

Nama : Naufal Athallah Iwel

NIM : 1920010174

Kelas : 3CC1

Pengaturan nama dan email

```
Naufal@DESKTOP-EISC94T MINGW64 ~  
$ git config --global user.name "Naufal"
```

```
Naufal@DESKTOP-EISC94T MINGW64 ~  
$ git config --global user.email naufalaiwel@gmail.com
```

List setelah mengatur nama dan email

```
Naufal@DESKTOP-EISC94T MINGW64 ~  
$ git config --list  
diff.astextplain.textconv=astextplain  
filter.lfs.clean=git-lfs clean -- %f  
filter.lfs.smudge=git-lfs smudge -- %f  
filter.lfs.process=git-lfs filter-process  
filter.lfs.required=true  
http.sslbackend=openssl  
http.sslcainfo=C:/Program Files/Git/mingw64/ssl/certs/ca-bundle.crt  
core.autocrlf=true  
core.fscache=true  
core.symlinks=false  
pull.rebase=false  
credential.helper=manager-core  
credential.https://dev.azure.com.usehttppath=true  
init.defaultbranch=master  
user.email=naufalaiwel@gmail.com  
user.name=Naufal
```

Pembuatan direktori tutorial-01

```
Naufal@DESKTOP-EISC94T MINGW64 ~  
$ mkdir tutorial-01  
  
Naufal@DESKTOP-EISC94T MINGW64 ~  
$ git init tutorial-01  
Initialized empty Git repository in C:/Users/Naufal/tutorial-01/.git/  
  
Naufal@DESKTOP-EISC94T MINGW64 ~  
$ git init  
Initialized empty Git repository in C:/Users/Naufal/.git/
```

Q1: Apa yang terjadi jika perintah dijalankan tanpa menyantumkan nama (path) directory?

Akan menginisialisasi git repository tidak di dalam file tutorial-01

Mengambil status pada tutorial-01 dan menambahkan file biodata

```

Naufal@DESKTOP-EISC94T MINGW64 ~
$ cd tutorial-01

Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-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)

```

```

Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-01 (master)
$ git add biodata.txt

```

```

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

```

Q2: Jelaskan perbedaan status working tree sebelum dan setelah menjalankan perintah add?

Perbedaannya file biodata akan hijau dan itu tandanya file telah ditracking git

Commit file biodata

```

Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-01 (master)
$ git commit -m 'initial project version'
[master (root-commit) a6b34d4] initial project version
1 file changed, 2 insertions(+)
create mode 100644 biodata.txt

Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-01 (master)
$ git commit 'initial project version'
error: pathspec 'initial project version' did not match any file(s) known to git

```

Q3: Apakah maksud dari -m dan 'initial project version' pada perintah diatas? Apa yang terjadi jika perintah dilakukan tanpa menambahkan -m?

-m berfungsi untuk memberikan pesan yang diberikan, jika tidak menggunakan -m maka akan error karena tidak diberikan inisialisasi pesan

Commit log

```

Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-01 (master)
$ git log
commit a6b34d4dc008bce690b145eabdf22d4d67ce8b0b (HEAD -> master)
Author: Naufal <naufalaiwel@gmail.com>
Date:   Mon Jan 4 10:51:34 2021 +0700

    initial project version

```

Q4: Informasi apa saja yang ditampilkan pada perintah log?

Informasi tentang commit yang sudah dilakukan author

Status setelah diedit

```
Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-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")
```

Q5: Informasi apa yang anda peroleh dari status saat ini?

File biodata yang ditracking akan terdeteksi perubahan

Status setelah commit kembali

```
Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-01 (master)
$ git add biodata.txt

Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-01 (master)
$ git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        modified:   biodata.txt
```

Q6: Informasi apa yang anda peroleh dari status saat ini?

