

Laporan Praktikum 8

Pengantar Open Source dan Aplikasi

“Pemrosesan File Teks”



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Modul VIII Pemrosesan File Teks

A. Tujuan

1. Mampu menggunakan perintah cat, more, less, grep, find, dll.

B. Teori Singkat

Menurut saya teori singkat mengenai modul ini, yaitu :

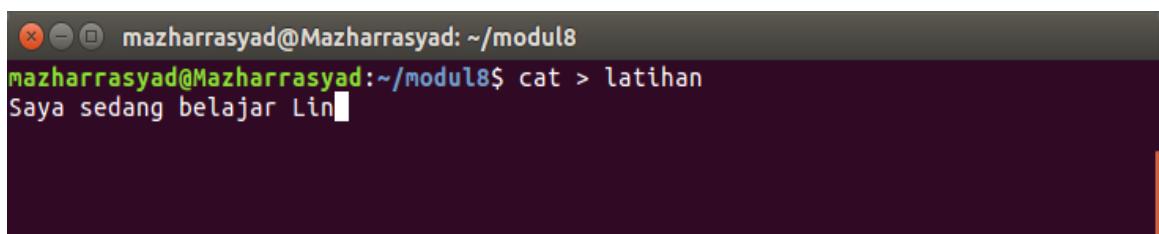
Dalam sistem operasi linux untuk memanipulasi file teks dapat menggunakan cat, more, less, head, tail, wc, cut, sort, tr, sed, grep, dan find.

C. Langkah – langkah Praktikum

1. Menggunakan perintah cat

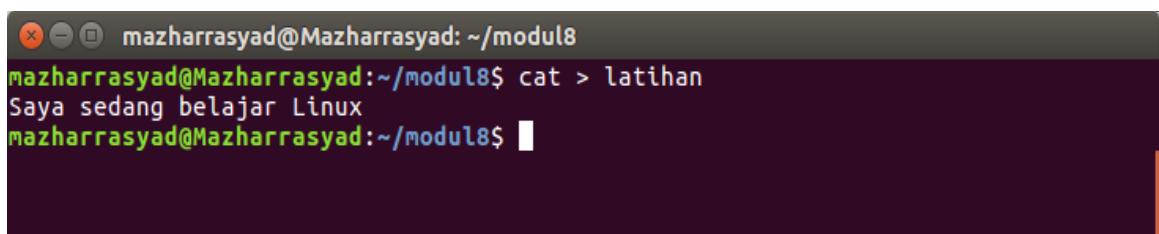
```
$ cat > latihan  
Saya sedang belajar Linux
```

Perintah tersebut membuat file baru dengan nama latihan yang menggunakan perintah cat dengan option > untuk mengisi isinya yang langsung diketikkan di terminal seperti pada gambar dibawah ini.



```
mazharrasyad@mazharrasyad: ~/modul8  
mazharrasyad@mazharrasyad:~/modul8$ cat > latihan  
Saya sedang belajar Lin
```

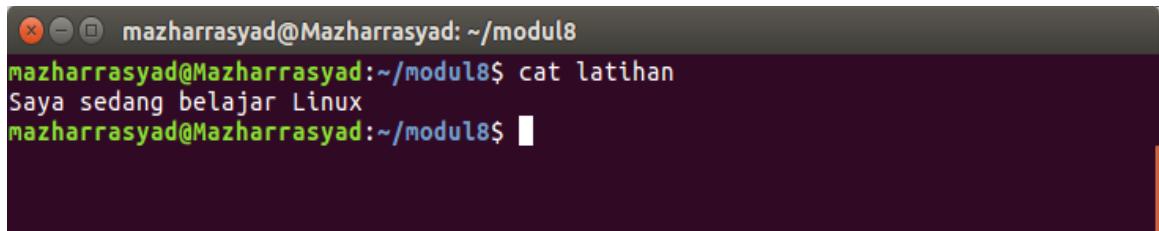
Jika sudah selesai mengisi teks dan ingin berhenti maka tekan tombol CTRL + D untuk menyimpan hasilnya.



```
mazharrasyad@mazharrasyad: ~/modul8  
mazharrasyad@mazharrasyad:~/modul8$ cat > latihan  
Saya sedang belajar Linux  
mazharrasyad@mazharrasyad:~/modul8$
```

```
$ cat latihan
```

cat latihan akan menampilkan isi dari file latihan karena tanpa menggunakan option apapun, hasilnya dapat dilihat pada gambar dibawah ini dengan mode teks dari terminal.

