

**LAPORAN PRAKTIKUM SISTEM OPERASI**  
**MODUL 7: MANAGEMEN USER DAN PERMISSION**  
**DIREKTORI/FILE PADA LINUX**



Disusun oleh:

Nama : Riyan Catur Agusta

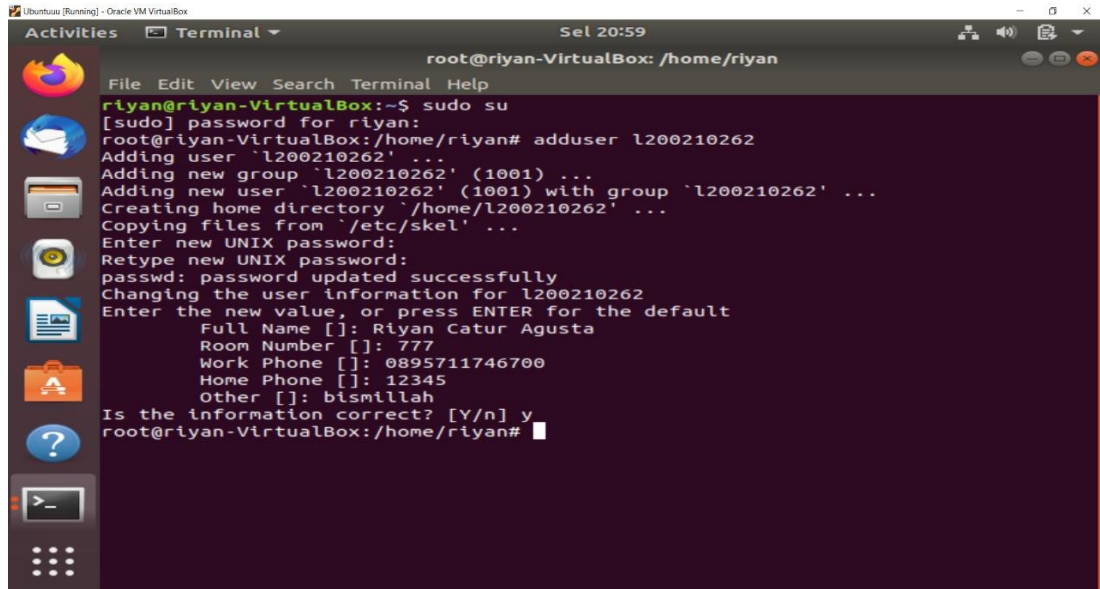
NIM : L200210262

Kelas : Praktikum SO E

**PROGRAM STUDI TEKNIK INFORMATIKA**  
**FAKULTAS KOMUNIKASI DAN INFORMATIKA**  
**UNIVERSITAS MUHAMMADIYAH SURAKARTA TAHUN 2022/2023**

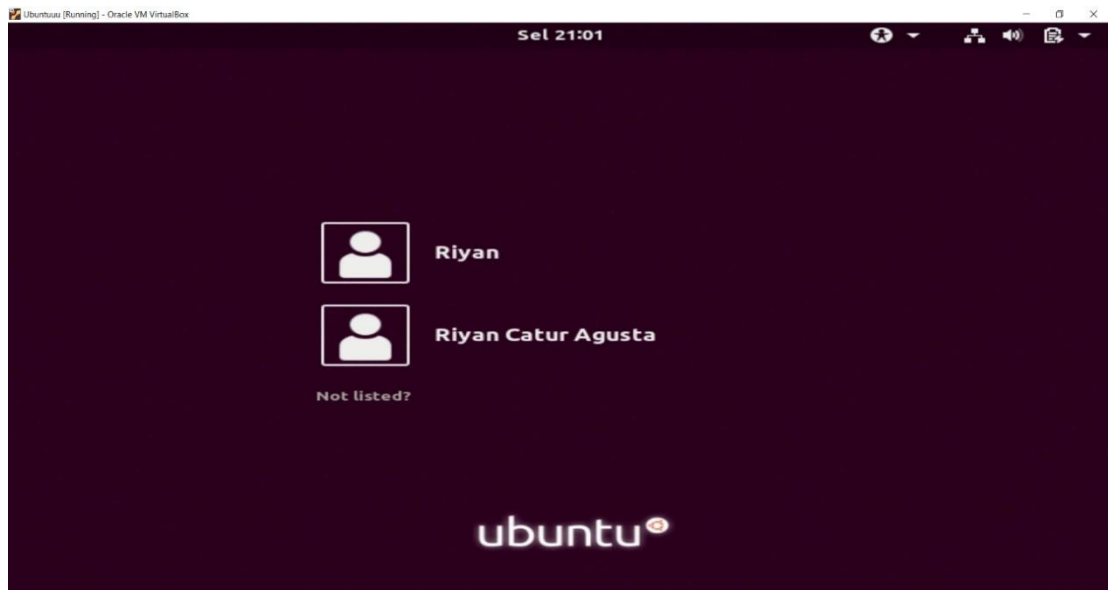
## PRAKTIKUM 1:

