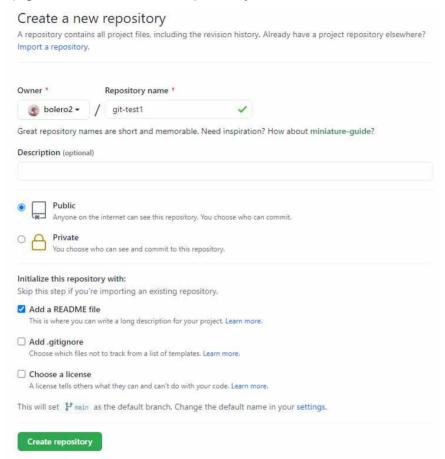
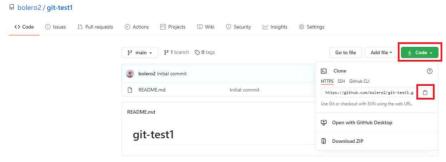
# 1. Repository 만들기

1) github.com 사이트에서 Repository 생성함.



### 2) terminal에서 git clone 실행



```
(base) clt_dc@DCGPU:~/git$ git clone https://github.com/bolero2/git-test1.git Cloning into 'git-test1'...
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (3/3), done.
```

```
(base) clt_dc@DCGPU:~/qit$ ls 로컬 저장소에 git-test1 중앙 서버의 Repository가 저장됨.
```

(해당 원격 저장소가 이전부터 Local PC에 있었으면, git clone 하지 않아도 됨. 최초 1 회용)

# 2. Git 파일/작업 추가하기

(대부분, git clone으로 저장소를 저장하는 것으로 시작함.) [용어 정리]

- 원격 저장소 : github.com에서 확인 가능한 저장소

- 로컬 저장소 : Local PC에 저장된(git clone 등으로 불러온) git 작업 공간

1) git status : 현재 상태 확인

```
(base) clt_dc@DCGPU:~/git/git-test1$ git status
On branch main
Your branch is up to date with 'origin/main'.
origin: 원격 저장소 이름
main: Branch 이름
이 두개는 기억해야 함.
```

(base) clt\_dc@DCGPU:~/git/git-test1\$ ls README.md 현재 README.md 밖에 없음.

- 2) git pull : 로컬 저장소의 작업 공간 최신화
- ▶ 원격 저장소에 있는 것들을 불러와서 로컬 저장소의 것들과 Merge 하는 작업. (변경사항을 모두 덮어쓴다는 뜻)

(base) clt\_dc@DCGPU:~/git/git-test1\$ git pull
Already up to date.

- 3) 본 작업 수행(이 작업은 로컬 저장소에서 진행됨, 원격 저장소와는 무관함.)
- ▶ .py 등 소스 코드 작업을 진행함.

```
(base) clt_dc@DCGPU:~/git/git-test1$ vi test1.py
(base) clt_dc@DCGPU:~/git/git-test1$ python test1.py
3.141592653589793
(base) clt_dc@DCGPU:~/git/git-test1$ vi test1.c
(base) clt_dc@DCGPU:~/git/git-test1$ gcc -o test1 test1.c
(base) clt_dc@DCGPU:~/git/git-test1$ ls
README.md test1 test1.c test1.py
(base) clt_dc@DCGPU:~/git/git-test1$ ./test1
A + B is 30
```

#### [저장소의 상태 표]

Tracked			Hatas als ad
Unmodified	Modified	Staged	Untracked

- Tracked : 관리 대상

- Untracked : 관리 대상이 아님 - Unmodified : 수정하지 않음

- Modified : 수정함

- Staged : Commit 시에 중앙 저장소에 기록됨.

(처음 원격 저장소 git clone 시 모든 파일은 Tracked이면서 Unmodified 상태임.)

