

# SKKU Overflow 전체총회

개발자가 되기 위한 발걸음, 제 2차 GIT 교육



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- Merge
- Rebase
- Continue

00

이전 내용 복습



<https://github.com/skku-overflow/git-study-2/tree/master>



skku-overflow / git-study-2

Watch 1 Star 0 Fork 0

Code Issues 0 Pull requests 0 Projects 0 Wiki Security Insights

No description, website, or topics provided.

4 commits 2 branches 0 releases 1 contributor

Branch: master New pull request Create new file Upload files Find file Clone or download


kdy1 1. 제거	Latest commit f15f2ba 2 days ago
.gitignore	Initial commit 2 days ago
README.md	1. 제거 2 days ago
main.py	Hello, world! 2 days ago






00

이전 내용 복습

내 Repository에 들어와있는지 확인!





 **Sungayoung / git-study-2**  
forked from [skku-overflow/git-study-2](#)

 Watch 0  Star 0  Fork 1

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*No description, website, or topics provided.* [Edit](#)

[Manage topics](#)

 **4 commits**  **2 branches**  **0 releases**  **1 contributor**

Branch: master ▾

New pull request





Create new file

Upload files

Find file

Clone or download ▾


This branch is even with [skku-overflow:master](#). [Pull request](#) [Compare](#)


 <b>kdy1 1. 제거</b>	Latest commit <a href="#">f15f2ba</a> 2 days ago
 <a href="#">.gitignore</a>	Initial commit 2 days ago
 <a href="#">README.md</a>	1. 제거 2 days ago
 <a href="#">main.py</a>	Hello, world! 2 days ago





00

이전 내용 복습

 **Sungayoung / git-study-2**  
forked from skku-overflow/git-study-2

 Watch 0


 Star 0


 Fork 1


[Code](#) [Pull requests 0](#) [Projects 0](#) [Wiki](#) [Security](#) [Insights](#) [Settings](#)


No description, website, or topics provided. [Edit](#)

[Manage topics](#)

 4 commits

 2 branches

 0 releases

 1 contributor

Branch: master ▾

New pull request


Create new file


Upload files


Find file


Clone or download ▾

This branch is even with skku-overflow:master.

 kdy1 1. 제거

 .gitignore

 README.md

 main.py


Initial commit

1. 제거

Hello, world!

Clone with SSH ⓘ

Use a password protected SSH key.