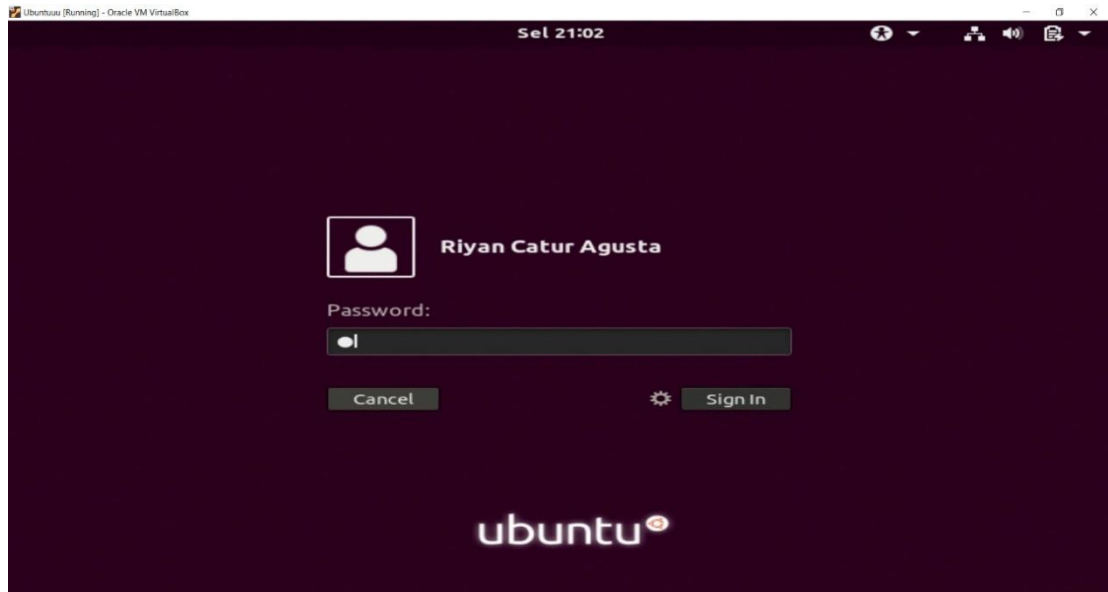
1. Membuat user baru dengan nama nim menggunakan adduser dan memasukkan password dua kali. Dilanjutkan memasukkan user information dengan data yang diminta.



```
root@riyan-VirtualBox: /home/riyan
File Edit View Search Terminal Help
riyan@riyan-VirtualBox:~$ sudo su
[sudo] password for riyan:
root@riyan-VirtualBox:/home/riyan# adduser l200210262
Adding user `l200210262' ...
Adding new group `l200210262' (1001) ...
Adding new user `l200210262' (1001) with group `l200210262' ...
Creating home directory `/home/l200210262' ...
Copying files from `/etc/skel' ...
Enter new UNIX password:
Retype new UNIX password:
passwd: password updated successfully
Changing the user information for l200210262
Enter the new value, or press ENTER for the default
Full Name []: Riyan Catur Agusta
Room Number []: 777
Work Phone []: 0895711746700
Home Phone []: 12345
Other []: bismillah
Is the information correct? [Y/n] y
root@riyan-VirtualBox:/home/riyan#
```

2. Keluar dari shell dan LogOut, kemudia LogIn lagi menggunakan User yang baru dibuat.





## PRAKTIKUM 2:

1. Membuat file latihan dengan perintah '`touch latihan`' dan mengubah permission file menggunakan perintah '`chmod`'.

The image is a screenshot of a terminal window titled 'riyan@riyan-VirtualBox: ~'. The terminal shows the following commands and output:

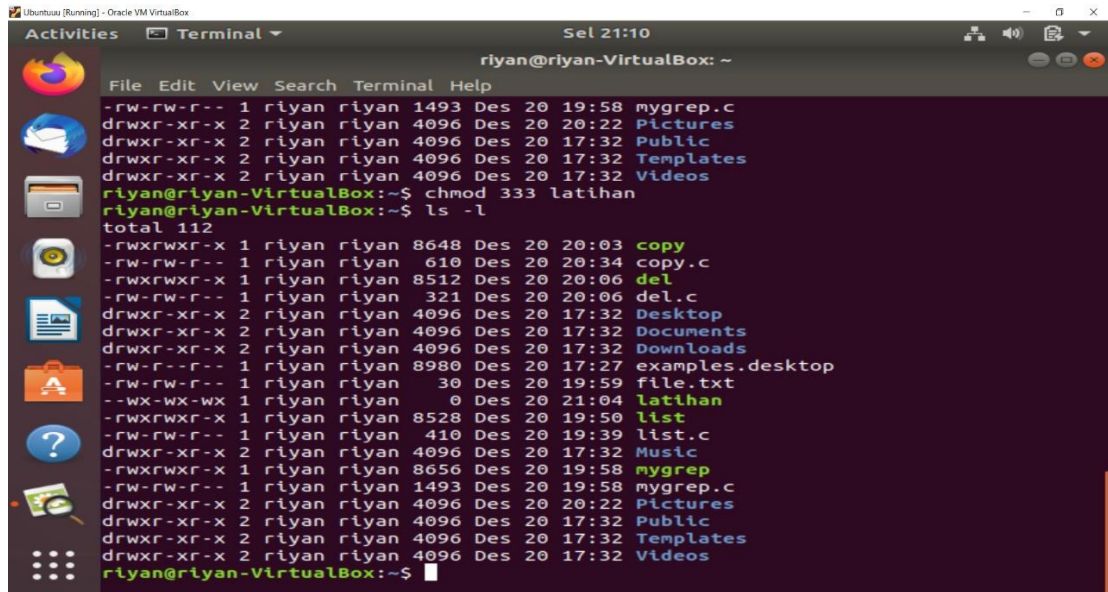
```
riyan@riyan-VirtualBox:~$ touch latihan
riyan@riyan-VirtualBox:~$ chmod 666 latihan
riyan@riyan-VirtualBox:~$ ls -l
total 112
-rwxrwxr-x 1 riyan riyan 8648 Des 20 20:03 copy
-rw-rw-r-- 1 riyan riyan 610 Des 20 20:34 copy.c
-rwxrwxr-x 1 riyan riyan 8512 Des 20 20:06 del
-rw-rw-r-- 1 riyan riyan 321 Des 20 20:06 del.c
drwxr-xr-x 2 riyan riyan 4096 Des 20 17:32 Desktop
drwxr-xr-x 2 riyan riyan 4096 Des 20 17:32 Documents
drwxr-xr-x 2 riyan riyan 4096 Des 20 17:32 Downloads
-rw-r--r-- 1 riyan riyan 8980 Des 20 17:27 examples.desktop
-rw-rw-r-- 1 riyan riyan 30 Des 20 19:59 file.txt
-rw-rw-rw- 1 riyan riyan 0 Des 20 21:04 latihan
-rwxrwxr-x 1 riyan riyan 8528 Des 20 19:50 list
-rw-rw-r-- 1 riyan riyan 410 Des 20 19:39 list.c
drwxr-xr-x 2 riyan riyan 4096 Des 20 17:32 Music
-rwxrwxr-x 1 riyan riyan 8656 Des 20 19:58 mygrep
-rw-rw-r-- 1 riyan riyan 1493 Des 20 19:58 mygrep.c
drwxr-xr-x 2 riyan riyan 4096 Des 20 20:22 Pictures
drwxr-xr-x 2 riyan riyan 4096 Des 20 17:32 Public
drwxr-xr-x 2 riyan riyan 4096 Des 20 17:32 Templates
drwxr-xr-x 2 riyan riyan 4096 Des 20 17:32 Videos
riyan@riyan-VirtualBox:~$ chmod 640 latihan
riyan@riyan-VirtualBox:~$ ls -l
total 112
-rwxrwxr-x 1 riyan riyan 8648 Des 20 20:03 copy
-rw-rw-r-- 1 riyan riyan 610 Des 20 20:34 copy.c
-rwxrwxr-x 1 riyan riyan 8512 Des 20 20:06 del
```

```
Ubuntu [Running] - Oracle VM VirtualBox
Activities Terminal Sel 21:09
riyan@riyan-VirtualBox: ~
File Edit View Search Terminal Help
drwxr-xr-x 2 riyan riyan 4096 Des 20 17:32 Templates
drwxr-xr-x 2 riyan riyan 4096 Des 20 17:32 Videos
riyan@riyan-VirtualBox:~$ chmod 640 latihan
riyan@riyan-VirtualBox:~$ ls -l
total 112
-rwxrwxr-x 1 riyan riyan 8648 Des 20 20:03 copy
-rw-rw-r-- 1 riyan riyan 610 Des 20 20:34 copy.c
-rwxrwxr-x 1 riyan riyan 8512 Des 20 20:06 del
-rw-rw-r-- 1 riyan riyan 321 Des 20 20:06 del.c
drwxr-xr-x 2 riyan riyan 4096 Des 20 17:32 Desktop