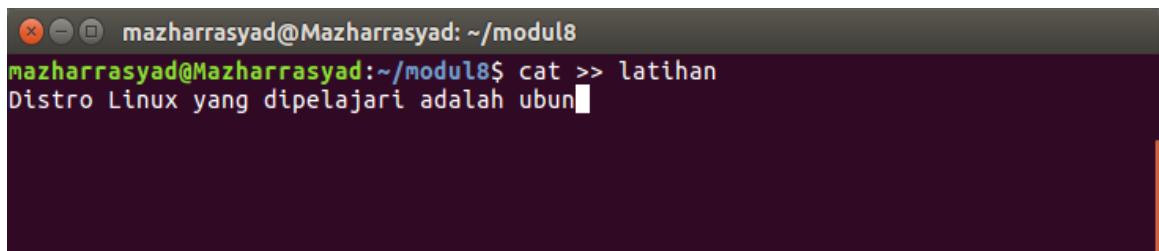


```
mazharrasyad@mazharrasyad:~/modul8
mazharrasyad@mazharrasyad:~/modul8$ cat latihan
Saya sedang belajar Linux
mazharrasyad@mazharrasyad:~/modul8$
```

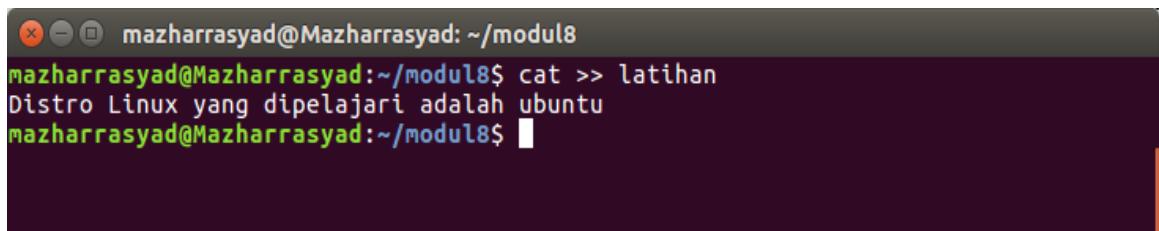
```
$ cat >> latihan
```

Distro Linux yang dipelajari adalah ubuntu

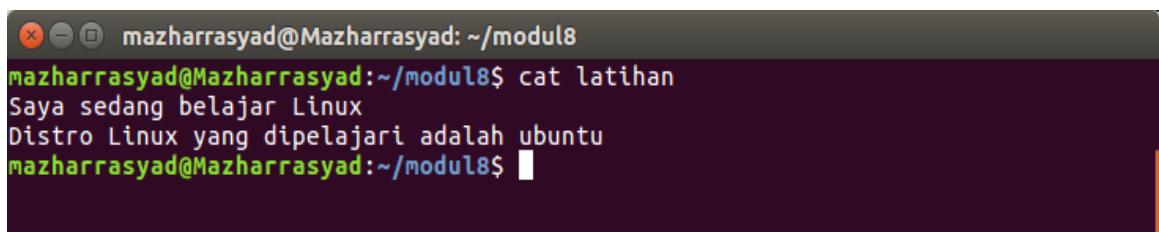
Perintah tersebut mengisi file latihan yang menggunakan perintah cat dengan option >> untuk mengisi isinya yang langsung diketikkan di terminal seperti pada gambar dibawah ini.



```
mazharrasyad@mazharrasyad:~/modul8
mazharrasyad@mazharrasyad:~/modul8$ cat >> latihan
Distro Linux yang dipelajari adalah ubun
mazharrasyad@mazharrasyad:~/modul8$
```



```
mazharrasyad@mazharrasyad:~/modul8
mazharrasyad@mazharrasyad:~/modul8$ cat latihan
Saya sedang belajar Linux
Distro Linux yang dipelajari adalah ubuntu
mazharrasyad@mazharrasyad:~/modul8$
```