git@github.com:Sungayoung/git-study-2.git 

Open in Desktop

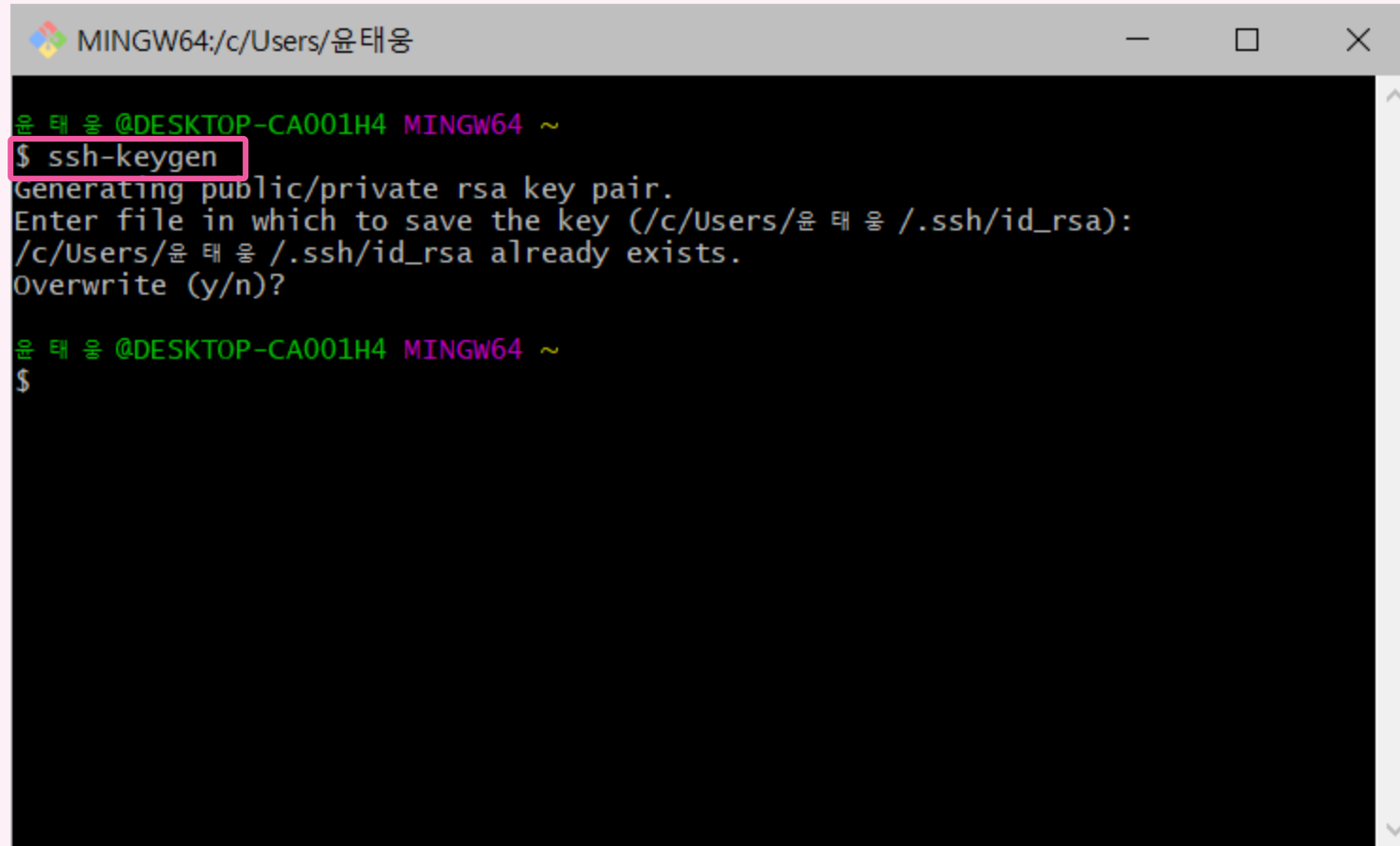
Download ZIP

2 days ago

SSH Key 복사



## 1. SSH key 생성



```
MINGW64:/c/Users/윤태웅

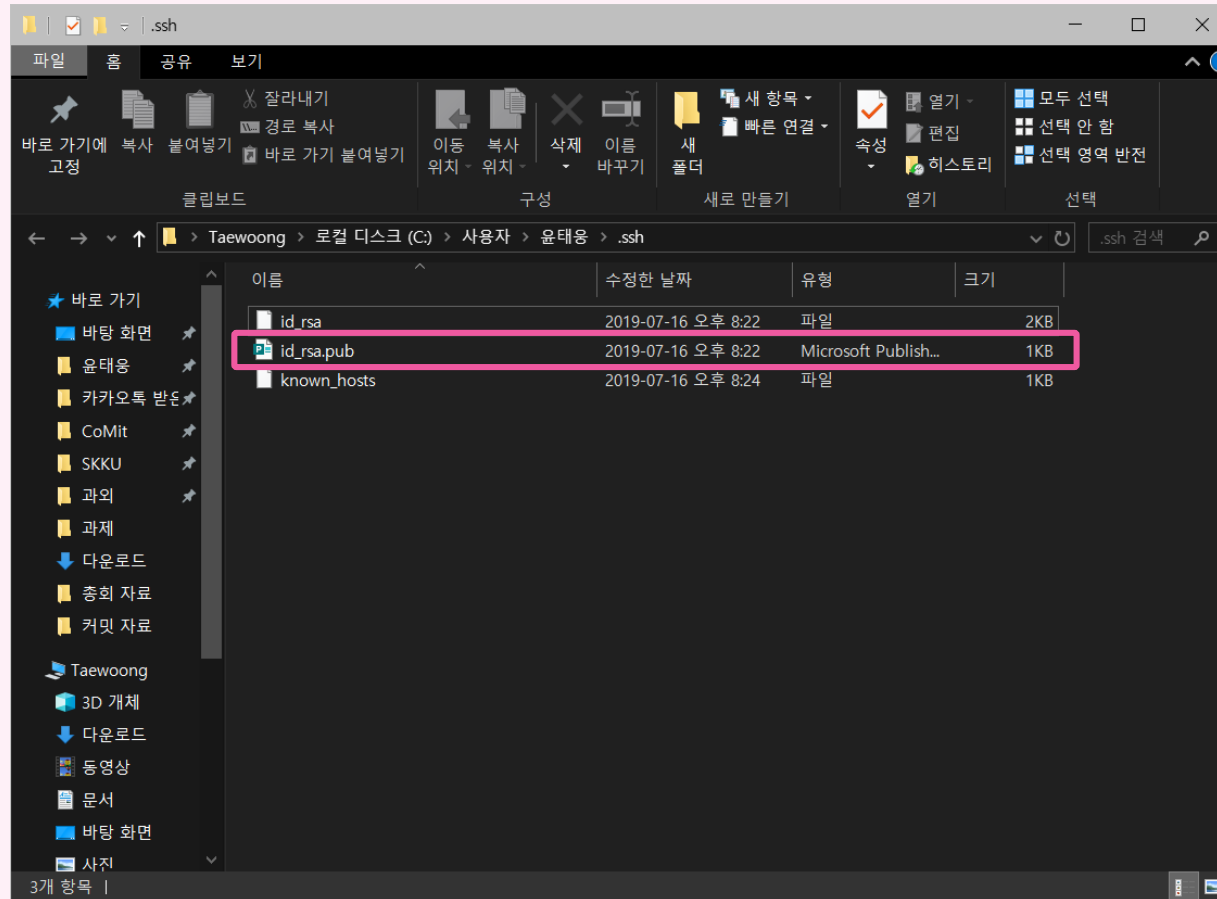
윤 태 웅 @DESKTOP-CA001H4 MINGW64 ~
$ ssh-keygen
Generating public/private rsa key pair.
Enter file in which to save the key (/c/Users/윤 태 웅 /.ssh/id_rsa):
/c/Users/윤 태 웅 /.ssh/id_rsa already exists.
Overwrite (y/n)?

윤 태 웅 @DESKTOP-CA001H4 MINGW64 ~
$
```

Git bash 창에 ssh-keygen 입력하고  
계속 엔터를 누른다.



## 2. SSH key 복사



users/.ssh/id\_rsa.pub 파일을 vscode로 열어서 값을 복사해두기





### 3. 원격 저장소에 키 입력

SSH keys / Add new

Title

Key

Begins with 'ssh-rsa', 'ssh-dss', 'ssh-ed25519', 'ecdsa-sha2-nistp256', 'ecdsa-sha2-nistp384', or 'ecdsa-sha2-nistp521'

Add SSH key

Github 사이트에서 [프로필] > [Settings] > [SSH and GPG keys] key에 붙여넣기



## 4. 로컬 저장소를 원격 저장소와 연결하기

Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere?  
[Import a repository.](#)

Owner: woongman1109 / Repository name: SKKU-Overflow-Git-ed. ✓

Great repository names are short and memorable. Need inspiration? How about [crispy-parakeet?](#)

Description (optional)

☒ Public  
Anyone can see this repository. You choose who can commit.

☐ Private  
You choose who can see and commit to this repository.

Skip this step if you're importing an existing repository.

☐ Initialize this repository with a README  
This will let you immediately clone the repository to your computer.

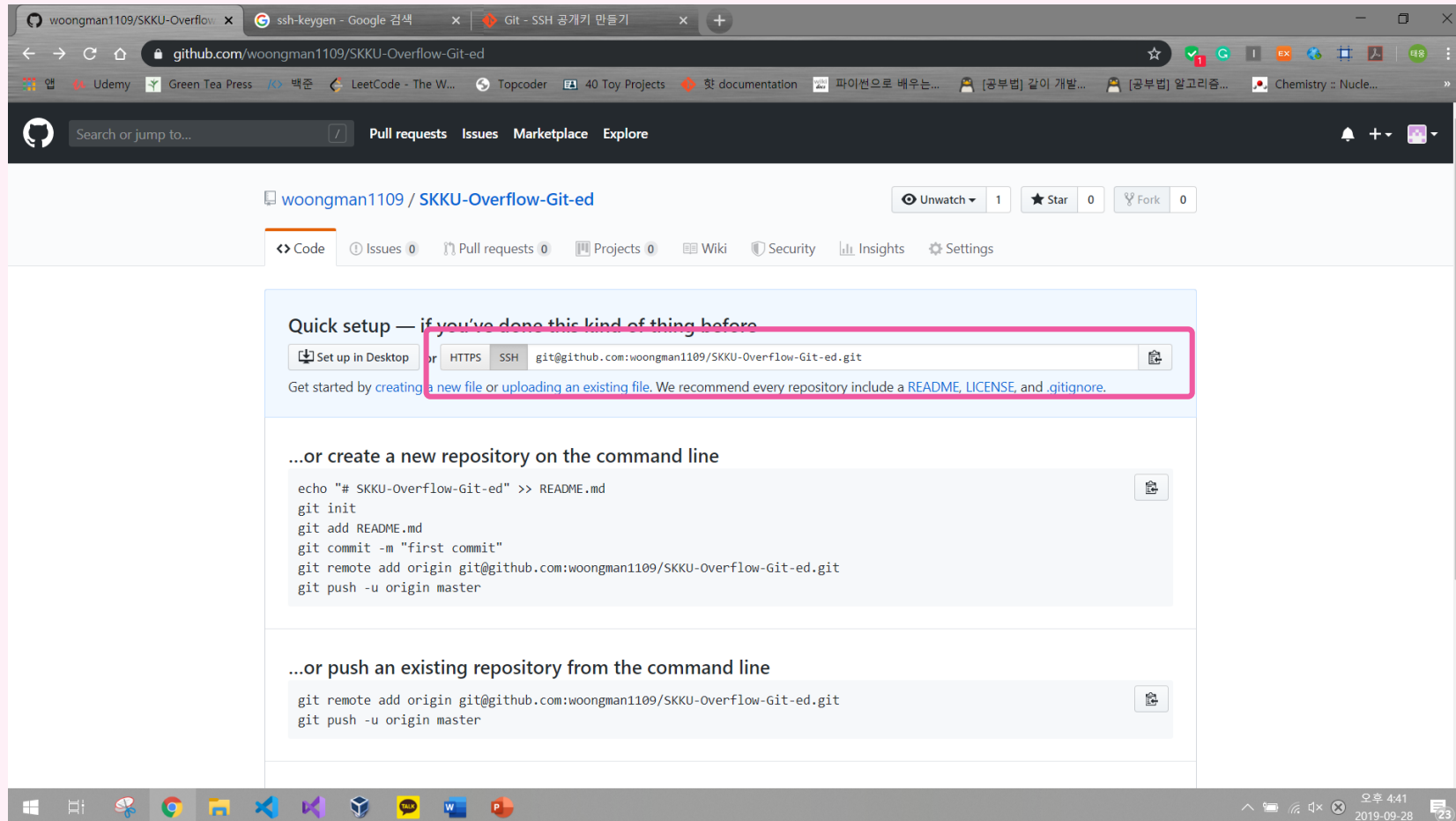
Add .gitignore: None Add a license: None ⓘ