drwxr-xr-x 2 riyan riyan 4096 Des 20 17:32 Documents
drwxr-xr-x 2 riyan riyan 4096 Des 20 17:32 Downloads
-rw-r--r-- 1 riyan riyan 8980 Des 20 17:27 examples.desktop
-rw-rw-r-- 1 riyan riyan 30 Des 20 19:59 file.txt
-rw-r--r-- 1 riyan riyan 0 Des 20 21:04 latihan
-rwxrwxr-x 1 riyan riyan 8528 Des 20 19:50 list
-rw-rw-r-- 1 riyan riyan 410 Des 20 19:39 list.c
drwxr-xr-x 2 riyan riyan 4096 Des 20 17:32 Music
-rwxrwxr-x 1 riyan riyan 8656 Des 20 19:58 mygrep
-rw-rw-r-- 1 riyan riyan 1493 Des 20 19:58 mygrep.c
drwxr-xr-x 2 riyan riyan 4096 Des 20 20:22 Pictures
drwxr-xr-x 2 riyan riyan 4096 Des 20 17:32 Public
drwxr-xr-x 2 riyan riyan 4096 Des 20 17:32 Templates
drwxr-xr-x 2 riyan riyan 4096 Des 20 17:32 Videos
riyan@riyan-VirtualBox:~$ chmod 111 latihan
riyan@riyan-VirtualBox:~$ ls -l
total 112
-rwxrwxr-x 1 riyan riyan 8648 Des 20 20:03 copy
-rw-rw-r-- 1 riyan riyan 610 Des 20 20:34 copy.c
```

```
Ubuntu [Running] - Oracle VM VirtualBox
Activities Terminal Sel 21:09
riyan@riyan-VirtualBox: ~
File Edit View Search Terminal Help
drwxr-xr-x 2 riyan riyan 4096 Des 20 17:32 Public
drwxr-xr-x 2 riyan riyan 4096 Des 20 17:32 Templates
drwxr-xr-x 2 riyan riyan 4096 Des 20 17:32 Videos
riyan@riyan-VirtualBox:~$ chmod 111 latihan
riyan@riyan-VirtualBox:~$ ls -l
total 112
-rwxrwxr-x 1 riyan riyan 8648 Des 20 20:03 copy
-rw-rw-r-- 1 riyan riyan 610 Des 20 20:34 copy.c
-rwxrwxr-x 1 riyan riyan 8512 Des 20 20:06 del
-rw-rw-r-- 1 riyan riyan 321 Des 20 20:06 del.c
drwxr-xr-x 2 riyan riyan 4096 Des 20 17:32 Desktop
drwxr-xr-x 2 riyan riyan 4096 Des 20 17:32 Documents
drwxr-xr-x 2 riyan riyan 4096 Des 20 17:32 Downloads
-rw-r--r-- 1 riyan riyan 8980 Des 20 17:27 examples.desktop
-rw-rw-r-- 1 riyan riyan 30 Des 20 19:59 file.txt
---x--x--x 1 riyan riyan 0 Des 20 21:04 latihan
-rwxrwxr-x 1 riyan riyan 8528 Des 20 19:50 list
-rw-rw-r-- 1 riyan riyan 410 Des 20 19:39 list.c
drwxr-xr-x 2 riyan riyan 4096 Des 20 17:32 Music