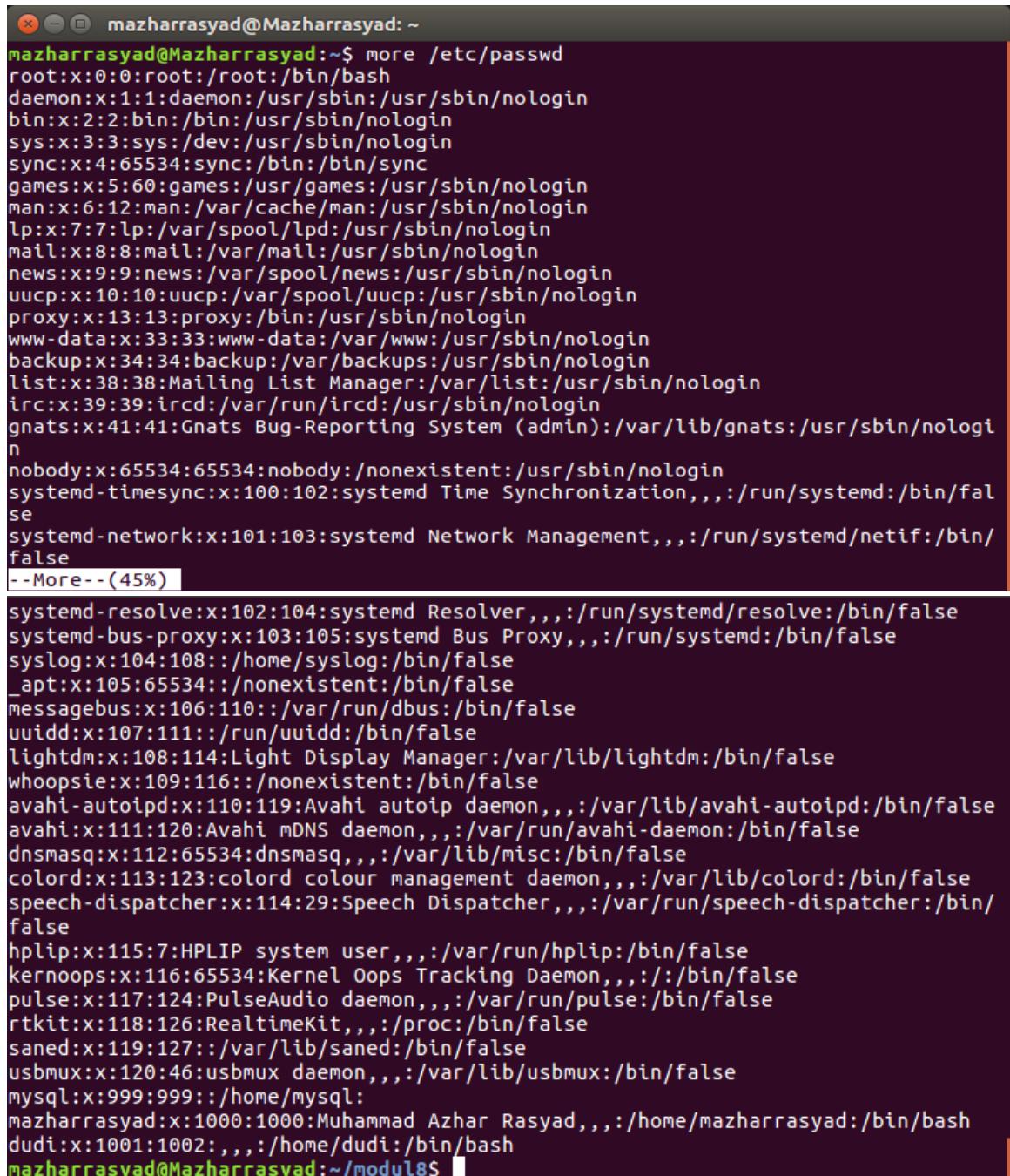
```
mazharrasyad@mazharrasyad:~/modul8
mazharrasyad@mazharrasyad:~/modul8$ cat latihan
Saya sedang belajar Linux
Distro Linux yang dipelajari adalah ubuntu
mazharrasyad@mazharrasyad:~/modul8$
```

