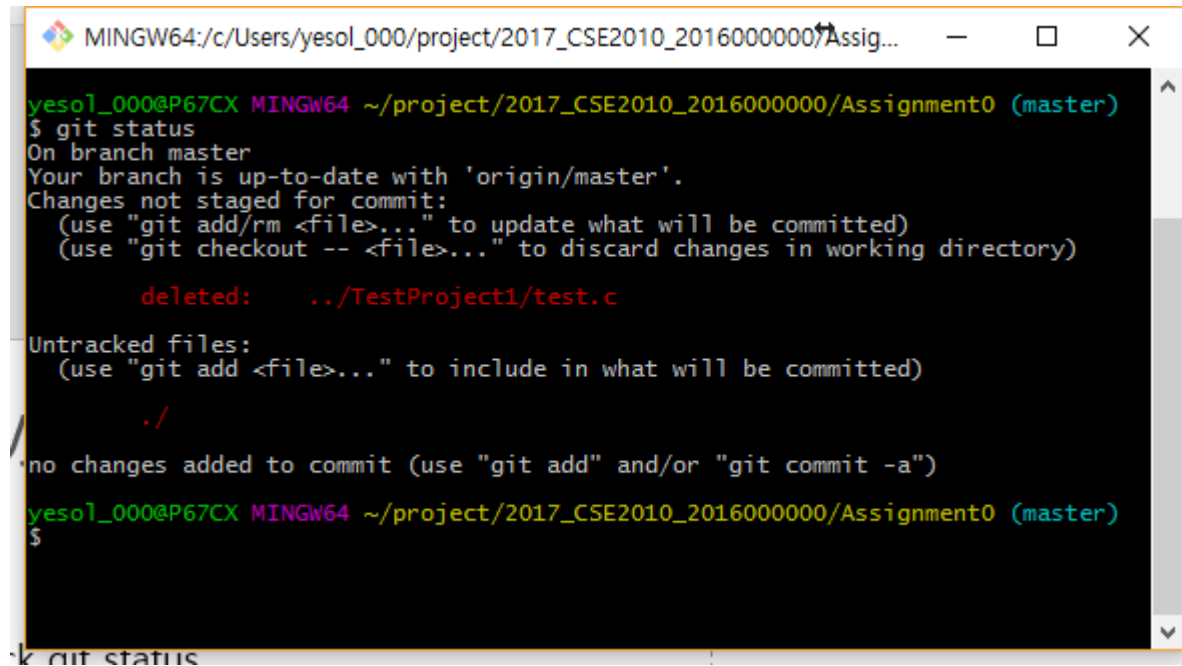
../ : Parent directory

./ : Current directory

Git Usage

8. Print the status of git

```
$ git status
```



```
MINGW64:/c:/Users/yesol_000/project/2017_CSE2010_2016000000/Assignment0
yesol_000@P67CX MINGW64 ~/project/2017_CSE2010_2016000000/Assignment0 (master)
$ git status
On branch master
Your branch is up-to-date with 'origin/master'.
Changes not staged for commit:
  (use "git add/rm <file>..." to update what will be committed)
  (use "git checkout -- <file>..." to discard changes in working directory)

        deleted:    ../TestProject1/test.c

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

        ./

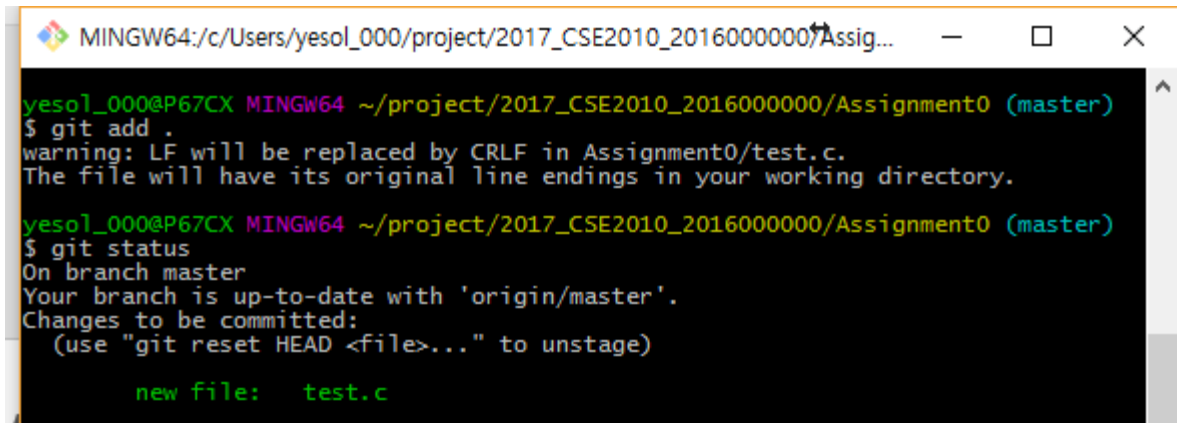
no changes added to commit (use "git add" and/or "git commit -a")
yesol_000@P67CX MINGW64 ~/project/2017_CSE2010_2016000000/Assignment0 (master)
$
```