-rwxrwxr-x 1 riyan riyan 8656 Des 20 19:58 mygrep
-rw-rw-r-- 1 riyan riyan 1493 Des 20 19:58 mygrep.c
drwxr-xr-x 2 riyan riyan 4096 Des 20 20:22 Pictures
drwxr-xr-x 2 riyan riyan 4096 Des 20 17:32 Public
drwxr-xr-x 2 riyan riyan 4096 Des 20 17:32 Templates
drwxr-xr-x 2 riyan riyan 4096 Des 20 17:32 Videos
riyan@riyan-VirtualBox:~$ chmod 222 latihan
riyan@riyan-VirtualBox:~$ ls -l
total 112
-rwxrwxr-x 1 riyan riyan 8648 Des 20 20:03 copy
```

```
Ubuntu [Running] - Oracle VM VirtualBox
Activities Terminal Sel 21:09
riyan@riyan-VirtualBox: ~
File Edit View Search Terminal Help
drwxr-xr-x 2 riyan riyan 4096 Des 20 17:32 Public
drwxr-xr-x 2 riyan riyan 4096 Des 20 17:32 Templates
drwxr-xr-x 2 riyan riyan 4096 Des 20 17:32 Videos
riyan@riyan-VirtualBox:~$ chmod 222 latihan
riyan@riyan-VirtualBox:~$ ls -l
total 112
-rwxrwxr-x 1 riyan riyan 8648 Des 20 20:03 copy
-rw-rw-r-- 1 riyan riyan 610 Des 20 20:34 copy.c
-rwxrwxr-x 1 riyan riyan 8512 Des 20 20:06 del
-rw-rw-r-- 1 riyan riyan 321 Des 20 20:06 del.c
drwxr-xr-x 2 riyan riyan 4096 Des 20 17:32 Desktop
drwxr-xr-x 2 riyan riyan 4096 Des 20 17:32 Documents
drwxr-xr-x 2 riyan riyan 4096 Des 20 17:32 Downloads
-rw-r--r-- 1 riyan riyan 8980 Des 20 17:27 examples.desktop
-rw-rw-r-- 1 riyan riyan 30 Des 20 19:59 file.txt
-rw-rw-r-- 1 riyan riyan 0 Des 20 21:04 latihan
-rwxrwxr-x 1 riyan riyan 8528 Des 20 19:50 list
-rw-rw-r-- 1 riyan riyan 410 Des 20 19:39 list.c
drwxr-xr-x 2 riyan riyan 4096 Des 20 17:32 Music
-rwxrwxr-x 1 riyan riyan 8656 Des 20 19:58 mygrep
-rw-rw-r-- 1 riyan riyan 1493 Des 20 19:58 mygrep.c
drwxr-xr-x 2 riyan riyan 4096 Des 20 20:22 Pictures
drwxr-xr-x 2 riyan riyan 4096 Des 20 17:32 Public
drwxr-xr-x 2 riyan riyan 4096 Des 20 17:32 Templates
drwxr-xr-x 2 riyan riyan 4096 Des 20 17:32 Videos
riyan@riyan-VirtualBox:~$ chmod 333 latihan
riyan@riyan-VirtualBox:~$ ls -l
total 112
-rwxrwxr-x 1 riyan riyan 8648 Des 20 20:03 copy
```