Create repository

Github 사이트에서 [프로필] > [Your repositories] > [New] 에서  
이름 설정만 하고 Create Repository



## 5. 원격저장소의 URL 복사하기



woongman1109/SKKU-Overflow-Git-ed

Unwatch 1 Star 0 Fork 0

Code Issues 0 Pull requests 0 Projects 0 Wiki Security Insights Settings

Quick setup — if you've done this kind of thing before

Set up in Desktop or **SSH** `git@github.com:woongman1109/SKKU-Overflow-Git-ed.git`

Get started by [creating a new file](#) or [uploading an existing file](#). We recommend every repository include a [README](#), [LICENSE](#), and [.gitignore](#).

...or create a new repository on the command line

```
echo "# SKKU-Overflow-Git-ed" >> README.md
git init
git add README.md
git commit -m "first commit"
git remote add origin git@github.com:woongman1109/SKKU-Overflow-Git-ed.git
git push -u origin master
```

...or push an existing repository from the command line

```
git remote add origin git@github.com:woongman1109/SKKU-Overflow-Git-ed.git
git push -u origin master
```

다음 화면의 원격저장소 URL을 복사한다  
[SSH 버튼 눌린 거 확인하고 오른쪽에 있는 복사버튼 클릭]



```
MINGW64:/c/Users/hablo/git-study-2

hablo@LAPTOP-ICFQBEEU MINGW64 ~
$ git clone git@github.com:Sungayoung/git-study-2.git
Cloning into 'git-study-2'...
Warning: Permanently added the RSA host key for IP address '52.78.231.108' to the list of known hosts.
remote: Enumerating objects: 16, done.
remote: Counting objects: 100% (16/16), done.
remote: Compressing objects: 100% (15/15), done.
remote: Total 16 (delta 3), reused 14 (delta 1), pack-reused 0
Receiving objects: 100% (16/16), done.
Resolving deltas: 100% (3/3), done.

hablo@LAPTOP-ICFQBEEU MINGW64 ~
$ pwd
/c/Users/hablo

hablo@LAPTOP-ICFQBEEU MINGW64 ~
$ cd git-study-2

hablo@LAPTOP-ICFQBEEU MINGW64 ~/git-study-2 (master)
$ pwd
/c/Users/hablo/git-study-2
```

```
$ git clone git@github.com:<본인 github username>/git-study-2.git
$ cd git-study-2
```



00

이전 내용 복습

## | main.py 수정 |

```
1 # -*- coding:utf-8 -*-
2
3 # 2차 GIT 교육 총회 실습 자료
4
5 def main():
6     print("Hello, world!")
7
8
9 if __name__ == '__main__':
10     main()
11
```



00

이전 내용 복습

```
MINGW64:/c/Users/hablo/git-study-2

hablo@LAPTOP-ICFQBEEU MINGW64 ~
$ cd git-study-2

hablo@LAPTOP-ICFQBEEU MINGW64 ~/git-study-2 (master)
$ ls
main.py  README.md

hablo@LAPTOP-ICFQBEEU MINGW64 ~/git-study-2 (master)
$ vim main.py

hablo@LAPTOP-ICFQBEEU MINGW64 ~/git-study-2 (master)
$ git add main.py

hablo@LAPTOP-ICFQBEEU MINGW64 ~/git-study-2 (master)
$ git commit -m "first commit"
[master fcf4f1d] first commit
1 file changed, 1 insertion(+)

hablo@LAPTOP-ICFQBEEU MINGW64 ~/git-study-2 (master)
$ git log
commit fcf4f1db0716b2c4fc28dea1ca9d432eded94656 (HEAD -> master)
Author: --unset-all <--unset-all>
Date:   Mon Nov 11 01:44:49 2019 +0900

    first commit
```

```
$ git add main.py
```

```
$ git commit
```




## 이전 내용 복습


```
$ git push
```





00

이전 내용 복습

 Sungayoung / git-study-2  
forked from skku-overflow/git-study-2


 Watch 0


 Star 0



 Fork 2


[Code](#) [Pull requests 0](#) [Projects 0](#) [Wiki](#) [Security](#) [Insights](#) [Settings](#)


