



Tugas Git 1

1. Git Setup

- Pengaturan nama, jalankan perintah :

```
denan@ReytoComputer MINGW64 ~ (master)
$ git config --global user.name "Reyhan Denanto"
```

- Pengaturan email, jalankan perintah :

```
denan@ReytoComputer MINGW64 ~ (master)
$ git config --global user.email "denanto01@gmail.com"
```

- Memeriksa setting, jalankan perintah :

```
denan@ReytoComputer MINGW64 ~
$ git config --list
```

- Memeriksa atau mengganti setting, dengan key spesifik :

```
denan@ReytoComputer MINGW64 ~ (master)
$ git config user.name
Reyhan Denanto
```

```
denan@ReytoComputer MINGW64 ~ (master)
$ git config user.email
denanto01@gmail.com
```

2. Local Repository

- a. Buat directory lokal dengan nama tugas-1, jalankan perintah:

```
denan@ReytoComputer MINGW64 ~ (master)
$ mkdir tugas-1
```

- b. Buat repository, jalankan perintah ;

```
$ git init tugas-1
```

A1. Yang terjadi adalah akan terciptanya repository tanpa adanya directory file

- File (biodata.txt) pada repository yang telah dibuat:

```
biodata.txt - Notepad
File Edit Format View Help
NO.REG : 1920010197
Nama : Reyhan Denanto
```



- Lalu jalankan git status

```
denan@ReytoComputer MINGW64 ~/tugas-01 (master)
$ git status
On branch master

No commits yet

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

nothing added to commit but untracked files present (use "git add" to track)
```

Terlihat bahwa berikut adalah git status working tree sebelum diberi perintah add

- Tambahkan perintah “add” pada git status untuk biodata.txt

```
denan@ReytoComputer MINGW64 ~/tugas-01 (master)
$ git add biodata.txt

denan@ReytoComputer MINGW64 ~/tugas-01 (master)
$ git status
On branch master

No commits yet

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

Berikut setelah ditambakkannya perintah “add”

A2. Status Working tree sebelum adanya perintah add masih terdapat untracked file lalu meminta untuk menjalankan perintah “add/commit” sedangkan setelah diberi perintah add file (biodata.txt) akan terdaftar sebagai file baru

- Perubahan setelah adanya perintah “git commit -m ‘initial project version’”

```
denan@ReytoComputer MINGW64 ~/tugas-01 (master)
$ git commit -m 'initial project version'
[master (root-commit) 72a2885] initial project version
1 file changed, 2 insertions(+)
create mode 100644 biodata.txt
```

A3. Maksud dari -m adalah master root-commit, sedangkan initial project version adalah untuk memulai perubahan pada proyek yang sedang dibuka. Yang terjadi adalah error : pathspec ‘initial project version’ did not match any file(s) known to git seperti berikut:

```
denan@ReytoComputer MINGW64 ~/tugas-01 (master)
$ git commit 'initial project version'
error: pathspec 'initial project version' did not match any file(s) known to git
```

- Menampilkan log

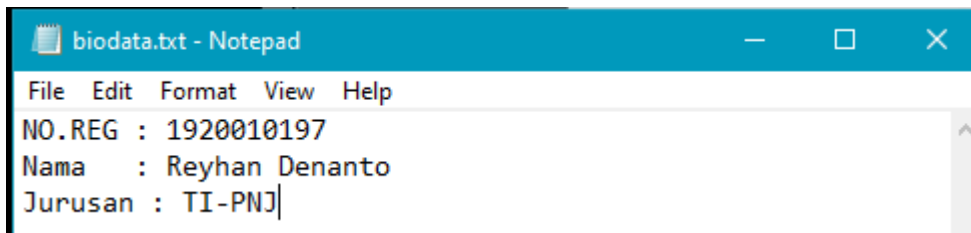


```
denan@ReytoComputer MINGW64 ~/tugas-01 (master)
$ git log
commit 72a2885727fe034233a31edd69ffa134c89da5b3 (HEAD -> master)
Author: Reyhan Denanto <denanto01@gmail.com>
Date: Mon Jan 4 16:47:08 2021 +0700

    initial project version
```

A4. Informasi yang didapat adalah Author : (username), dan (email) yang pada sebelumnya telah di input, lalu ada tanggal pembuatan Git beserta waktu projek di inisiasi/ jalankan

- Isikan jurusan



```
biodata.txt - Notepad
File Edit Format View Help
NO.REG : 1920010197
Nama : Reyhan Denanto
Jurusan : TI-PNJ
```

- Lakukan perintah status

```
denan@ReytoComputer MINGW64 ~/tugas-01 (master)
$ git status
On branch master
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   biodata.txt

no changes added to commit (use "git add" and/or "git commit -a")
```

Perubahan setelah file di modifikasi lalu di cek dengan perintah status

A5. Informasi yang didapat dari perintah “status” adalah bahwa adanya modifikasi data dan user diminta untuk menjalankan perintah add untuk update atau restore untuk mengembalikan perubahan

- Lakukan staging dengan perintah yang sesuai