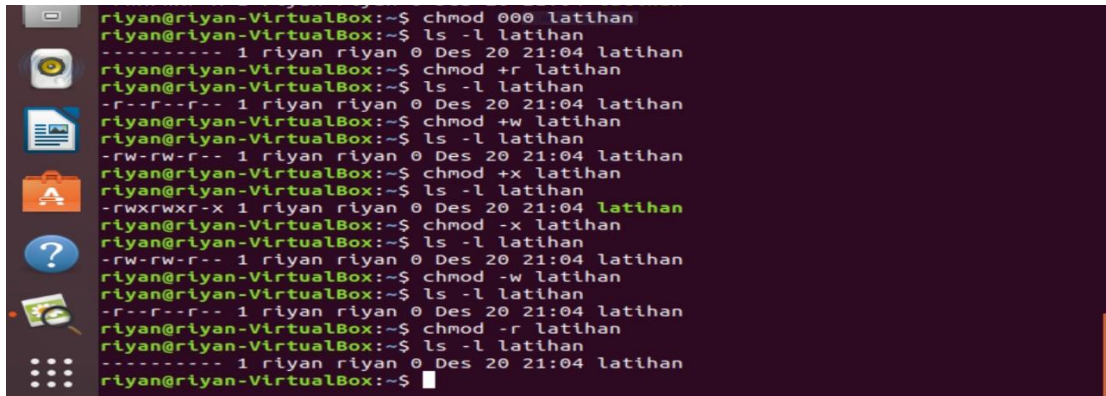
```
riyan@riyan-VirtualBox: ~  
File Edit View Search Terminal Help  
-rw-rw-r-- 1 riyan riyan 1493 Des 20 19:58 mygrep.c  
drwxr-xr-x 2 riyan riyan 4096 Des 20 20:22 Pictures  
drwxr-xr-x 2 riyan riyan 4096 Des 20 17:32 Public  
drwxr-xr-x 2 riyan riyan 4096 Des 20 17:32 Templates  
drwxr-xr-x 2 riyan riyan 4096 Des 20 17:32 Videos  
riyan@riyan-VirtualBox:~$ chmod 333 latihan  
riyan@riyan-VirtualBox:~$ ls -l  
total 112  
-rwxrwxr-x 1 riyan riyan 8648 Des 20 20:03 copy  
-rw-rw-r-- 1 riyan riyan 610 Des 20 20:34 copy.c  
-rwxrwxr-x 1 riyan riyan 8512 Des 20 20:06 del  
-rw-rw-r-- 1 riyan riyan 321 Des 20 20:06 del.c  
drwxr-xr-x 2 riyan riyan 4096 Des 20 17:32 Desktop  
drwxr-xr-x 2 riyan riyan 4096 Des 20 17:32 Documents  
drwxr-xr-x 2 riyan riyan 4096 Des 20 17:32 Downloads  
-rw-r--r-- 1 riyan riyan 8980 Des 20 17:27 examples.desktop  
-rw-rw-r-- 1 riyan riyan 30 Des 20 19:59 file.txt  
--wx-wx-wx 1 riyan riyan 0 Des 20 21:04 latihan  
-rwxrwxr-x 1 riyan riyan 8528 Des 20 19:50 list  
-rw-rw-r-- 1 riyan riyan 410 Des 20 19:39 list.c  
drwxr-xr-x 2 riyan riyan 4096 Des 20 17:32 Music  
-rwxrwxr-x 1 riyan riyan 8656 Des 20 19:58 mygrep  
-rw-rw-r-- 1 riyan riyan 1493 Des 20 19:58 mygrep.c  
drwxr-xr-x 2 riyan riyan 4096 Des 20 20:22 Pictures  
drwxr-xr-x 2 riyan riyan 4096 Des 20 17:32 Public  
drwxr-xr-x 2 riyan riyan 4096 Des 20 17:32 Templates  
drwxr-xr-x 2 riyan riyan 4096 Des 20 17:32 Videos  
riyan@riyan-VirtualBox:~$
```