Branch: master ▾



 Commits on Nov 11, 2019


first commit  
 --unset-all committed 3 minutes ago



 fc f4f1d 


 Commits on Nov 6, 2019



1. 제거  
 kdy1 committed 4 days ago


 f15f2ba 



설명 추가  
 kdy1 committed 4 days ago

 a2ef4d6 

Hello, world!  
 kdy1 committed 4 days ago

 d24be58 

Initial commit  
 kdy1 committed 4 days ago

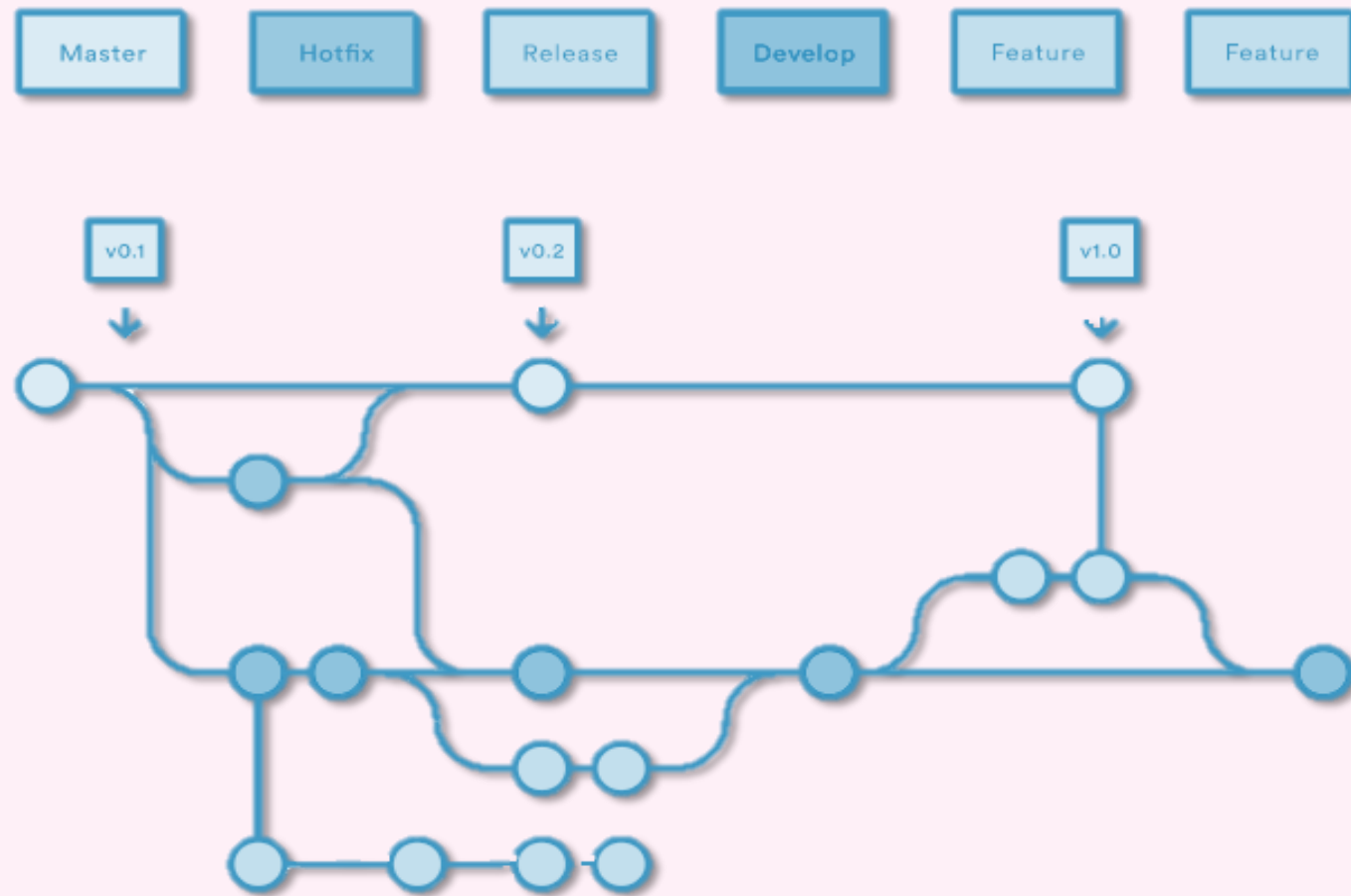
 c2424c4 





01

Branch란?



### Local

```
$ git checkout -b <branch 이름>
```

```
$ git checkout <branch 이름>
```

```
$ git branch -d <branch 이름>
```

```
$ git branch -D <branch 이름>
```

### Remote

```
$ git push origin <branch 이름>
```

### Local

지정한 이름으로 branch 생성

지정한 branch로 이동

지정한 branch 삭제

지정한 branch 강제삭제

### Remote

지정된 원격 저장소에 입력한 이름으로  
branch 현재 HEAD 내용을 push



```
MINGW64:/c/Users/윤태웅/Desktop/git-study-2

윤 태 웅 @DESKTOP-CA001H4 MINGW64 ~/Desktop/git-study-2 (master)
$ git checkout -b hotfix
Switched to a new branch 'hotfix'

윤 태 웅 @DESKTOP-CA001H4 MINGW64 ~/Desktop/git-study-2 (hotfix)
$ git add -A

윤 태 웅 @DESKTOP-CA001H4 MINGW64 ~/Desktop/git-study-2 (hotfix)
$ git commit -m "버그 수정"
[hotfix 3ddfc09] 버그 수정
1 file changed, 2 insertions(+)

윤 태 웅 @DESKTOP-CA001H4 MINGW64 ~/Desktop/git-study-2 (hotfix)
$ git push -u origin hotfix
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 8 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 396 bytes | 198.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object
remote:
remote: Create a pull request for 'hotfix' on GitHub by visiting:
remote:   https://github.com/woongman1109/git-study-2/pull/new
remote:
To github.com:woongman1109/git-study-2.git
 * [new branch]      hotfix -> hotfix
Branch 'hotfix' set up to track remote branch 'hotfix' from 'origin'

윤 태 웅 @DESKTOP-CA001H4 MINGW64 ~/Desktop/git-study-2 (hotfix)
$ git branch
* hotfix
  master
```

```
$ git checkout -b hotfix
```

```
$ git add -A
```

```
$ git commit -m "메시지"
```

```
$ git push -u origin hotfix
```