```
denan@ReytoComputer MINGW64 ~/tugas-01 (master)
$ git add biodata.txt
```

- Periksa status dengan perintah yang sesuai

```
denan@ReytoComputer MINGW64 ~/tugas-01 (master)
$ git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        modified:   biodata.txt
```



A6. Informasi yang didapat adalah terjadinya modified pada file biodata.txt

- Lakukan perintah commit yang sesuai

```
denan@ReytoComputer MINGW64 ~/tugas-01 (master)
$ git commit -m 'initial project version'
[master 02ae1e0] initial project version
1 file changed, 1 insertion(+), 1 deletion(-)
```

Adanya 1 file yang diubah, 1 masukan, 1 penghapusan

- Temukan id commit pertama, gunakan perintah sesuai

```
denan@ReytoComputer MINGW64 ~/tugas-01 (master)
$ git log
commit 02ae1e0c2c633d38df85851077efe577cc4672a9 (HEAD -> master)
Author: Reyhan Denanto <denanto01@gmail.com>
Date: Mon Jan 4 17:25:54 2021 +0700

    initial project version

commit 3d9a8a6e5eaa94a1e24162c6f9c42c6c4686e211
Author: Reyhan Denanto <denanto01@gmail.com>
Date: Mon Jan 4 17:24:33 2021 +0700

    initial project version

commit 72a2885727fe034233a31edd69ffa134c89da5b3
Author: Reyhan Denanto <denanto01@gmail.com>
Date: Mon Jan 4 16:47:08 2021 +0700

    initial project version
```

Id commit pertama yaitu inisiasi project pada jam 16:47

```
denan@ReytoComputer MINGW64 ~/tugas-01 (master)
$ git commit -m 'initial project version'
[master (root-commit) 72a2885] initial project version
1 file changed, 2 insertions(+)
create mode 100644 biodata.txt
```

A7. Id commit pertama adalah 72a2885

- Menampilkan perbedaan commit pertama dan terakhir

```
denan@ReytoComputer MINGW64 ~/tugas-01 (master)
$ git diff 72a2885
diff --git a/biodata.txt b/biodata.txt
index 938e0ff..658ad15 100644
--- a/biodata.txt
+++ b/biodata.txt
@@ -1,2 +1,3 @@
 NO.REG : 1920010197
 -Nama   : Reyhan Denanto
 \ No newline at end of file
 +Nama   : Reyhan Denanto
 +Jurusan: TI-PNJ
 \ No newline at end of file
```



Tampilan commit pertama dan terakhir

3. Remote Repository

- Membuat akun dan repository

Create a new repository

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

Owner * / Repository name *

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

Description (optional)

☒ **Public**
Anyone on the internet can see this repository. You choose who can commit.

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

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

☐ **Add a README file**
This is where you can write a long description for your project. [Learn more.](#)

☐ **Add .gitignore**
Choose which files not to track from a list of templates. [Learn more.](#)

☐ **Choose a license**
A license tells others what they can and can't do with your code. [Learn more.](#)

- Jalankan perintah untuk push repository yang sudah ada (dari local ke remote). Contoh perintah seperti dalam kotak merah pada gambar di bawah ini. Cek pada GitHub masing- masing

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

```
git remote add origin https://github.com/ReytoZ1/3sc1_pnj_t01_Reyhan_Denanto.git
git branch -M main
git push -u origin main
```

```
denan@ReytoComputer MINGW64 ~/tugas-01 (main)
$ git remote add origin https://github.com/ReytoZ1/3sc1_pnj_t01_Reyhan_Denanto.g
it
error: remote origin already exists.

denan@ReytoComputer MINGW64 ~/tugas-01 (main)
$ git branch -M main

denan@ReytoComputer MINGW64 ~/tugas-01 (main)
$ git push -u origin main
Enumerating objects: 9, done.
Counting objects: 100% (9/9), done.
Delta compression using up to 12 threads
Compressing objects: 100% (5/5), done.
Writing objects: 100% (9/9), 831 bytes | 415.00 KiB/s, done.
Total 9 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/ReytoZ1/tugas-01.git
 * [new branch]      main -> main
Branch 'main' set up to track remote branch 'main' from 'origin'.
```

Setelah dijalankannya perintah



A8. -u : adalah Update, Origin : adalah nama default, master : nama branch. Jadi apabila perintah “-u origin master, berarti update nama sesuai default, yang apabila sebelumnya ada modifikasi perlu di inisiasi/commit secara manual.

- Ubah biodata.txt

