Latihan Git

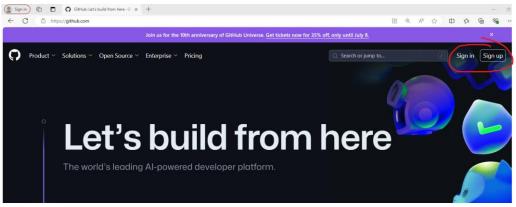
Tools:

Github online: github.com

Git desktop: https://git-scm.com/download/ download dan install

Buat repository di github:

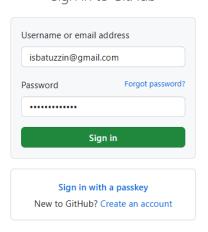
Masuk github (github.com), sign in jika sudah punya account, sign up jika belum punya account.



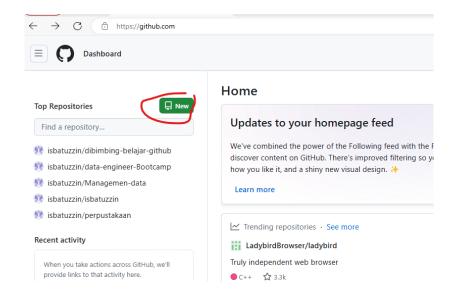
Sign in, masukkan user dan password



Sign in to GitHub

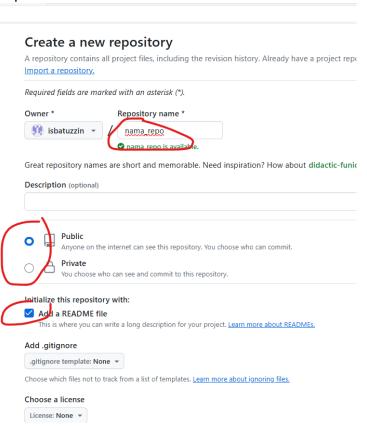


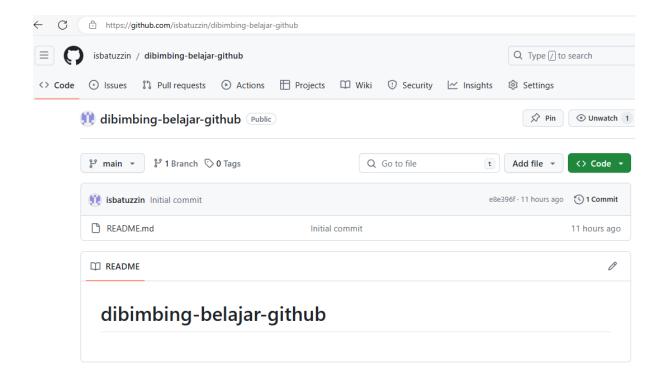
Buat repo, click new



Isikan nama repo dan sifat repo

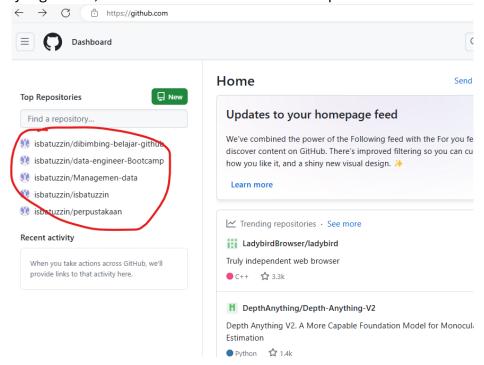
https://github.com/new





Readmi sebagai panduan pemakaian Gitignore -> ada file2 yang ndak boleh dimasukkan, misal password, dll yang ndak ikutan dicommit

Hasil repo yang dibuat, klik salah satu untuk masuk ke repo

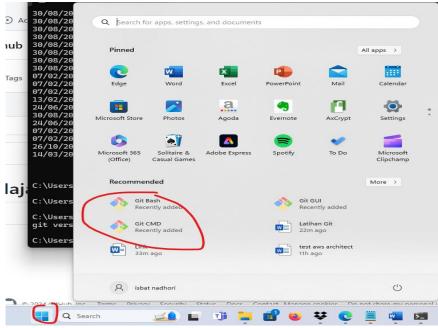


Selanjutnya kita bisa melakukan sinkronisasi dari lokal ke remote:

Pertama download https://git-scm.com/download/ dan install

Jalankan dan masuk ke folder yang sudah disiapkan, untuk menjalankan click windows

dan pilih GitBash atau GitCMD



Tampilan Git bash

```
MINGW64:/c/Users/isbat/project/dibimbing

sisbat@PCKantor MINGW64 ~

sisbat@PCKantor MINGW64 ~

spwd
/c/Users/isbat
isbat@PCKantor MINGW64 ~

s cd project/
isbat@PCKantor MINGW64 ~/project

s ls
dibimbing/
isbat@PCKantor MINGW64 ~/project

s cd dibimbing/
isbat@PCKantor MINGW64 ~/project

s cd dibimbing/
isbat@PCKantor MINGW64 ~/project/dibimbing

sisbat@PCKantor MINGW64 ~/project/dibimbing

sisbat@PCKantor MINGW64 ~/project/dibimbing
```

```
☐ Git CMD
30/08/2023 08:21
                        12.870.368 edb_npgsql.exe
                        12.015.600 edb_pgagent_pg15.exe
30/08/2023
           08:21
30/08/2023 08:21
                        42.177.720 edb_pgbouncer.exe
                        12.754.712 edb_pgjdbc.exe
30/08/2023 08:21
30/08/2023 08:23
                        21.080.920 edb_psqlodbc.exe
30/08/2023 08:21
                        20.326.288 edb_psqlodbc.exe-20230830082148
                        21.080.920 edb_psqlodbc.exe-20230830082244
30/08/2023 08:22
                        20.326.288 edb_psqlodbc.exe-20230830082250
30/08/2023
           08:22
07/02/2023
           07:02
                    <DIR>
                                   Favorites
07/02/2023 07:02
                                   Links
                    <DIR>
07/02/2023 07:02
                    <DIR>
                                   Music
13/02/2024 10:06
                                   OneDrive
                    <DIR>
24/06/2024 07:00
                    <DIR>
                                  OneDrive - Politeknik Elektronika Negeri Surabaya
30/08/2023 08:22
                     74.222.472 pemhttpd.exe
24/06/2024 07:30
07/02/2023 07:02
                    <DIR>
                                  project
                    <DIR>
                                   Saved Games
07/02/2023 07:02
                     <DIR>
                                   Searches
26/10/2023
           13:39
                    <DIR>
                                   Videos
14/03/2024 08:52
                    <DIR>
                                   VirtualBox VMs
              12 File(s)
                          316.251.209 bytes
              17 Dir(s) 70.439.333.888 bytes free
C:\Users\isbat>cd project
C:\Users\isbat\project>cd dibimbing
C:\Users\isbat\project\dibimbing>git --version
git version 2.45.2.windows.1
C:\Users\isbat\project\dibimbing>
```

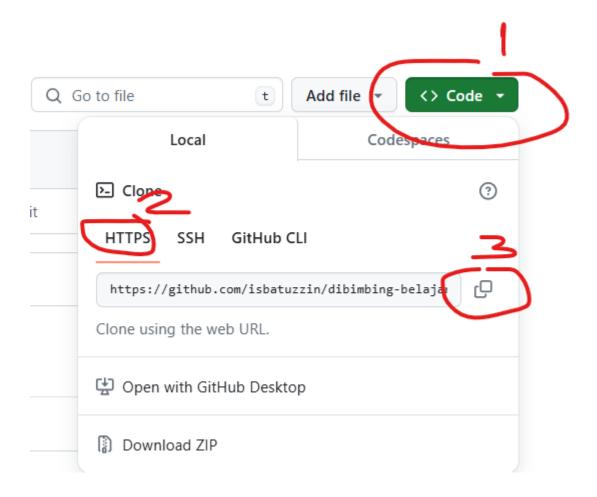
Lihat version dengan menjalan git –version Di git CMD