Git Usage

9. Add all files in the directory to git

```
$ git add .
```

```
$ git status
```

A screenshot of a terminal window titled 'MINGW64:/c:/Users/yesol_000/project/2017_CSE2010_2016000000/Assig...'. The terminal shows the following commands and output:

```
yesol_000@P67CX MINGW64 ~/project/2017_CSE2010_2016000000/Assignment0 (master)
$ git add .
warning: LF will be replaced by CRLF in Assignment0/test.c.
The file will have its original line endings in your working directory.

yesol_000@P67CX MINGW64 ~/project/2017_CSE2010_2016000000/Assignment0 (master)
$ git status
On branch master
Your branch is up-to-date with 'origin/master'.
Changes to be committed:
  (use "git reset HEAD <file>..." to unstage)

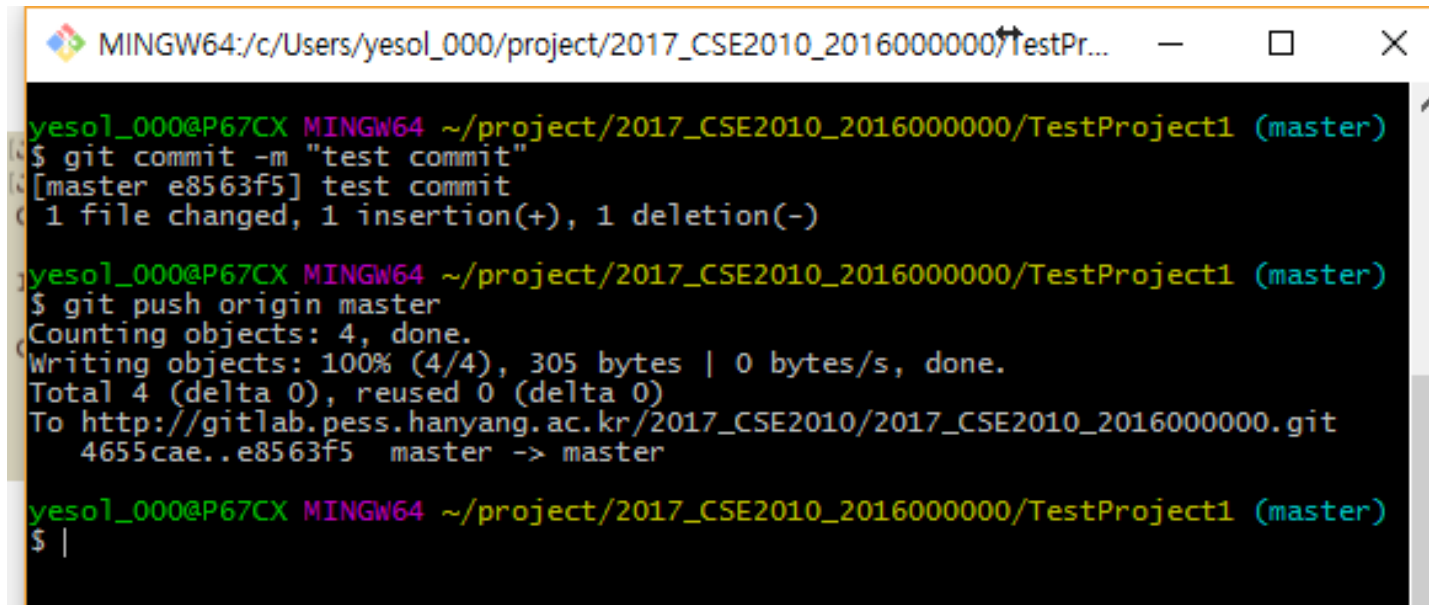
    new file:   test.c
```

Git Usage

10. Commit file (Save to local repository 지역 저장소에 저장)

```
$ git commit -m "[commit log message]"
```

```
$ git push origin master
```