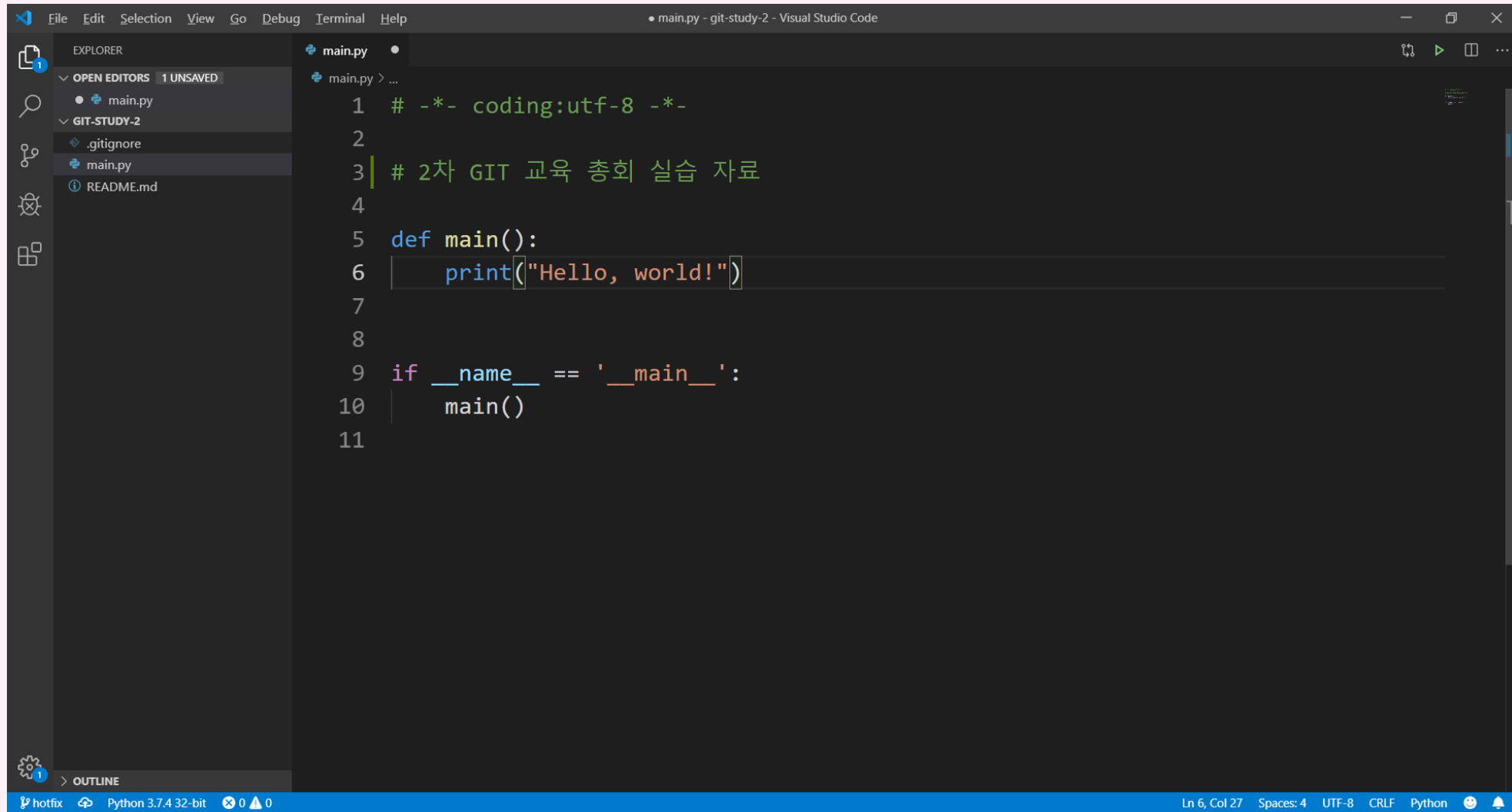
```
$ git branch
```



01

Branch란? [branch 생성&push]

| main.py 수정 |



```
1  # -*- coding:utf-8 -*-
2
3  # 2차 GIT 교육 총회 실습 자료
4
5  def main():
6      print("Hello, world!")
7
8
9  if __name__ == '__main__':
10     main()
11
```



```
MINGW64:/c/Users/윤태웅/Desktop/git-study-2
윤 태 웅 @DESKTOP-CA001H4 MINGW64 ~/Desktop/git-study-2 (master)
$ git checkout -b hotfix
Switched to a new branch 'hotfix'

윤 태 웅 @DESKTOP-CA001H4 MINGW64 ~/Desktop/git-study-2 (hotfix)
$ git add -A

윤 태 웅 @DESKTOP-CA001H4 MINGW64 ~/Desktop/git-study-2 (hotfix)
$ git commit -m "버그 수정"
[hotfix 3ddfc09] 버그 수정
1 file changed, 2 insertions(+)

윤 태 웅 @DESKTOP-CA001H4 MINGW64 ~/Desktop/git-study-2 (hotfix)
$ git push -u origin hotfix
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 8 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 396 bytes | 198.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object
remote:
remote: Create a pull request for 'hotfix' on GitHub by visiting:
remote:   https://github.com/woongman1109/git-study-2/pull/new
remote:
To github.com:woongman1109/git-study-2.git
 * [new branch]      hotfix -> hotfix
Branch 'hotfix' set up to track remote branch 'hotfix' from 'origin'

윤 태 웅 @DESKTOP-CA001H4 MINGW64 ~/Desktop/git-study-2 (hotfix)
$ git branch
* hotfix
master
```

```
$ git checkout -b hotfix
```


```
$ git add -A
```




```
$ git commit -m "메시지"
```

```
$ git push -u origin hotfix
```

```
$ git branch
```







 **woongman1109 / git-study-2**  
forked from skku-overflow/git-study-2

 Watch 0  Star 0  Fork 2


[Code](#) [Pull requests 0](#) [Projects 0](#) [Wiki](#) [Security](#) [Insights](#) [Settings](#)

No description, website, or topics provided. [Edit](#)

[Manage topics](#)


 7 commits  3 branches  0 releases  1 contributor

Your recently pushed branches:


 hotfix (less than a minute ago) [Compare & pull request](#)

Branch: hotfix [New pull request](#) [Create new file](#) [Upload files](#) [Find file](#) [Clone or download](#)

This branch is 2 commits ahead of skku-overflow:master. [Pull request](#) [Compare](#)

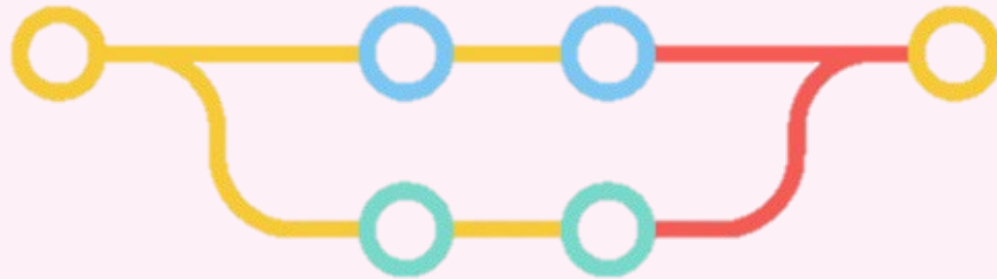
 woongman1109 버그 수정 Latest commit 3ddfc09 1 minute ago

<a href="#">.gitignore</a>	Initial commit	4 days ago
<a href="#">README.md</a>	추가	15 hours ago
<a href="#">main.py</a>	버그 수정	1 minute ago