C:\Users\isbat\project\dibimbing>git --version
git version 2.45.2.windows.1

Atau di git Bash



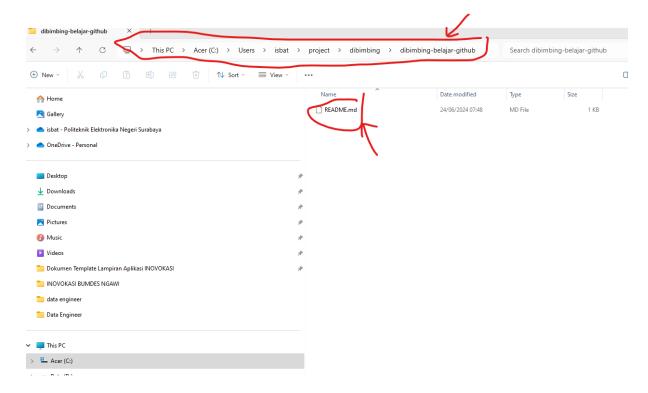
Sinkronisasi repo lokal dan github: Clone dari github ke lokal, Awalnya ambil link di git



Jalankan git clone dari git CMD

```
C:\Users\isbat\project\dibimbing>git clone https://github.com/isbatuzzin/dibimbing-belajar-github.git
Cloning into 'dibimbing-belajar-github'...
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
Receiving objects: 100% (3/3), done.
C:\Users\isbat\project\dibimbing>
```

Lihat hasil dari explorer project yang diclone sesuai folder yang dibuat



Contoh jika ada file baru dilokal dan ingin disinkronisasi dengan github di remote

Gunakan command Git add, menambahkan file ke github dari lokal Sebagi contoh dibuat file baru

Untuk melihat jalankan git status, terlihat ada file yang belum commit

```
/c/Users/isbat/project/dibimbing/dibimbing-belajar-github
isbat@PCKantor MINGW64 ~/project/dibimbing/dibimbing-belajar-github (main)
$ ls
README.md test/ test.py
isbat@PCKantor MINGW64 ~/project/dibimbing/dibimbing-belajar-github (main)
$ get status
bash: get: command not found
isbat@PCKantor MINGW64 ~/project/dibimbing/dibimbing-belajar-github (main)
$ git status
On branch main
Your branch is up to date with 'origin/main'.

Untracked files:
   (use "git add <file>..." to include in what will be committed)
   test.py
test/
nothing added to commit but untracked files present (use "git add" to track)
isbat@PCKantor MINGW64 ~/project/dibimbing/dibimbing-belajar-github (main)
$ i
```

Untuk mensinkronisasi dimulai git add, git coomit dan git push Jalankan git add .

```
isbat@PCKantor MINGW64 ~/project/dibimbing/dibimbing-belajar-github (main) $ git add .
```

Lalu lihat statusnya pakai perintah git status, terlihat warna sudah berubah

```
isbat@PCKantor MINGW64 ~/project/dibimbing/dibimbing-belajar-github (main)

$ git status
On branch main
Your branch is up to date with 'origin/main'.

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        new file: Latihan Git.docx
        new file: test.py
        new file: test/test.py
```

Git commit

```
isbat@PCKantor MINGW64 ~/project/dibimbing/dibimbing-belajar-github (main)

$ git commit -m "initial project -- hello word script"
[main f10fd9b] initial project -- hello word script

3 files changed, 2 insertions(+)
create mode 100644 Latihan Git.docx
create mode 100644 test.py
create mode 100644 test/test.py
```

Git status

```
isbat@PCKantor MINGW64 ~/project/dibimbing/dibimbing-belajar-github (main)
$ git status
On branch main
Your branch is ahead of 'origin/main' by 1 commit.
  (use "git push" to publish your local commits)
nothing to commit, working tree clean
```

Git push

Untuk melakukan push pastikan sshkey tanpa password jalan, cara membuat ssh key bisa dibaca di : https://purdue.edu/science/scienceit/ssh-keys-windows.html

Dari windows 11 bisa jalankan ssh-keygen

```
C:\Users\isbat\Documents>ssh-keygen
Generating public/private rsa key pair.
Enter file in which to save the key (C:\Users\isbat/.ssh/id_rsa):
Created directory 'C:\\Users\\isbat/.ssh'.
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in C:\Users\isbat/.ssh/id_rsa
Your public key has been saved in C:\Users\isbat/.ssh/id_rsa.pub
The key fingerprint is:
SHA256:prMuL8Y2OAoHbNaGr+tVgcsqdCMmLodkvZ10NNiSzqs isbat@PCKantor
The key's randomart image is:
+---[RSA 3072]---
|.*.o =o
B.o.o= o.
+0..*.+
 +.=..=.
 .= = .. S
 0.0 .. 0
 . .=. o
 ..=EB o
0=.+ *+
+----[SHA256]-
C:\Users\isbat\Documents>
```