A screenshot of a terminal window with a black background and green and white text. The window title is 'MINGW64:/c/Users/yesol_000/project/2017_CSE2010_2016000000/TestPr...'. The user is at the prompt 'yesol_000@P67CX MINGW64 ~/project/2017_CSE2010_2016000000/TestProject1 (master)'. They enter '\$ git commit -m "test commit"', and the output shows '[master e8563f5] test commit' and '1 file changed, 1 insertion(+), 1 deletion(-)'. Then they enter '\$ git push origin master', and the output shows 'Counting objects: 4, done.', 'Writing objects: 100% (4/4), 305 bytes | 0 bytes/s, done.', 'Total 4 (delta 0), reused 0 (delta 0)', and 'To http://gitlab.pess.hanyang.ac.kr/2017_CSE2010/2017_CSE2010_2016000000.git 4655cae..e8563f5 master -> master'. Finally, they enter '\$ |' at the prompt.

```
yesol_000@P67CX MINGW64 ~/project/2017_CSE2010_2016000000/TestProject1 (master)
$ git commit -m "test commit"
[master e8563f5] test commit
1 file changed, 1 insertion(+), 1 deletion(-)

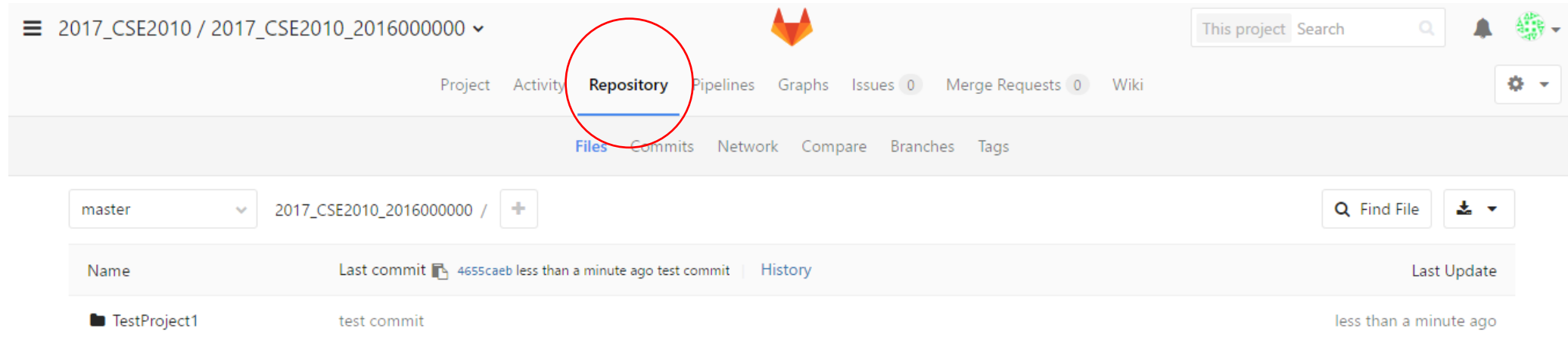
yesol_000@P67CX MINGW64 ~/project/2017_CSE2010_2016000000/TestProject1 (master)
$ git push origin master
Counting objects: 4, done.
Writing objects: 100% (4/4), 305 bytes | 0 bytes/s, done.
Total 4 (delta 0), reused 0 (delta 0)
To http://gitlab.pess.hanyang.ac.kr/2017_CSE2010/2017_CSE2010_2016000000.git
4655cae..e8563f5 master -> master

yesol_000@P67CX MINGW64 ~/project/2017_CSE2010_2016000000/TestProject1 (master)
$ |
```

※ Commit log message should be write in detail
로그 메시지는 최대한 자세히 작성할 것.
ex) This is a program that prints a message "hello world"

Git Usage

11. You can check the files pushed at GitLab.




The screenshot shows the GitLab interface for a repository named '2017_CSE2010 / 2017_CSE2010_2016000000'. The 'Repository' tab is highlighted with a red circle. Below the navigation bar, the 'Files' tab is selected, showing a file tree with 'TestProject1' and its commit history.

Name	Last commit	Last Update
TestProject1	test commit	less than a minute ago



Git Usage

12. Comment

2017_CSE2010 / 2017_CSE2010_2016000000



This project Search






Project Activity **Repository** Pipelines Graphs Issues 0 Merge Requests 0 Wiki

Files Commits Network Compare Branches Tags

master 2017_CSE2010_2016000000 / +

Find File



Name	Last commit  4655caeb less than a minute ago test commit History	Last Update
 TestProject1	test commit	less than a minute ago

Git Usage

12. Comment

Showing 1 changed file with 1 additions and 1 deletions

Hide whitespace changes

Inline

Side-by-side

▼


TestProject1/test.c

📄

🗨️

View file @e8563f5

1	-	hello world
	1	+ hello world;
...		...



박예슬 @2016101704 commented in 17 seconds


Owner

😊

✎

🗑️

Good!



WritePreview

B

I

”

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≡

≡

✓

✕

Write a comment or drag your files here...