

JAWABAN :

1. Generate private/public key pair using **Elliptic Curve Digital Signature Algorithm** with “NAR22-1” as password.

ssh-keygen -t ecdsa //ssh-keygen adalah alat untuk membuat pasangan kunci otentikasi baru untuk SSH. Pasangan kunci tersebut digunakan untuk mengotomatisasi login, sistem masuk tunggal, dan untuk mengautentikasi host. -t untuk memilih algoritma yang akan digunakan dan ecdsa adalah Elliptic Curve Digital Signature Algorithm yang ingin digunakan.

```
prk@ubuntu:~$ ssh-keygen -t ecdsa
Generating public/private ecdsa key pair.
Enter file in which to save the key (/home/prk/.ssh/id_ecdsa):
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /home/prk/.ssh/id_ecdsa
Your public key has been saved in /home/prk/.ssh/id_ecdsa.pub
The key fingerprint is:
SHA256:ZZAHYleM1rF2KVhprp/nDns+18CllUh/qkiuDun1SK4 prk@ubuntu
The key's randomart image is:
+---[ECDSA 256]---+
|    o  +B+o      |
|   . O++* . .   |
|  ..+* 0        |
|    +.0    .    |
|   S.    . o    |
|   . .      +    |
|  o o ...o . o   |
| . = = .+0= + .  |
|  Eo=.+.+0**     |
+---[SHA256]-----+
prk@ubuntu:~$
```

2. Connect to the server (with your own IP Address and user).

```
sudo apt update
```

```
sudo apt install openssh-server
```

```
sudo systemctl status ssh //check apakah openssh-server sudah terinstall
```

```
ip a //check ip
```

```
ssh user@ip_address //connect to server dengan IP address dan user
```

```
prk@ubuntu:~$ ssh prk@192.168.215.128
The authenticity of host '192.168.215.128 (192.168.215.128)' can't be established.
ECDSA key fingerprint is SHA256:BL2Br7vHHjiA+wnQjB+JVDGZXS9PE0ve99ZE0IiF8ao.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '192.168.215.128' (ECDSA) to the list of known hosts.
prk@192.168.215.128's password:
Welcome to Ubuntu 20.04 LTS (GNU/Linux 5.4.0-37-generic x86_64)

* Documentation:  https://help.ubuntu.com
* Management:    https://landscape.canonical.com
* Support:        https://ubuntu.com/advantage
```

8. Make a bash script to rename .png file to .jpg file with these conditions:

- The script can accept multiple files.
- If there are no arguments that are supplied, return 1 as the exit code.
- By default, the script will use bash.
- The script can escape spaces in the file name. (e.g., "hello world.png" will become "hello world.jpg").
- Validate that the file must exists.

```
#!/bin/bash
```

```
for f in *.png ; do //mengambil semua file yang memiliki extension png
```

```
    mv "$f" "${f%.png}.jpg" //merename file yang memiliki extension png menjadi jpg dengan mv command
```

```
done
```

12. You have created your scripts, now you need to upload all your **bash scripts** and **explanations**, now you are asked to put it into **Github**. Here are some specifications:

- Create a **Github Account** with a username that you picked, create a project with format:

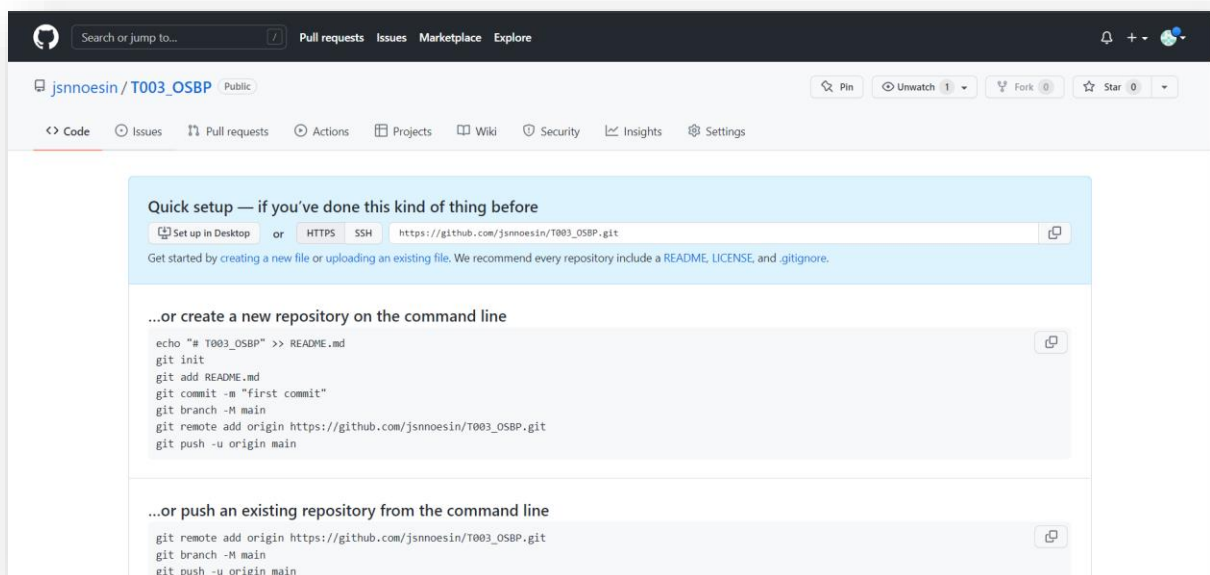
TXXX_OSBP

Where:

TXXX: Your trainee number

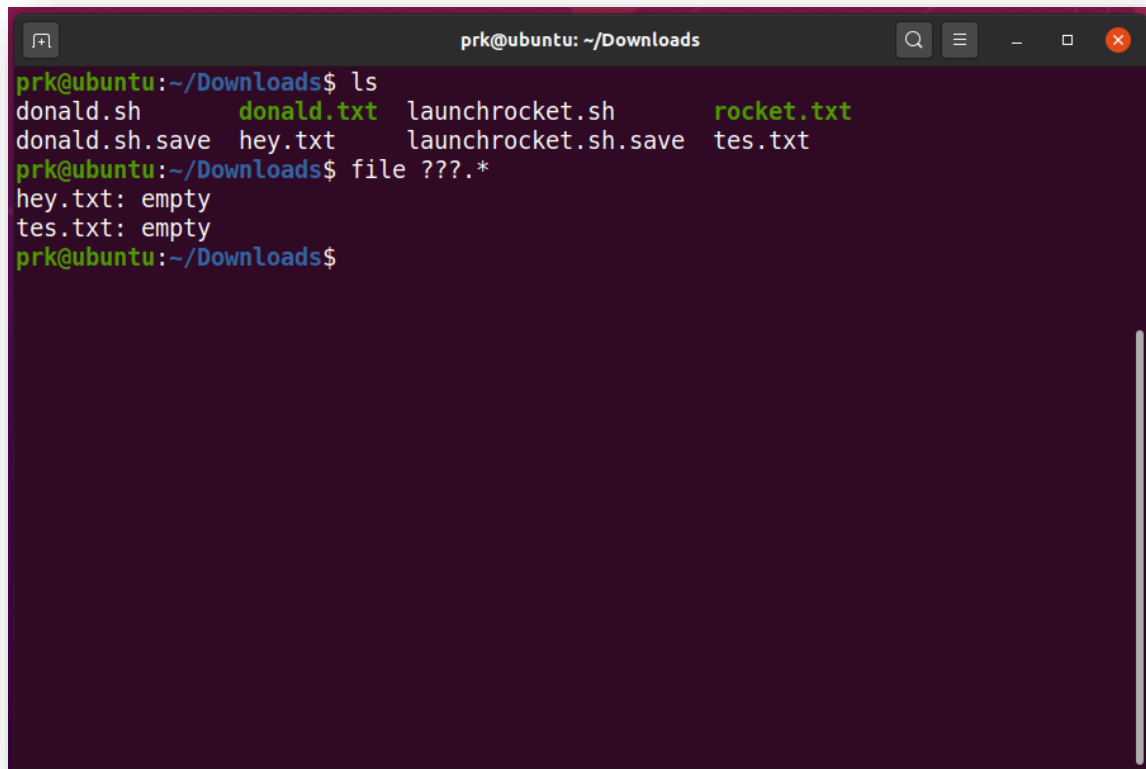
- Set your repository visibility to **public**.
- Create a branch based on:

T003 Jason Github : https://github.com/jsnnoesin/T003_OSBP



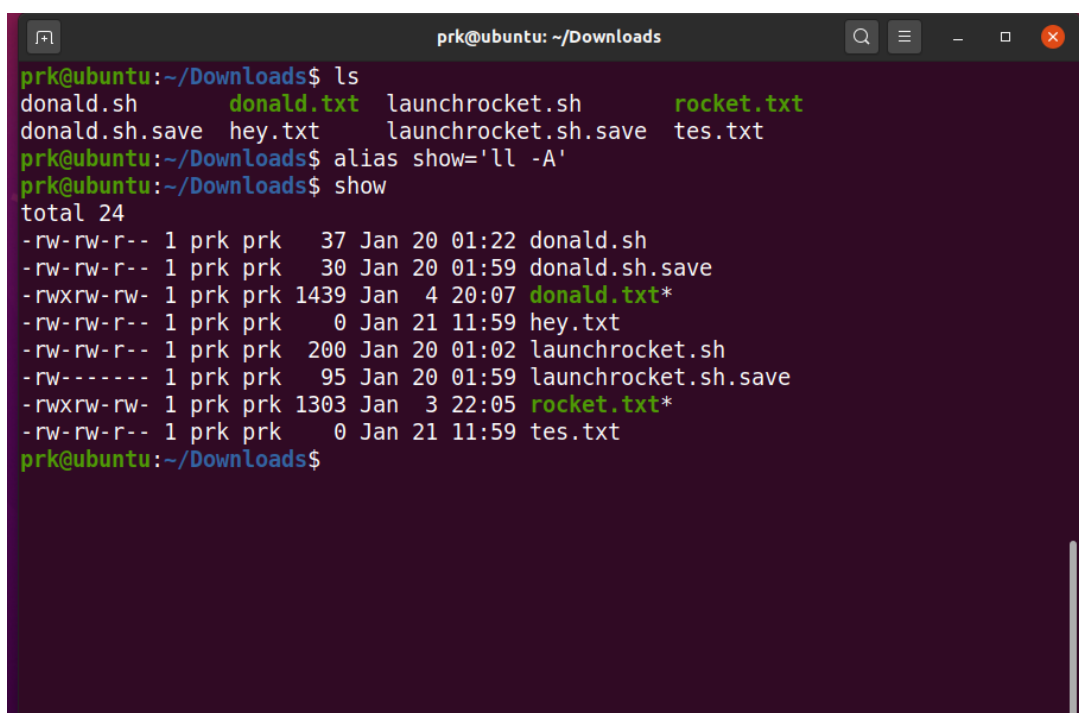
15. Display all file types in current directory that only has 3 characters with one command only. (You cannot use find).

file ???.* //file menampilkan file dan brief isinya lalu bisa tambahkan extension di belakangnya
arti ??? disini berarti 3 kata dan * adalah semua tipe file.

A terminal window titled 'prk@ubuntu: ~/Downloads' showing the execution of the 'ls' and 'file' commands. The 'ls' command lists files: donald.sh, donald.txt, launchrocket.sh, rocket.txt, donald.sh.save, hey.txt, launchrocket.sh.save, and tes.txt. The 'file' command is used with the pattern 'file ???.*' to check the file types of 'hey.txt' and 'tes.txt', both of which are reported as 'empty'.

```
prk@ubuntu:~/Downloads$ ls
donald.sh      donald.txt  launchrocket.sh  rocket.txt
donald.sh.save hey.txt     launchrocket.sh.save tes.txt
prk@ubuntu:~/Downloads$ file ???.*
hey.txt: empty
tes.txt: empty
prk@ubuntu:~/Downloads$
```

16. Make alias for a command "ll" that are used to display all file and hidden file in the directory. (Without current directory and parent directory).