Keterangan:

- a) **Chmod 666 (RW / RW / RW)**  
Opsi ini memungkinkan semua pengguna untuk membaca dan menulis ke file.
- b) **Chmod 640 (RW / R / ---)**  
Opsi ini memungkinkan pengguna untuk membaca dan menulis ke file, sementara grup dapat membaca dan pengguna lain tidak memiliki permission apapun.
- c) **Chmod 111 (X / X / X)**  
Opsi ini memungkinkan semua pengguna untuk dapat mengeksekusi sebuah file.
- d) **Chmod 222 (R / R / R)**  
Opsi ini memungkinkan semua pengguna untuk dapat mencoba sebuah file.
- e) **Chmod 333 (RX / RX /RX)**  
Opsi ini memungkinkan semua pengguna untuk dapat menulis dan mengeksekusi file.

### PRAKTIKUM 3:

1. Melakukan perubahan hak akses menggunakan operand +x, +r, +w, -x, -r, -w.



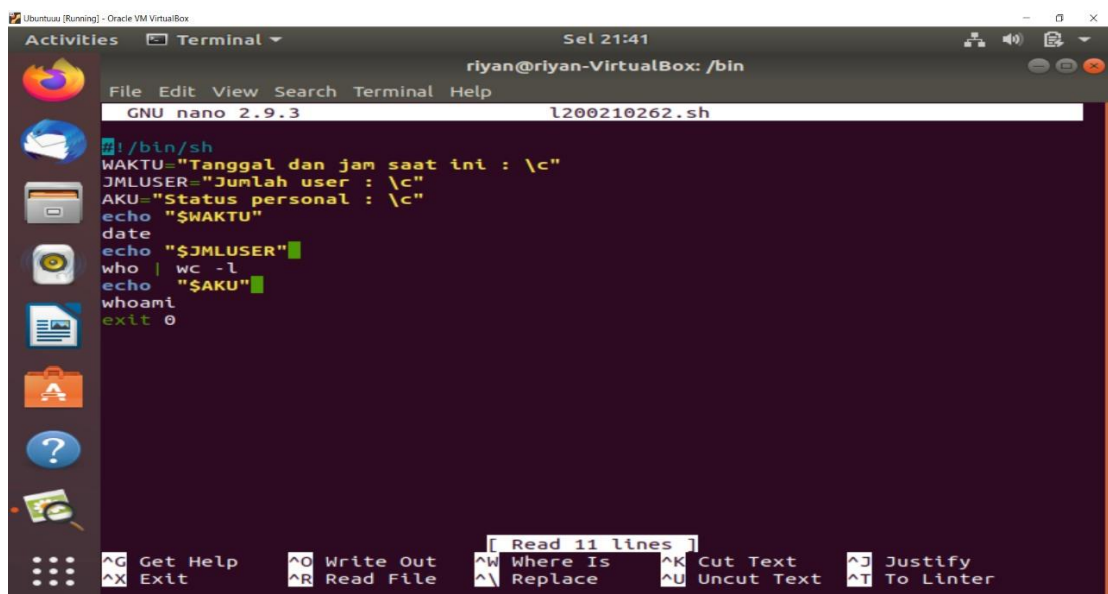
```
riyan@riyan-VirtualBox:~$ chmod 000 latihan
riyan@riyan-VirtualBox:~$ ls -l latihan
----- 1 riyan riyan 0 Des 20 21:04 latihan
riyan@riyan-VirtualBox:~$ chmod +r latihan
riyan@riyan-VirtualBox:~$ ls -l latihan
-r--r--r-- 1 riyan riyan 0 Des 20 21:04 latihan
riyan@riyan-VirtualBox:~$ chmod +w latihan
riyan@riyan-VirtualBox:~$ ls -l latihan
-rw-rw-r-- 1 riyan riyan 0 Des 20 21:04 latihan
riyan@riyan-VirtualBox:~$ chmod +x latihan
riyan@riyan-VirtualBox:~$ ls -l latihan
-rwxrwxr-x 1 riyan riyan 0 Des 20 21:04 latihan
riyan@riyan-VirtualBox:~$ chmod -x latihan
riyan@riyan-VirtualBox:~$ ls -l latihan
-rw-rw-r-- 1 riyan riyan 0 Des 20 21:04 latihan
riyan@riyan-VirtualBox:~$ chmod -w latihan
riyan@riyan-VirtualBox:~$ ls -l latihan
-r--r--r-- 1 riyan riyan 0 Des 20 21:04 latihan
riyan@riyan-VirtualBox:~$ chmod -r latihan
riyan@riyan-VirtualBox:~$ ls -l latihan
----- 1 riyan riyan 0 Des 20 21:04 latihan
riyan@riyan-VirtualBox:~$
```

Keterangan:

- a) \$chmod 000 latihan (tidak memberikan hak akses).
- b) \$chmod +r latihan (menambahkan hak akses read).
- c) \$chmod +w latihan (menambahkan hak akses write).
- d) \$chmod +x Latihan (menambahkan hak akses execute).
- e) \$chmod -x latihan (menghilangkan hak akses execute).
- f) \$chmod -w latihan (menghilangkan hak akses write).
- g) \$chmod -r latihan (menghilangkan hak akses read).