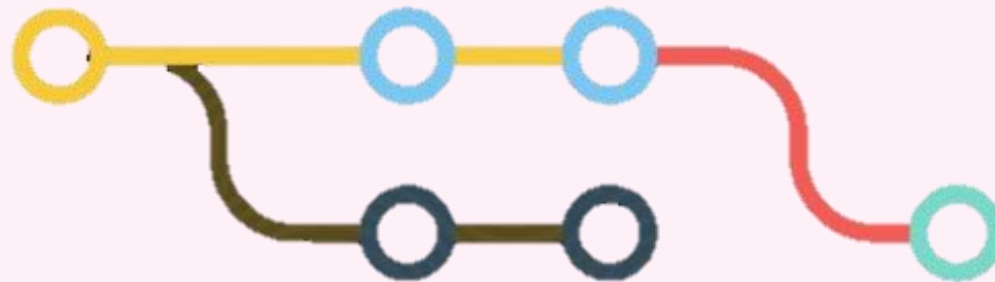
[README.md](#) 

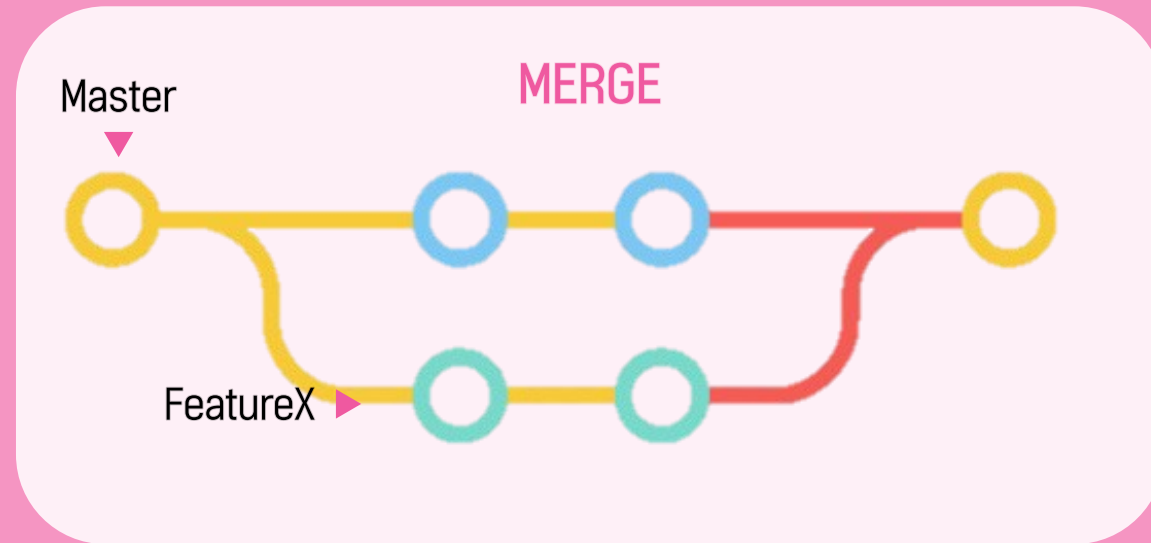


## MERGE



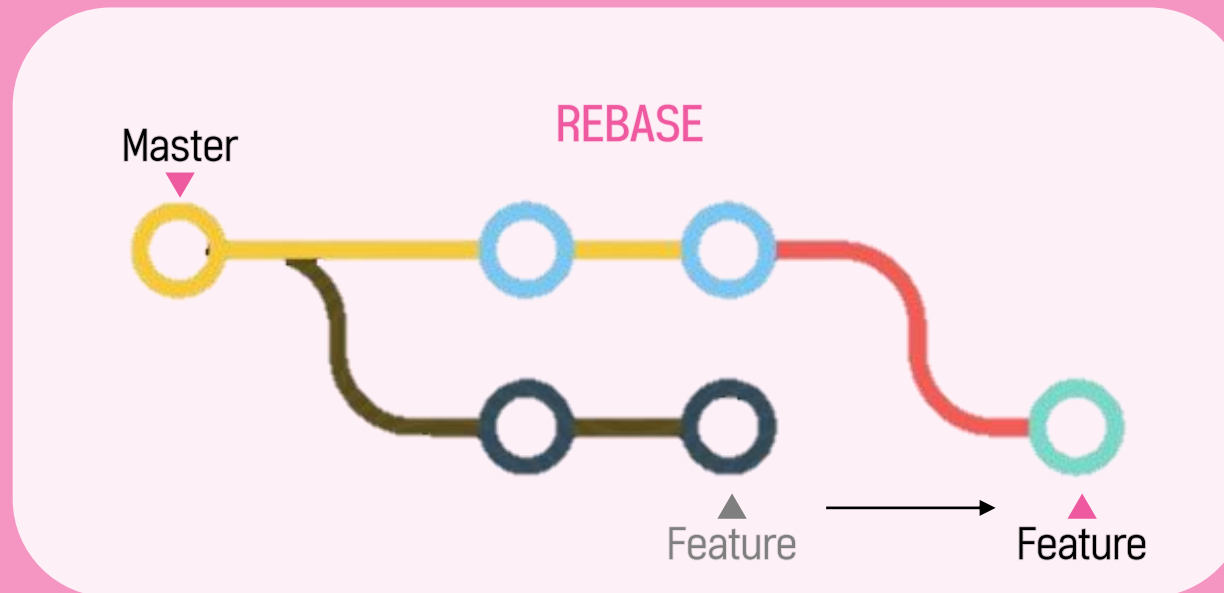
## REBASE







Base branch의 수정내역(commit)을  
최신 내역까지 업데이트하여  
현재 branch의 base 를 재설정(rebase)



```
$ git merge <branch 이름>  
$ git merge feature_x
```

지정한 branch를 현재 위치한 branch에 merge

```
$ git rebase <branch 이름>  
$ git rebase feature_x
```

지정한 branch 위에 현재 branch 변경사항을 적용

충돌(conflict)이 발생하면?  
[=fast-forward merge가 실패하면?]

직접 병합을 해줘야 함  
[VSCode로 열어서 간편하게 병합 가능]  
이후 해당 파일들은 \$ git add하여 staging



merge 중일 경우  
\$ git merge --continue  
rebase 중일 경우  
\$ git rebase --continue



## 02

### Branch 병합하기

```
MINGW64:/c:/Users/윤태웅/Desktop/git-study-2
$ git branch
* hotfix
master

$ git checkout master
Switched to branch 'master'
Your branch is up to date with 'origin/master'.

$ git merge hotfix
Updating cdba/b8..3ddfc09
Fast-forward
 main.py | 2 ++
 1 file changed, 2 insertions(+)

$ git branch
hotfix
* master

$ git branch -D hotfix
Deleted branch hotfix (was 3ddfc09).

$
```

\$ git branch

\$ git checkout master

\$ git merge hotfix

\$ git branch -D hotfix

\$ git push



## 1. Pull Request 생성 버튼 누르기

skku-overflow / git-study-2

Watch 1 Star 0 Fork 2

Code Issues 0 Pull requests 0 Projects 0 Wiki Security Insights

사각형 캡처(R)

Open a pull request

Create a new pull request by comparing changes across two branches. If you need to, you can also [compare across forks](#).

base repository: skku-overflow/git-study-2

base: master

head repository: woongman1109/git-study-2

compare: hotfix

✓ Able to merge. These branches can be automatically merged.