File yang dimodifikasi berikan perintah add ulang dan hasilnya berhasil tertracking kembali

Q7: Berapakah id commit pertama anda?

commit a6b34d4dc008bce690b145eabdf22d4d67ce8b0b

Menampilkan perbedaan commit pertama dan kedua

```

Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-01 (master)
$ git diff a6b34d4dc008bce690b145eabdf22d4d67ce8b0b
diff --git a/biodata.txt b/biodata.txt
index 72ec460..d8fe83e 100644
--- a/biodata.txt
+++ b/biodata.txt
@@ -1,2 +1,3 @@
  No. Reg      : 1920010174
-Nama      : Naufal
\ No newline at end of file
+Nama      : Naufal
+Jurusan    : Software Engineering
\ No newline at end of file

```

Q8: Apakah maksud dari -u, origin, dan master pada perintah dalam kotak merah?

-u untuk menambahkan referensi tracking ke server yang akan dipush, origin merupakan lokasi file, master merupakan bentuk dari file lokal

Q9: Apa perbedaan antara local dan remote repository pada titik ini?

Local dimana file yang terdapat di dalam komputer pengguna, sedangkan remote repository merupakan file yang local yang telah diupload dan online

Q10: Perubahan apa yang terjadi pada remote repository?

Setelah staging, commit, dan push maka file di remote repository akan terupdate

Membuat branch testing

```

Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-01 (testing)
$ git add branch.txt

Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-01 (testing)
$ git commit -m 'commit branch'
[testing 919af89] commit branch
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 branch.txt

Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-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

Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-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), 272 bytes | 272.00 KiB/s, done.

```

```

Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-01 (testing)
$ git push
Everything up-to-date

Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-01 (testing)
$ git checkout master
error: pathspec 'master' did not match any file(s) known to git

Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-01 (testing)
$ git checkout main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.

```

Menggabungkan testing dengan main

```

Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-01 (main)
$ git merge testing
Updating a407dea..919af89
Fast-forward
 branch.txt | 0
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 branch.txt

Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-01 (main)
$ git push
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/naufalathallah/3cc1_pnj_t01_NaufalAthallahIwe1.git
 a407dea..919af89  main -> main

Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-01 (main)
$ git clone https://github.com/naufalathallah/3cc1_pnj_t01_NaufalAthallahIwe1
Cloning into '3cc1_pnj_t01_NaufalAthallahIwe1'...
remote: Enumerating objects: 12, done.
remote: Counting objects: 100% (12/12), done.
remote: Compressing objects: 100% (6/6), done.
remote: Total 12 (delta 1), reused 12 (delta 1), pack-reused 0
Receiving objects: 100% (12/12), done.
Resolving deltas: 100% (1/1), done.

```

Melakukan clone repository

```

Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-01 (main)
$ cd 3cc1_pnj_t01_NaufalAthallahIwe1/

Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-01/3cc1_pnj_t01_NaufalAthallahIwe1 (main)
$ git status
On branch main
Your branch is up to date with 'origin/main'.

Changes not staged for commit:
  (use "git add/rm <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        deleted:    biodata.txt

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        1920010174.txt

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

Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-01/3cc1_pnj_t01_NaufalAthallahIwe1 (main)
$ git add 1920010174.txt

Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-01/3cc1_pnj_t01_NaufalAthallahIwe1 (main)
$ git commit -m 'npm commit'
[main 3c6358b] npm commit
 1 file changed, 4 insertions(+)
 create mode 100644 1920010174.txt

Naufal@DESKTOP-EISC94T MINGW64 ~/tutorial-01/3cc1_pnj_t01_NaufalAthallahIwe1 (main)
$ git push
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Delta compression using up to 12 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (2/2), 273 bytes | 273.00 KiB/s, done.
Total 2 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/naufalathallah/3cc1_pnj_t01_NaufalAthallahIwe1
 919af89..3c6358b  main -> main

```

Q11: Apa itu conflict dalam konteks Git. Jika pada langkah ini anda menemukan conflict, tambahkan pada jawaban anda bagaimana anda menyelesaikannya.

Conflict merupakan ketika 2 branch terpisah telah dilakukan pengeditan pada baris sebuah file atau ketika file telah dihapus tetapi diedit di branch yang lainnya. Contohnya pada kasus ini ketika pengupdatean isi pada biodata dimana terjadi update pada file dan harus diupload kembali untuk update.