4) git status : 작업 완료 시 어떤 파일이 수정되었는지 확인.

```
(base) clt_dc@DCGPU:~/git/git-test1$ git status
On branch main
Your branch is up to date with 'origin/main'.
 (use "git add <file>..." to include in what will be committed)
nothing added to commit but untracked files present (use "git add" to track)
- 위의 3개 파일은 Untracked 파일임.
- git clone 시에 내려온 파일이 아니기 때문.
5) git add : Untracked 파일을 Tracked 상태로 변경.
- git add test1.py test1.c test1
- git add ./*
- git add test*.py
- git add *.*
모두 가능함. (이후 git status로 상태 확인을 꼭 해줘야 한다.)
(base) clt_dc@DCGPU:~/git/git-test1$ git add test1.py test1.c
(base) clt_dc@DCGPU:~/git/git-test1$ git add ./*
(base) clt_dc@DCGPU:~/git/git-test1$ git status
On branch main
Your branch is up to date with 'origin/main'.
Changes to be committed:
 (use "git reset HEAD <file>..." to unstage)
       new file:
```

"new file:"로 넘어간 파일들은 이제 Tracked 상태임.

6) git commit -m "commit message 내용" : Staged 파일들을 모두 commit 함. (변경사항 기록)

```
(base) clt dc@DCGPU:~/git/git-test1$ git commit -m "first commit"
[main cdd495a] first commit
Committer: Ubuntu <clt_dc@DCGPU.arkhpeawxyoutnzh1vellybbwc.cx.internal.cloudapp.net>
Your name and email address were configured automatically based
on your username and hostname. Please check that they are accurate.
You can suppress this message by setting them explicitly. Run the
following command and follow the instructions in your editor to edit
your configuration file:
    git config --global --edit

After doing this, you may fix the identity used for this commit with:
    git commit --amend --reset-author

3 files changed, 13 insertions(+)
    create mode 100755 test1
    create mode 100644 test1.c
    create mode 100644 test1.py
```

#### (최종)

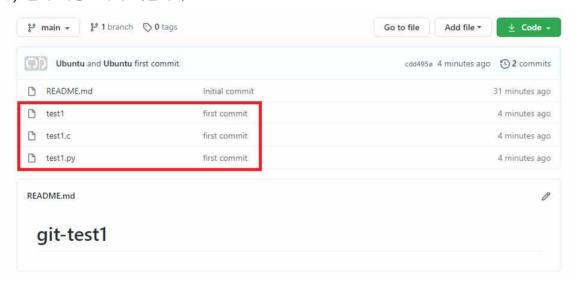
7) git push -u origin main : 로컬 저장소의 commit 내용을 원격 저장소로 전송.

```
(base) clt_dc@DCGPU:~/git/git-test1$ git push -u origin main
Username for 'https://github.com': bolero2
Password for 'https://bolero2@github.com':
Counting objects: 5, done.
Delta compression using up to 24 threads.
Compressing objects: 100% (5/5), done.
Writing objects: 100% (5/5), 2.82 KiB | 2.82 MiB/s, done.
Total 5 (delta 0), reused 0 (delta 0)
To https://github.com/bolero2/git-test1.git
   b4da483..cdd495a main -> main
Branch 'main' set up to track remote branch 'main' from 'origin'.
```

- origin : 원격 저장소
- main : branch 이름
- -u : update 옵션.

(git clone이 여러 개 있을 때, 다른 사람이 push 한 후에 내가 push를 하면 동작 안 함. update로 merge 후 push 가능.)

8) 원격 저장소에서 확인하기



# [기본 개념]

clone(최초 1회)  $\rightarrow$  pull(작업 전 최신화)  $\rightarrow$  코드 작업  $\rightarrow$  add(Stage로 올림)  $\rightarrow$  commit(변경사항 기록)  $\rightarrow$  push(원격 저장소에 저장)

## 3. Git 파일 삭제

(원격 저장소를 git clone으로 불러온 후, git pull까지 완료한 상태.)

```
1) git rm
```

- -r : Recursive 삭제.(directory 하위를 순회하며 모두 삭제)
- -f : 변경사항을 commit 하지 않았을 경우 강제로 삭제.