2. Menggunakan perintah more dan less

\$ more /etc/passwd

Menampilkan teks dengan perintah more dengan ditandai tulisan --More-- dibawah kiri dan terdapat ukuran dari 0 – 100% supaya tidak menampilkan semua teks secara langsung melainkan ditampilkan dari paling atas dan jika ingin melihat teks selanjutnya harus menggunakan tombol tertentu. Perintah ini dapat melihat pengetikan perintah sebelumnya yang diketikkan dan tidak fokus 1 file.

Untuk mengganti tampilan 1 baris menggunakan tombol Enter, mengganti tampilan 1 layar terminal menggunakan Space atau z, dan untuk keluar menggunakan tombol q atau Q.



```
mazharrasyad@mazharrasyad:~$ more /etc/passwd
root:x:0:0:root:/root:/bin/bash
daemon:x:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:bin:/usr/sbin/nologin
sys:x:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/sync
games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin
irc:x:39:39:ircd:/var/run/ircd:/usr/sbin/nologin
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
systemd-timesync:x:100:102:systemd Time Synchronization,,,,:/run/systemd:/bin/false
systemd-network:x:101:103:systemd Network Management,,,,:/run/systemd/netif:/bin/false
--More-- (45%)
systemd-resolve:x:102:104:systemd Resolver,,,,:/run/systemd/resolve:/bin/false
systemd-bus-proxy:x:103:105:systemd Bus Proxy,,,,:/run/systemd:/bin/false
syslog:x:104:108::/home/syslog:/bin/false
_apt:x:105:65534::/nonexistent:/bin/false
messagebus:x:106:110::/var/run/dbus:/bin/false
uuidd:x:107:111::/run/uuidd:/bin/false
lightdm:x:108:114:Light Display Manager:/var/lib/lightdm:/bin/false
whoopsie:x:109:116::/nonexistent:/bin/false
avahi-autoipd:x:110:119:Avahi autoip daemon,,,,:/var/lib/avahi-autoipd:/bin/false
avahi:x:111:120:Avahi mDNS daemon,,,,:/var/run/avahi-daemon:/bin/false
dnsmasq:x:112:65534:dnsmasq,,,,:/var/lib/misc:/bin/false
colord:x:113:123:colord colour management daemon,,,,:/var/lib/colord:/bin/false
speech-dispatcher:x:114:29:Speech Dispatcher,,,,:/var/run/speech-dispatcher:/bin/false
hplip:x:115:7:HPLIP system user,,,,:/var/run/hplip:/bin/false
kernoops:x:116:65534:Kernel Oops Tracking Daemon,,,,:/bin/false
pulse:x:117:124:PulseAudio daemon,,,,:/var/run/pulse:/bin/false
rtkit:x:118:126:RealtimeKit,,,,:/proc:/bin/false
saned:x:119:127::/var/lib/saned:/bin/false
usbmux:x:120:46:usbmux daemon,,,,:/var/lib/usbmux:/bin/false
mysql:x:999:999::/home/mysql:
mazharrasyad:x:1000:1000:Muhammad Azhar Rasyad,,,,:/home/mazharrasyad:/bin/bash
dudi:x:1001:1002:,,,,:/home/dudi:/bin/bash
mazharrasyad@mazharrasyad:~/modul8$
```

```
$ ls -l /etc | more
```

Menampilkan detail file atau direktori dengan tambahan option more bertujuan untuk tidak menampilkan semua teks yang ada dan jika ingin menampilkan teks selanjutnya harus menggunakan tombol tertentu yang telah dijelaskan sebelumnya.