```
biodata.txt - Notepad
File Edit Format View Help
NO.REG : 1920010197
Nama : Reyhan Denanto
Jurusan: TI-PNJ
Angkatan : 2019
```

A9. Perbedaan sejauh ini adalah nama branch yang tadinya (**master**) menjadi (**main**) , selain itu pada head disamping id commit pada perintah log berubah dari (HEAD > master) menjadi (HEAD > main, origin/main)

```
denan@ReytoComputer MINGW64 ~/tugas-01 (main)
$ git log
commit 02ae1e0c2c633d38df85851077efe577cc4672a9 (HEAD -> main, origin/main)
```

- Lakukan staging dan commit dengan perintah sesuai

```
denan@ReytoComputer MINGW64 ~/tugas-01 (main)
$ git add biodata.txt

denan@ReytoComputer MINGW64 ~/tugas-01 (main)
$ git commit -m 'initial project version'
[main d940a81] initial project version
1 file changed, 2 insertions(+), 1 deletion(-)
```

- Perbarui remote jalankan perintah
Git push

```
denan@ReytoComputer MINGW64 ~/tugas-01 (main)
$ git push
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 12 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 327 bytes | 327.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/ReytoZ1/tugas-01.git
02ae1e0..d940a81 main -> main
```

A10 Sepertinya tidak ada perubahan yang signifikan



4. Remote Repo part 2

- Buat branch dengan nama testing

```
denan@ReytoComputer MINGW64 ~/tugas-01 (main)
$ git branch testing
```

- Pindah branch ke testing

```
$ git checkout testing
Switched to branch 'testing'

denan@ReytoComputer MINGW64 ~/tugas-01 (testing)
$
```

- Buatlah file baru (branch.txt) pada branch testing, lalu lakukan commit menggunakan perintah yang sesuai.



```
denan@ReytoComputer MINGW64 ~/tugas-01 (testing)
$ git add branch.txt

denan@ReytoComputer MINGW64 ~/tugas-01 (testing)
$ git status
On branch testing
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        new file:   branch.txt

denan@ReytoComputer MINGW64 ~/tugas-01 (testing)
$ git commit -m 'initial project version'
[testing b5a58a5] initial project version
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 branch.txt
```

Berikut saya add terlebih dahulu file terbaru lalu saya commit

- Lakukan push menggunakan perintah yang sesuai. Jika diminta, lakukan set upstream, jalankan perintah: (setelahnya, pastikan dengan melakukan push kembali)

```
denan@ReytoComputer MINGW64 ~/tugas-01 (testing)
$ git push
fatal: The current branch testing has no upstream branch.
To push the current branch and set the remote as upstream, use

    git push --set-upstream origin testing
```



```
denan@ReytoComputer MINGW64 ~/tugas-01 (testing)
$ git push --set-upstream origin testing
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 12 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 286 bytes | 286.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
remote:
remote: Create a pull request for 'testing' on GitHub by visiting:
remote:   https://github.com/ReytoZ1/tugas-01/pull/new/testing
remote:
To https://github.com/ReytoZ1/tugas-01.git
 * [new branch]      testing -> testing
Branch 'testing' set up to track remote branch 'testing' from 'origin'.
```

- Kembali ke branch master

```
denan@ReytoComputer MINGW64 ~/tugas-01 (testing)
$ git branch master

denan@ReytoComputer MINGW64 ~/tugas-01 (testing)
$ git checkout master
Switched to branch 'master'
```

Perlu diketahui bahwa perlunya memasukan perintah git branch master sebelum perintah git checkout master

```
denan@ReytoComputer MINGW64 ~/tugas-01 (master)
$ .....
```

- Lakukan merge testing branch ke master

```
denan@ReytoComputer MINGW64 ~/tugas-01 (master)
$ git merge testing
Already up to date.
```

- Lakukan push

```
denan@ReytoComputer MINGW64 ~/tugas-01 (master)
$ git push --set-upstream origin master
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0
remote:
remote: Create a pull request for 'master' on GitHub by visiting:
remote:   https://github.com/ReytoZ1/tugas-01/pull/new/master
remote:
To https://github.com/ReytoZ1/tugas-01.git
 * [new branch]      master -> master
Branch 'master' set up to track remote branch 'master' from 'origin'.
```

5. Remote repo part 3

- Lakukan clone



```
denan@ReytoComputer MINGW64 ~/tugas-01 (master)
$ git clone https://github.com/TirtaSouja/3sc1_pnj.git
Cloning into '3sc1_pnj'...
remote: Enumerating objects: 8, done.
remote: Counting objects: 100% (8/8), done.
remote: Compressing objects: 100% (4/4), done.
remote: Total 8 (delta 0), reused 3 (delta 0), pack-reused 0
Receiving objects: 100% (8/8), done.
```

A11. Conflict adalah sebuah permasalahan atau error yang terjadi pada, menemukan conflict dan penyelesaiannya dengan membaca ulang perintah atau menyesuaikan perintah.