버그 수정

Write Preview

AA B i “ > ↺ ☰ ≡ ☑ @ 📌 ↶

Leave a comment

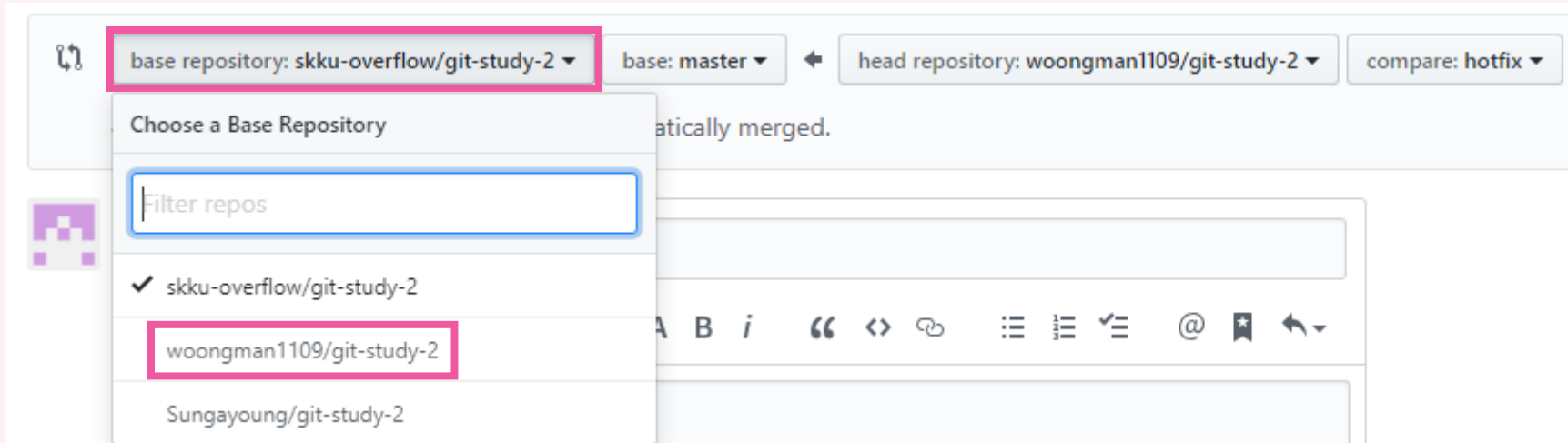
Attach files by dragging & dropping, selecting or pasting them.

☒ Allow edits from maintainers. [Learn more](#)

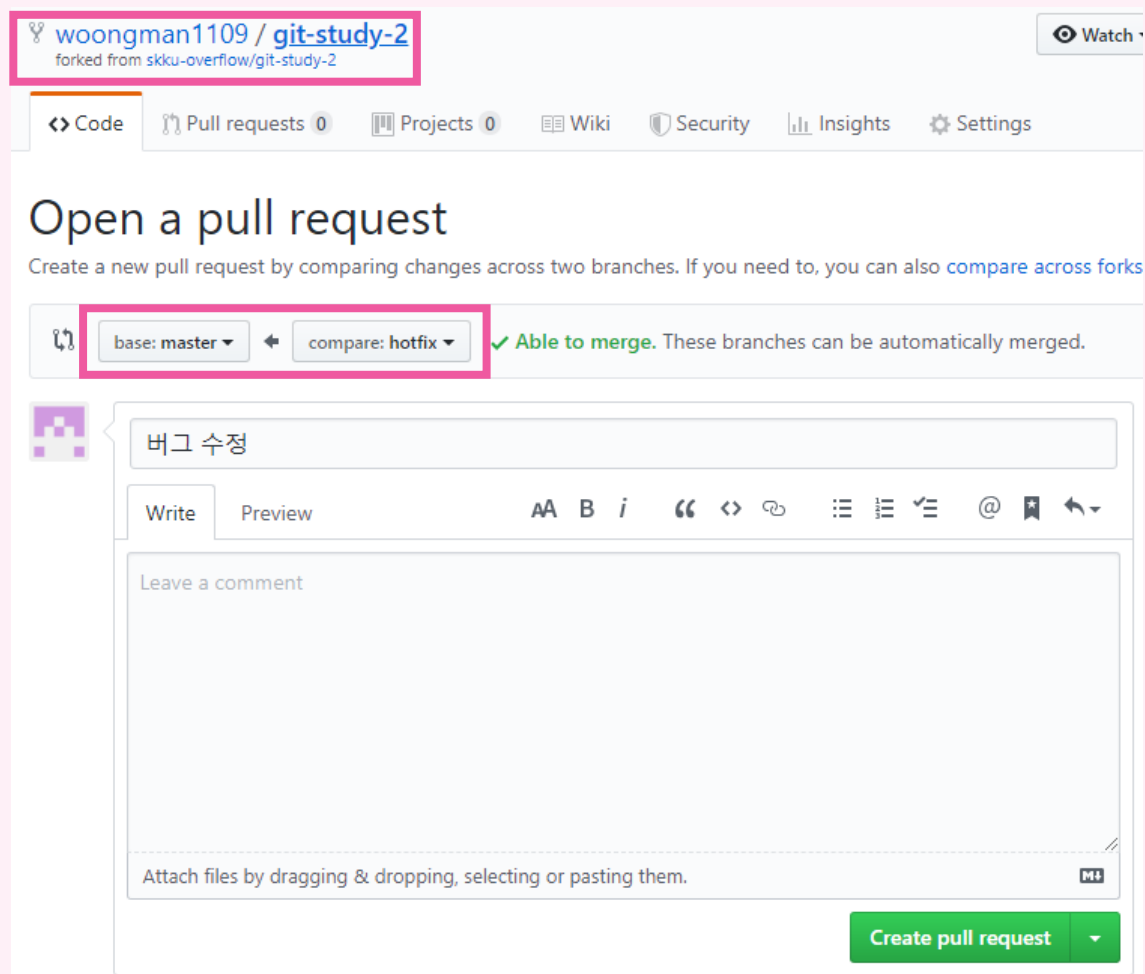
Create pull request



## 2. merge할 대상 repository 변경



## 3. merge할 branch, 대상 branch 확인



The screenshot shows the GitHub interface for a pull request. At the top, the repository name 'woongman1109 / git-study-2' is highlighted with a pink box, with a note 'forked from skku-overflow/git-study-2'. Below this, navigation tabs include 'Code', 'Pull requests 0', 'Projects 0', 'Wiki', 'Security', 'Insights', and 'Settings'. The main heading is 'Open a pull request', followed by the instruction: 'Create a new pull request by comparing changes across two branches. If you need to, you can also [compare across forks](#)'. Below this, a comparison bar shows 'base: master' and 'compare: hotfix' selected, with a green checkmark and the text 'Able to merge. These branches can be automatically merged.' The main content area has a title '버그 수정' (Bug Fix) and a 'Write' tab selected. It includes a rich text editor with a 'Leave a comment' placeholder and a file upload area with the text 'Attach files by dragging & dropping, selecting or pasting them.' At the bottom right, there is a green 'Create pull request' button.