#### [현재 상태]

```
(base) clt_dc@DCGPU:~/git/DeepLearning-dc$ ls

README.md data-handling-scripts mobilenet-v2-tensorflow shufflenet-v1-tensorflow

utility utils.old vgg16-tensorflow yolo-v1-tensorflow yolo-v3-tensorflow
```

```
[git rm -rf 명령어 실행]
```

- git rm -rf ./\*-tensorflow
- git rm -rf ./utility
- : 파일 하나 단위로도 수행 가능. (ex. git rm test1.py)

```
(base) clt_dc@DCGPU:~/git/DeepLearning-dc$ git rm -rf ./*-tensorflow
rm 'mobilenet-v2-tensorflow/mobilenet-v2.py'
rm 'shufflenet-v1-tensorflow/shufflenet-v1.py'
rm 'vgg16-tensorflow/vgg16-conv3d.py'
rm 'yolo-v1-tensorflow/README.md'
rm 'yolo-v1-tensorflow/airplane.jpg'
rm 'yolo-v1-tensorflow/config.py'
rm 'yolo-v1-tensorflow/cvtest.py'
rm 'yolo-v1-tensorflow/hrnet-w32.py'
rm 'yolo-v1-tensorflow/main_ssd_compare_originalVGGnet19.py'
rm 'yolo-v1-tensorflow/sheep.jpg'
rm 'yolo-v1-tensorflow/yolo-v1-main.py'
rm 'yolo-v1-tensorflow/yolo-v1-network.py'
rm 'yolo-v1-tensorflow/yolo-v1-test.py'
rm 'yolo-v1-tensorflow/yolo-v1-total-colab.py'
rm 'yolo-v1-tensorflow/yolo-v1-total.py'
rm 'yolo-v1-tensorflow/yolo-v1-total2-temp.py'
rm 'yolo-v3-tensorflow/class_darknet53.py'
rm 'yolo-v3-tensorflow/class_detection.py'
rm 'yolo-v3-tensorflow/class_utils.py'
rm 'yolo-v3-tensorflow/class_yolo.py'
rm 'yolo-v3-tensorflow/yolo-dc.py'
```

```
(base) clt_dc@DCGPU:~/git/DeepLearning-dc$ git rm -rf ./utility
rm 'utility/3D_NUMBER_Demo_1.py'
rm 'utility/Image_Augmentation.py'
rm 'utility/python-csv.py'
rm 'utility/test_pytorch.py'
```

## [git status : 현재 stage 상태 확인]

```
(base) clt_dc@DCGPU:~/git/DeepLearning-dc$ 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)
                   mobilenet-v2-tensorflow/mobilenet-v2.py
        deleted:
        deleted:
                   shufflenet-v1-tensorflow/shufflenet-v1.py
        deleted:
                   utility/3D_NUMBER_Demo_1.py
                   utility/Image_Augmentation.py
        deleted:
       deleted:
                   utility/python-csv.py
        deleted:
                   utility/test_pytorch.py
                   vgg16-tensorflow/vgg16-conv3d.py
        deleted:
                   yolo-v1-tensorflow/airplane.jpg
        deleted:
                   yolo-v1-tensorflow/config.py
       deleted:
                  yolo-v1-tensorflow/cvtest.py
                  yolo-v1-tensorflow/hrnet-w32.py
        deleted:
                  yolo-v1-tensorflow/main_ssd_compare_originalVGGnet19.py
        deleted:
                   yolo-v1-tensorflow/sheep.jpg
        deleted:
                   yolo-v1-tensorflow/yolo-v1-main.py
        deleted:
                   yolo-v1-tensorflow/yolo-v1-network.py
                   yolo-v1-tensorflow/yolo-v1-test.py
        deleted:
                   yolo-v1-tensorflow/yolo-v1-total-colab.py
        deleted:
        deleted:
                   yolo-v1-tensorflow/yolo-v1-total.py
        deleted:
                   yolo-v1-tensorflow/yolo-v1-total2-temp.py
        deleted:
                  yolo-v3-tensorflow/class_darknet53.py
                  yolo-v3-tensorflow/class_detection.py
                  yolo-v3-tensorflow/class_utils.py
        deleted:
        deleted:
                  yolo-v3-tensorflow/class_yolo.py
        deleted:
                  yolo-v3-tensorflow/yolo-dc.py
```

: 초록색으로 올라간 것은 stage 상태임을 뜻함.