Setelah menjalankan ssh key akan terbentuk dua file di .ssh yitu id rsa dan id rsa.pub

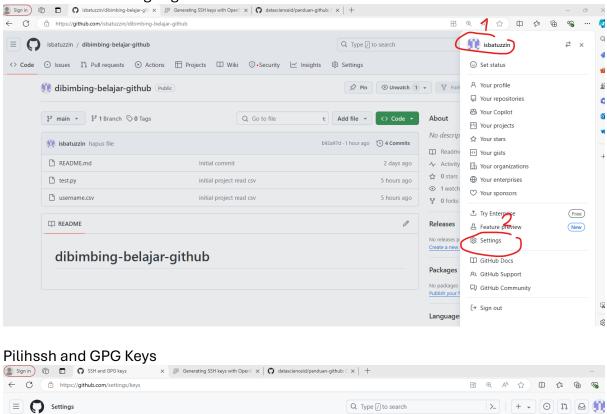
```
isbat@PCKantor MINGW64 ~/.ssh
$ ls
id_rsa id_rsa.pub
```

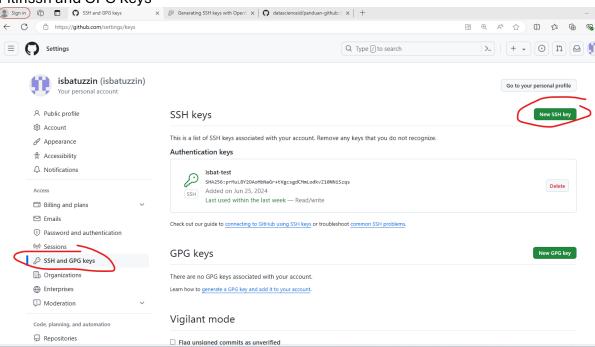
Buka id_rsa.pub dan copikan ke github ssh key

```
isbat@PCKantor MINGW64 ~/.ssh
$ cat id_rsa.pub
ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAABgQC3BJWAiE3x2u08421h3zJcREdx9HFyzfBspay8VHYn
rqGf9472sD9DPVWkhMOwv9jUNBfdrKBP2zKEH2SQoAE4nCmskWMNBKJVxOm6BpymzaZ6ay6k0unuHgdN
MOAFSdBfgBhD8nLqCdcw6JvBrhSobVMTj18ji88e4P4z1ILnr1YDhtzjIRaNDHwa7oUd53zThJ8QhpFI
kwXOchYCn4wlsOP3vKehRU1PkIBfh5YuhqZQLfToyqsIxa8CRk/rBgygKPnv6Xeh/Hi4Np/TL21Dxnw7
s9BdHyv+Xd08M192hBmtrjgBbB2szsdE1AUhdbt0iv7jOcdYiB2mub63R/lBijfXflZaSZkvfc0L716Y
yGnopCT333tv4L8hqPJqvWL2dcVY39LSkyAB4GWISVjmcz5I4rKY9UF/Llt5Wza3d7qTSBidI6AifjH9
89zbq4zIG4LhVKoOG9lraLe+02UUgv6AfF8wS76szyd9VjjzHCjJCWeBmZ7z5kUOM6aCTHs= isbat@P
CKantor
```