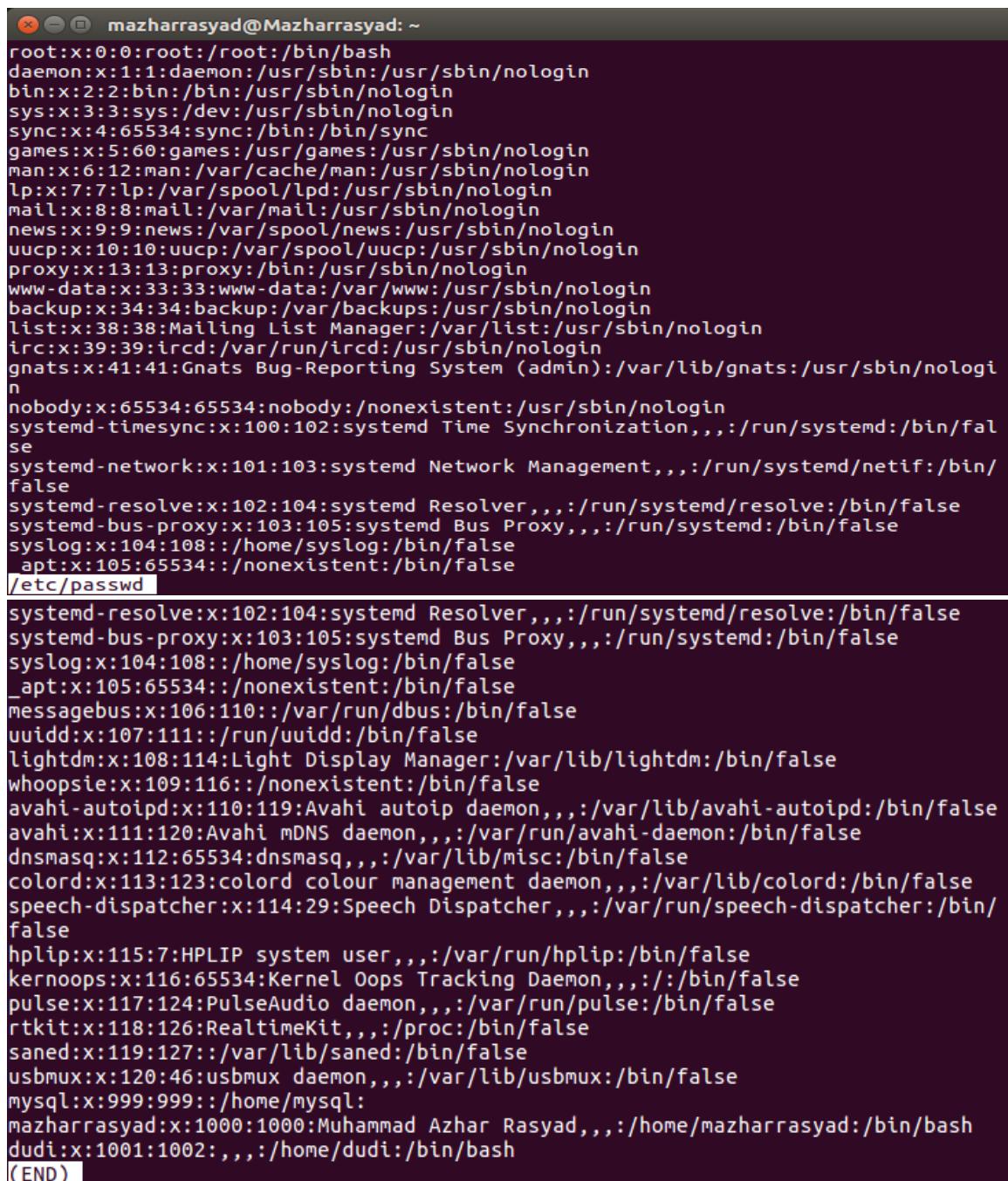
File atau direktori memiliki warna yang sama jika menggunakan option more dan tidak ada ukuran 0 – 100% karena option more hanya sebagai pendukung bukan sebagai perintah utama. Perintah ini dapat melihat pengetikan perintah sebelumnya yang diketikkan dan tidak fokus 1 file.

```
mazharrasyad@mazharrasyad:~$ ls -l /etc | more
total 1228
drwxr-xr-x 3 root root 4096 Feb 16 2017 acpi
-rw-r--r-- 1 root root 3028 Feb 16 2017 adduser.conf
-rw-r--r-- 1 root root 16 Jul 13 09:44 adjtime
drwxr-xr-x 2 root root 4096 Nov 18 13:19 alternatives
-rw-r--r-- 1 root root 401 Des 29 2014 anacrontab
-rw-r--r-- 1 root root 112 Jan 10 2014 apg.conf
drwxr-xr-x 6 root root 4096 Feb 16 2017 aptm
drwxr-xr-x 3 root root 4096 Sep 13 18:21 apparmor
drwxr-xr-x 8 root root 4096 Nov 18 13:19 apparmor.d
drwxr-xr-x 5 root root 4096 Nov 21 13:33 apport
-rw-r--r-- 1 root root 389 Apr 18 2016 appstream.conf
drwxr-xr-x 6 root root 4096 Okt 16 08:49 apt
drwxr-xr-x 3 root root 4096 Feb 16 2017 aptdaemon
drwxr-xr-x 2 root root 4096 Feb 16 2017 at-spi2
drwxr-xr-x 3 root root 4096 Feb 16 2017 avahi
-rw-r--r-- 1 root root 2188 Sep 1 2015 bash.bashrc
-rw-r--r-- 1 root root 45 Agu 13 2015 bash_completion
drwxr-xr-x 2 root root 4096 Nov 21 13:33 bash_completion.d
-rw-r--r-- 1 root root 367 Jan 27 2016 bindresvport.blacklist
drwxr-xr-x 2 root root 4096 Apr 12 2016 binfmt.d