### PRAKTIKUM 4:

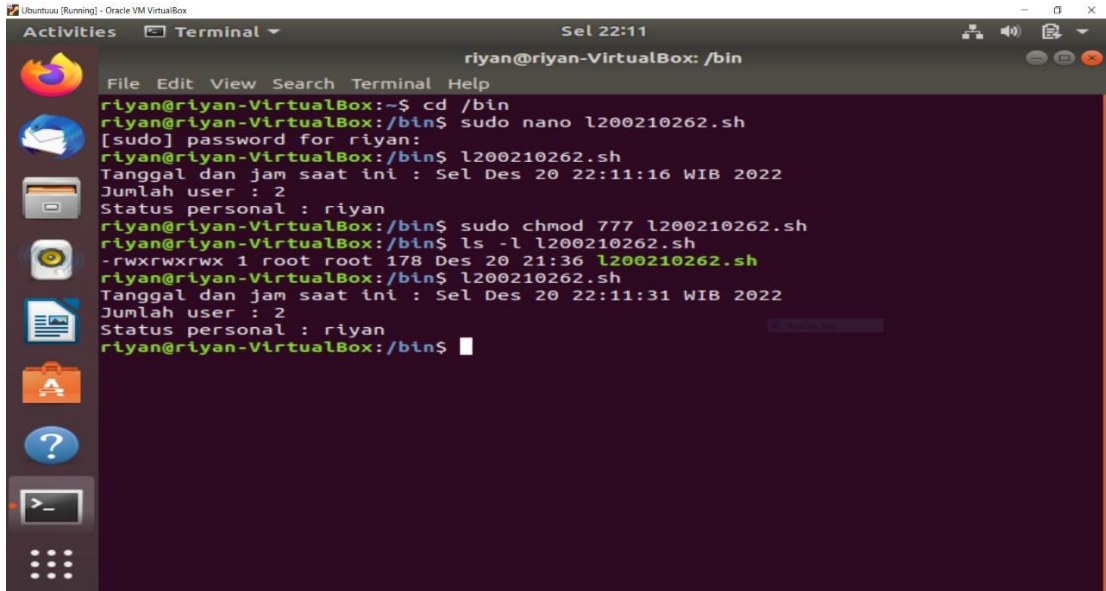
1. Masuk ke direktori/bin dengan perintah '`cd/bin`'.
2. Buat file dengan nama nim.sh (L200210262.sh) dengan perintah '`sudo nano l200210262.sh`'.



```
riyan@riyan-VirtualBox: /bin
GNU nano 2.9.3 l200210262.sh

#!/bin/sh
WAKTU="Tanggal dan jam saat ini : \c"
JMLUSER="Jumlah user : \c"
AKU="Status personal : \c"
echo "$WAKTU"
date
echo "$JMLUSER"
who | wc -l
echo "$AKU"
whoami
exit 0
```

3. Setelah itu buka file l200210262.sh, maka akan muncul informasi permission denied/ akses ditolak karena permissionnya belum diubah.
4. Ubah permission file agar dapat di read/write/execute dengan perintah '*sudo chmod 777 l200210262.sh*', kemudian masukkan perintah '*ls -l l200210262.sh*'.
5. Kembali buka file l200210262.sh, jika file diakses dan tidak terjadi error maka akan muncul sebagai berikut:



```
riyan@riyan-VirtualBox: /bin
File Edit View Search Terminal Help
riyan@riyan-VirtualBox:~$ cd /bin
riyan@riyan-VirtualBox:/bin$ sudo nano l200210262.sh
[sudo] password for riyan:
riyan@riyan-VirtualBox:/bin$ l200210262.sh
Tanggal dan jam saat ini : Sel Des 20 22:11:16 WIB 2022
Jumlah user : 2
Status personal : riyan
riyan@riyan-VirtualBox:/bin$ sudo chmod 777 l200210262.sh
riyan@riyan-VirtualBox:/bin$ ls -l l200210262.sh
-rwxrwxrwx 1 root root 178 Des 20 21:36 l200210262.sh
riyan@riyan-VirtualBox:/bin$ l200210262.sh
Tanggal dan jam saat ini : Sel Des 20 22:11:31 WIB 2022
Jumlah user : 2
Status personal : riyan
riyan@riyan-VirtualBox:/bin$
```