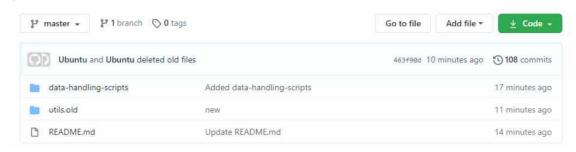
```
(base) clt_dc@DCGPU:~/git/DeepLearning-dc$ git commit -m "deleted old files"
[master 463f90d] deleted old files
Committer: Ubuntu <clt_dc@DCGPU.arkhpeawxyoutnzh1vellybbwc.cx.internal.cloudapp.net>
Your name and email address were configured automatically based
on your username and hostname. Please check that they are accurate.
You can suppress this message by setting them explicitly. Run the
following command and follow the instructions in your editor to edit
your configuration file:
    git config --global --edit
After doing this, you may fix the identity used for this commit with:
    git commit --amend --reset-author
 25 files changed, 6083 deletions(-)
 delete mode 100644 mobilenet-v2-tensorflow/mobilenet-v2.py
 delete mode 100644 shufflenet-v1-tensorflow/shufflenet-v1.py
 delete mode 100644 utility/3D_NUMBER_Demo_1.py
 delete mode 100644 utility/Image_Augmentation.py
 delete mode 100644 utility/python-csv.py
 delete mode 100644 utility/test_pytorch.py
 delete mode 100644 vgg16-tensorflow/vgg16-conv3d.py
 delete mode 100644 yolo-v1-tensorflow/README.md
 delete mode 100644 yolo-v1-tensorflow/airplane.jpg
 delete mode 100644 yolo-v1-tensorflow/config.py
 delete mode 100644 yolo-v1-tensorflow/cvtest.py
 delete mode 100644 yolo-v1-tensorflow/hrnet-w32.py
 delete mode 100644 yolo-v1-tensorflow/main_ssd_compare_originalVGGnet19.py
 delete mode 100644 yolo-v1-tensorflow/sheep.jpg
 delete mode 100644 yolo-v1-tensorflow/yolo-v1-main.py
 delete mode 100644 yolo-v1-tensorflow/yolo-v1-network.py
 delete mode 100644 yolo-v1-tensorflow/yolo-v1-test.py
 delete mode 100644 yolo-v1-tensorflow/yolo-v1-total-colab.py
 delete mode 100644 yolo-v1-tensorflow/yolo-v1-total.py
 delete mode 100644 yolo-v1-tensorflow/yolo-v1-total2-temp.pv
 delete mode 100644 yolo-v3-tensorflow/class_darknet53.py
 delete mode 100644 yolo-v3-tensorflow/class_detection.py
 delete mode 100644 yolo-v3-tensorflow/class_utils.py
 delete mode 100644 yolo-v3-tensorflow/class_yolo.py
 delete mode 100644 yolo-v3-tensorflow/yolo-dc.py
```

:25 files changed, 6083 deletions(-)를 보고, 잘 삭제되었음을 알 수 있음.

```
[git push -u origin master 명령어 실행]
: 최종 단계, commit 내용을 원격 저장소로 올림]
```

```
(base) clt_dc@DCGPU:~/git/DeepLearning-dc$ git push -u origin master Username for 'https://github.com': bolero2
Password for 'https://bolero2@github.com':
Counting objects: 2, done.
Delta compression using up to 24 threads.
Compressing objects: 100% (2/2), done.
Writing objects: 100% (2/2), 264 bytes | 264.00 KiB/s, done.
Total 2 (delta 1), reused 0 (delta 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/bolero2/DeepLearning-dc.git
    4b360aa..463f90d master -> master
Branch 'master' set up to track remote branch 'master' from 'origin'.
```

## 2) 원격 저장소 확인



: 잘 삭제되었음을 확인할 수 있다.