drwxr-xr-x 2 root root 4096 Sep 13 18:21 bluetooth
-rw-r--r-- 1 root root 33 Feb 16 2017 brlapi.key
drwxr-xr-x 7 root root 4096 Feb 16 2017 brltty
--More--
drwxr-xr-x 2 root root 4096 Apr 12 2016 tmpfiles.d
-rw-r--r-- 1 root root 1260 Mar 17 2016 ucf.conf
drwxr-xr-x 4 root root 4096 Okt 29 20:10 udev
drwxr-xr-x 2 root root 4096 Apr 2 2016 udisks2
drwxr-xr-x 3 root root 4096 Feb 16 2017 ufw
-rw-r--r-- 1 root root 338 Nov 18 2014 updatedb.conf
drwxr-xr-x 3 root root 4096 Nov 4 23:00 update-manager
drwxr-xr-x 2 root root 4096 Nov 4 23:00 update-motd.d
drwxr-xr-x 2 root root 4096 Des 9 2016 update-notifier
drwxr-xr-x 2 root root 4096 Feb 16 2017 UPower
-rw-r--r-- 1 root root 270 Mei 19 2016 upstart-xsessions
-rw-r--r-- 1 root root 1018 Okt 5 2015 usb_modeswitch.conf
drwxr-xr-x 2 root root 4096 Nov 2 2015 usb_modeswitch.d
-rw-r--r-- 1 root root 51 Feb 19 2016 vdpau_wrapper.cfg
drwxr-xr-x 2 root root 4096 Feb 16 2017 vim
lrwxrwxrwx 1 root root 23 Jul 13 05:30 vtrgb -> /etc/alternatives/vtrgb
-rw-r--r-- 1 root root 4942 Jun 14 2016 wgetrc
drwxr-xr-x 2 root root 4096 Jul 13 06:04 wildmidi
drwxr-xr-x 2 root root 4096 Okt 17 14:30 wpa_supplicant
drwxr-xr-x 11 root root 4096 Agu 1 08:09 X11
drwxr-xr-x 6 root root 4096 Sep 21 22:12 xdg
drwxr-xr-x 2 root root 4096 Okt 15 22:40 xml
-rw-r--r-- 1 root root 477 Jul 20 2015 zsh_command_not_found
mazharrasyad@mazharrasyad:~/modul8$
```

```
$ less /etc/passwd
```