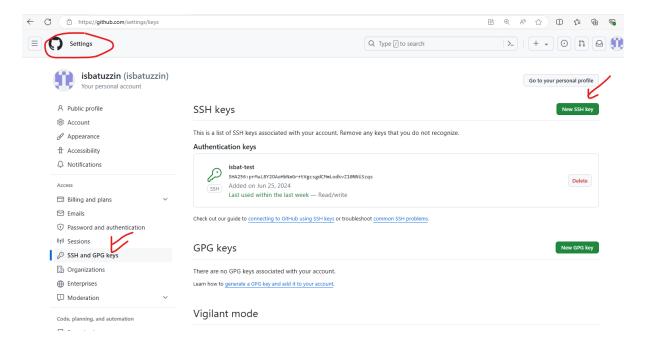
Cara kopi

Masuk ke user setting di github





Klik New SSH Key dam kopikan isi id_ssh.pub ke sini



```
$ git status
On branch main
Your branch is up to date with 'origin/main'.

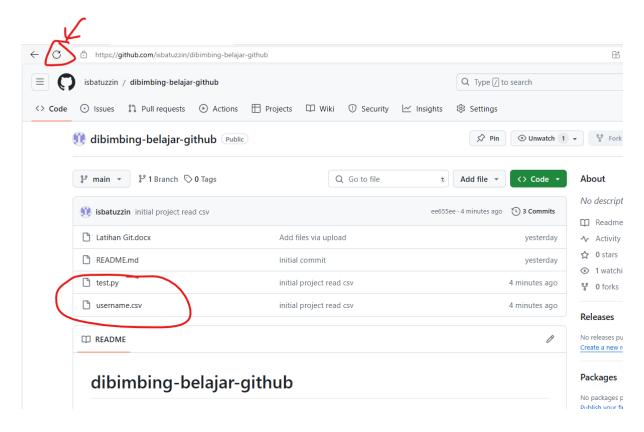
Changes to be committed:
   (use "git restore --staged <file>..." to unstage)
        new file: test.py
        new file: username.csv
```

next time Git touches it

```
$ git commit -m "initial project read csv"
[main ee655ee] initial project read csv
2 files changed, 12 insertions(+)
create mode 100644 test.py
create mode 100644 username.csv
```

```
$ git push origin main
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 20 threads
Compressing objects: 100% (4/4), done.
Writing objects: 100% (4/4), 573 bytes | 573.00 KiB/s, done.
Total 4 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To github.com:isbatuzzin/dibimbing-belajar-github.git
6275287..ee655ee main -> main
```

Haisl

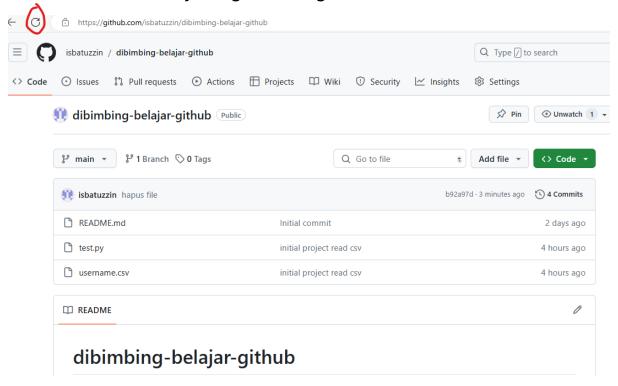


Menghapus file

- Git rm
- Git commit
- Git push

```
sbat@PCKantor MINGW64 ~/project/dibimbing-belajar-github (main)
$ git rm Latihan\ Git.docx
rm 'Latihan Git.docx'
isbat@PCKantor MINGW64 ~/project/dibimbing-belajar-github (main)
$ git commit
Aborting commit due to empty commit message.
isbat@PCKantor MINGW64 ~/project/dibimbing-belajar-github (main)
$ git commit -m "hapus file"
[main b92a97d] hapus file
 1 file changed, 0 insertions(+), 0 deletions(-)
 delete mode 100644 Latihan Git.docx
isbat@PCKantor MINGW64 ~/project/dibimbing-belajar-github (main)
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Delta compression using up to 20 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (2/2), 219 bytes | 219.00 KiB/s, done.
Total 2 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To github.com:isbatuzzin/dibimbing-belajar-github.git
   ee655ee..b92a97d main -> main
```

Hasil Dari browser lihat hasilnya dengan refresh github kita



Git log

Melihat aktivitas yang sudah dilakukan

```
$ git log
commit b92a97d09f13456fcf87343144376d01555783d6 (HEAD -> main, origin/main, orig
in/HEAD)
Author: isbat nadhori <isbatuzzin@gmail.com>
       Tue Jun 25 12:07:49 2024 +0700
    hapus file
commit ee655ee9fccce973ffbb7e7049afd37fa63cf2d7
Author: isbat nadhori <isbatuzzin@gmail.com>
Date: Tue Jun 25 08:01:46 2024 +0700
    initial project read csv
commit 62752878d87d4662c020b2438bdb283ddaf7f531
Author: isbatuzzin <54133704+isbatuzzin@users.noreply.github.com>
Date: Mon Jun 24 08:11:48 2024 +0700
    Add files via upload
commit e8e396ffc7acec9b2e032358c34faa95ec7ad76a
Author: isbatuzzin <54133704+isbatuzzin@users.noreply.github.com>
Date: Sun Jun 23 20:17:02 2024 +0700
    Initial commit
```