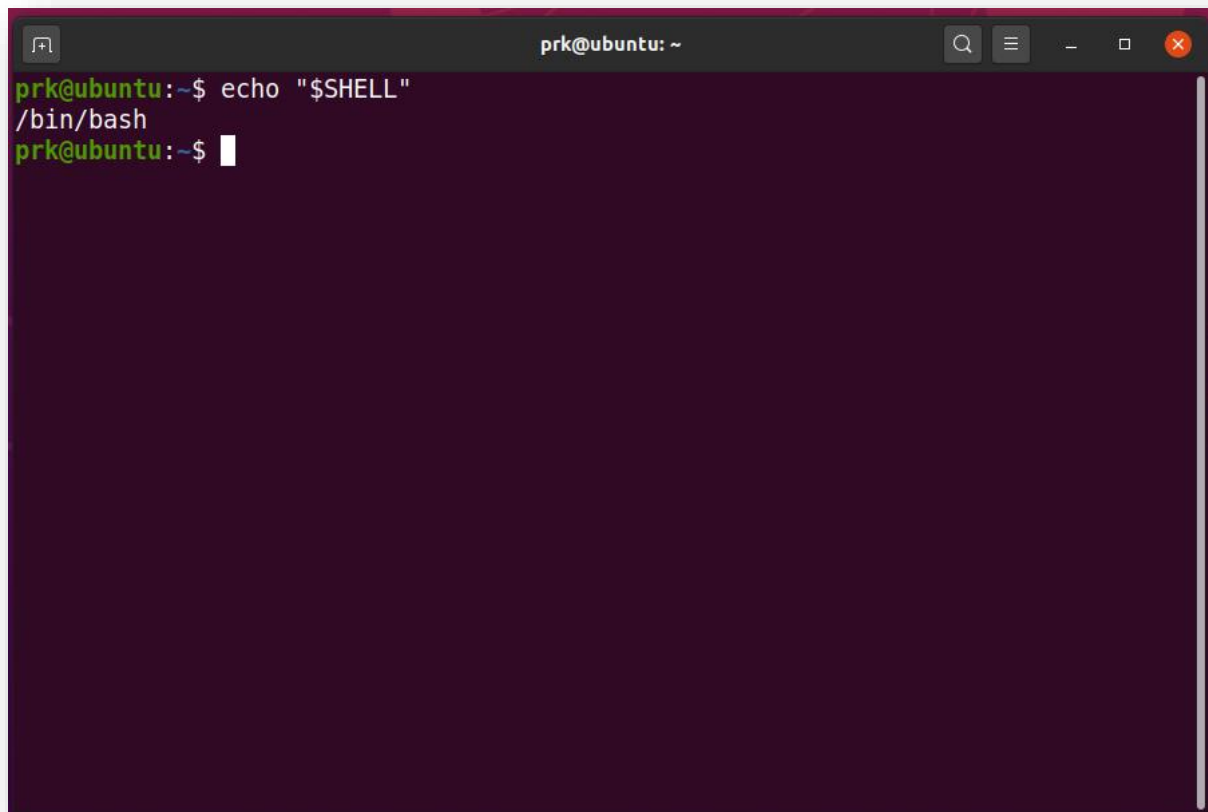
A terminal window titled 'prk@ubuntu: ~/Downloads' showing the creation of an alias 'show' for the 'ls -ll -A' command. The 'show' alias is then used to display a detailed listing of all files and hidden files in the directory. The output shows permissions, owner, group, size, date, and filename for each file, including 'donald.txt*' and 'rocket.txt*'.

```
prk@ubuntu:~/Downloads$ ls
donald.sh      donald.txt  launchrocket.sh  rocket.txt
donald.sh.save hey.txt     launchrocket.sh.save tes.txt
prk@ubuntu:~/Downloads$ alias show='ll -A'
prk@ubuntu:~/Downloads$ show
total 24
-rw-rw-r-- 1 prk prk   37 Jan 20 01:22 donald.sh
-rw-rw-r-- 1 prk prk   30 Jan 20 01:59 donald.sh.save
-rwxrw-rw- 1 prk prk 1439 Jan  4 20:07 donald.txt*
-rw-rw-r-- 1 prk prk    0 Jan 21 11:59 hey.txt
-rw-rw-r-- 1 prk prk  200 Jan 20 01:02 launchrocket.sh
-rw----- 1 prk prk   95 Jan 20 01:59 launchrocket.sh.save
-rwxrw-rw- 1 prk prk 1303 Jan  3 22:05 rocket.txt*
-rw-rw-r-- 1 prk prk    0 Jan 21 11:59 tes.txt
prk@ubuntu:~/Downloads$
```

20. Check what kind of **UNIX Shell** that you use currently with **one command**.

// pada kasus ini UNIX Shell yang digunakan adalah BASH (Bourne Again Shell)

echo "\$SHELL"



```
prk@ubuntu: ~  
prk@ubuntu:~$ echo "$SHELL"  
/bin/bash  
prk@ubuntu:~$
```