## | Rebase |

```
MINGW64/c:/Users/윤태웅/Desktop/git-study-2
윤 태 웅 @DESKTOP-CA001H4 MINGW64 ~/Desktop/git-study-2 (master)
$ git checkout origin/dev -b dev
Switched to a new branch 'dev'
Branch 'dev' set up to track remote branch 'dev' from 'origin'.

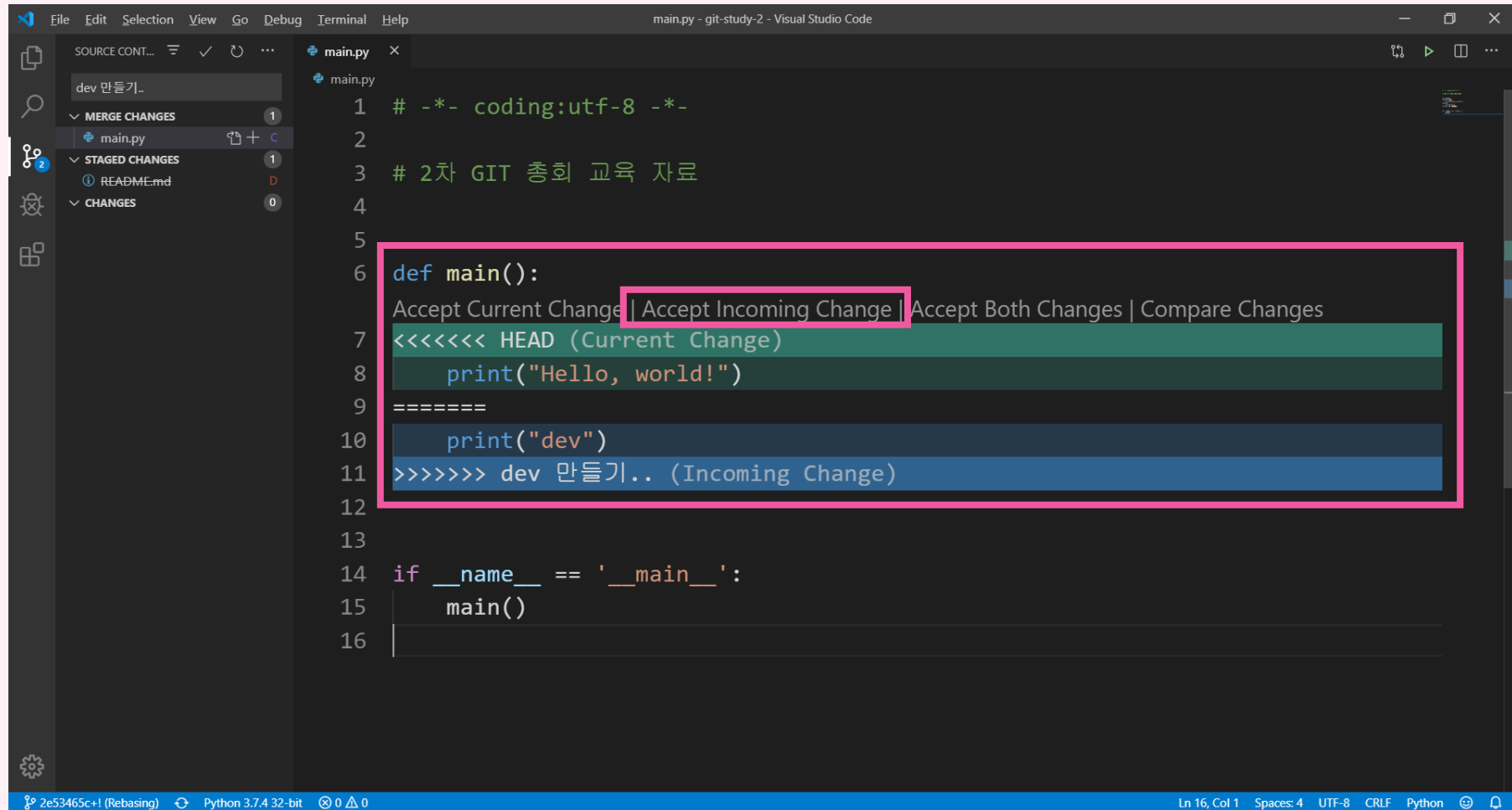
윤 태 웅 @DESKTOP-CA001H4 MINGW64 ~/Desktop/git-study-2 (dev)
$ git rebase master
First, rewinding head to replay your work on top of it...
Applying: dev
Using index info to reconstruct a base tree...
M       main.py
Falling back to patching base and 3-way merge...
Auto-merging main.py
CONFLICT (content): Merge conflict in main.py
error: Failed to merge in the changes.
hint: Use 'git am --show-current-patch' to see the failed patch
Patch failed at 0001 dev
Resolve all conflicts manually, mark them as resolved with
"git add/rm <conflicted_files>", then run "git rebase --continue".
You can instead skip this commit: run "git rebase --skip".
To abort and get back to the state before "git rebase", run "git rebase --abort"
.
```

```
$ git checkout origin/dev -b dev
```

```
$ git rebase master
```



## | Rebase |



```
1 # -*- coding:utf-8 -*-
2
3 # 2차 GIT 총회 교육 자료
4
5
6 def main():
7     Accept Current Change | Accept Incoming Change | Accept Both Changes | Compare Changes
8     <<<<<<< HEAD (Current Change)
9     print("Hello, world!")
10
11     =====
12     print("dev")
13
14     >>>>>>> dev 만들기.. (Incoming Change)
15
16
17 if __name__ == '__main__':
18     main()
```





## | Rebase |

```
MINGW64:/c/Users/윤태웅/Desktop/git-study-2
윤 태 웅 @DESKTOP-CA001H4 MINGW64 ~/Desktop/git-study-2 (dev|REBASE 1/1)
$ git add main.py

윤 태 웅 @DESKTOP-CA001H4 MINGW64 ~/Desktop/git-study-2 (dev|REBASE 1/1)
$ git rebase --continue
Applying: dev

윤 태 웅 @DESKTOP-CA001H4 MINGW64 ~/Desktop/git-study-2 (dev)
$
```

```
$ git add -A
```

```
$ git rebase --continue
```



감사합니다 :)