Update project Git pull

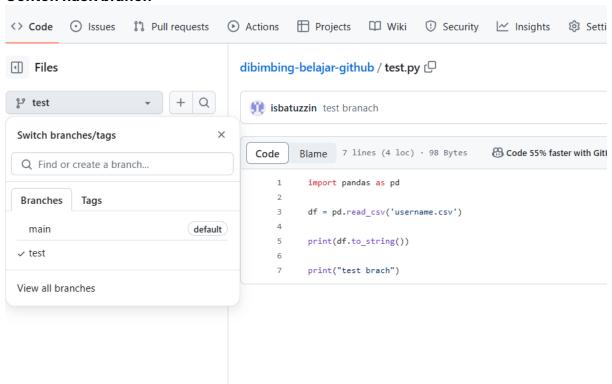
Buat vbarch

\$ git checkout -b test Switched to a new branch 'test'

\$ git status branch On branch test nothing to commit, working tree clean

```
sbat@PCKantor MINGW64 ~/project/dibimbing-belajar-github (test)
$ git add test.py
isbat@PCKantor MINGW64 ~/project/dibimbing-belajar-github (test)
$ git commit -m "test branach"
[test d02bd78] test branach
1 file changed, 3 insertions(+), 1 deletion(-)
isbat@PCKantor MINGW64 ~/project/dibimbing-belajar-github (test)
$ git push origin test
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 20 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 358 bytes | 358.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
remote:
remote: Create a pull request for 'test' on GitHub by visiting:
             https://github.com/isbatuzzin/dibimbing-belajar-github/pull/new/tes
emote:
remote:
To github.com:isbatuzzin/dibimbing-belajar-github.git
   [new branch]
                      test -> test
 sbat@PCKantor MINGW64 ~/project/dibimbing-belajar-github (test)
```

Contoh hasil branch



Merge branch

```
Date: Mon Jun 24 08:11:48 2024 +0700
     Add files via upload
    nmit e8e396ffc7acec9b2e032358c34faa95ec7ad76a
 Author: isbatuzzin <54133704+isbatuzzin@users.noreply.github.com>
 Date: Sun Jun 23 20:17:02 2024 +0700
....skipping...
   commit d999442184ddcb7438c6c8c35894421423b5bcae (HEAD -> main, origin/main,
rigin/HEAD)
   Merge: b92a97d d02bd78
   Author: isbatuzzin <54133704+isbatuzzin@users.noreply.github.com>
           Tue Jun 25 17:00:16 2024 +0700
       Merge pull request #1 from isbatuzzin/test
       test branch
   commit d02bd78490639eaecaad9180c787f92e8ed7b72f (origin/test, test)
   Author: isbat nadhori <isbatuzzin@gmail.com>
           Tue Jun 25 16:38:26 2024 +0700
   Date:
       test branach
 commit b92a97d09f13456fcf87343144376d01555783d6
 Author: isbat nadhori <isbatuzzin@gmail.com>
         Tue Jun 25 12:07:49 2024 +0700
     hapus file
 commit ee655ee9fccce973ffbb7e7049afd37fa63cf2d7
 Author: isbat nadhori <isbatuzzin@gmail.com>
 Date: Tue Jun 25 08:01:46 2024 +0700
     initial project read csv
 commit 62752878d87d4662c020b2438bdb283ddaf7f531
 Author: isbatuzzin <54133704+isbatuzzin@users.noreply.github.com>
 Date: Mon Jun 24 08:11:48 2024 +0700
     Add files via upload
    nmit e8e396ffc7acec9b2e032358c34faa95ec7ad76a
 Author: isbatuzzin <54133704+isbatuzzin@users.noreply.github.com>
         Sun Jun 23 20:17:02 2024 +0700
```