Menampilkan teks dengan perintah less dengan ditandai tulisan nama file dibawah kiri yang jika digerakkan menjadi : dan jika sampai baris terakhir berubah menjadi (END) tidak ada ukurannya tetapi tidak menampilkan semua teks secara langsung melainkan ditampilkan dari paling atas dan jika ingin melihat teks selanjutnya harus menggunakan tombol tertentu. Perintah ini tidak dapat melihat pengetikan perintah sebelumnya karena fokus 1 file.

Untuk mengganti tampilan 1 baris menggunakan tombol Enter, mengganti tampilan 1 layar terminal menggunakan Space atau z, dapat juga menggunakan panah atas atau bawah atau scroll mouse atas atau bawah untuk mengganti layar, dan untuk keluar menggunakan tombol q atau Q.



```
mazharrasyad@Mazharrasyad: ~
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/usr/sbin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/bin/sync
games:x:5:60:games:/usr/games:/usr/sbin:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin:/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin:/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin:/nologin
list:x:38:38:Mailing List Manager:/var/list:/usr/sbin:/nologin
irc:x:39:39:ircd:/var/run/ircd:/usr/sbin:/nologin
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin:/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin:/nologin
systemd-timesync:x:100:102:systemd Time Synchronization,,,:/run/systemd:/bin/false
systemd-network:x:101:103:systemd Network Management,,,:/run/systemd/netif:/bin/false
systemd-resolve:x:102:104:systemd Resolver,,,:/run/systemd/resolve:/bin/false
systemd-bus-proxy:x:103:105:systemd Bus Proxy,,,:/run/systemd:/bin/false
syslog:x:104:108::/home/syslog:/bin/false
_apt:x:105:65534::/nonexistent:/bin/false
/etc/passwd

systemd-resolve:x:102:104:systemd Resolver,,,:/run/systemd/resolve:/bin/false
systemd-bus-proxy:x:103:105:systemd Bus Proxy,,,:/run/systemd:/bin/false
syslog:x:104:108::/home/syslog:/bin/false
_apt:x:105:65534::/nonexistent:/bin/false
messagebus:x:106:110::/var/run/dbus:/bin/false
uuidd:x:107:111::/run/uuidd:/bin/false
lightdm:x:108:114:Light Display Manager:/var/lib/lightdm:/bin/false
whoopsie:x:109:116::/nonexistent:/bin/false
avahi-autoipd:x:110:119:Avahi autoip daemon,,,:/var/lib/avahi-autoipd:/bin/false
avahi:x:111:120:Avahi mDNS daemon,,,:/var/run/avahi-daemon:/bin/false
dnsmasq:x:112:65534:dnsmasq,,,:/var/lib/misc:/bin/false
colord:x:113:123:colord colour management daemon,,,:/var/lib/colord:/bin/false
speech-dispatcher:x:114:29:Speech Dispatcher,,,:/var/run/speech-dispatcher:/bin/false
hplip:x:115:7:HPLIP system user,,,:/var/run/hplip:/bin/false
kernoops:x:116:65534:Kernel Oops Tracking Daemon,,,:/bin/false
pulse:x:117:124:PulseAudio daemon,,,:/var/run/pulse:/bin/false
rtkit:x:118:126:RealtimeKit,,,:/proc:/bin/false
saned:x:119:127::/var/lib/saned:/bin/false
usbmux:x:120:46:usbmux daemon,,,:/var/lib/usbmux:/bin/false
mysql:x:999:999::/home/mysql:
mazharrasyad:x:1000:1000:Muhammad Azhar Rasyad,,,:/home/mazharrasyad:/bin/bash
dudi:x:1001:1002:,,,:/home/dudi:/bin/bash
(END)
```

```
$ ls -l /etc | less
```

Menampilkan detail file atau direktori dengan tambahan option less bertujuan untuk tidak menampilkan semua teks yang ada dan jika ingin menampilkan teks selanjutnya harus menggunakan tombol tertentu yang telah dijelaskan sebelumnya dan option less hanya sebagai pendukung bukan sebagai perintah utama.

File atau direktori memiliki warna yang sama jika menggunakan option less diberi tanda : jika belum sampai akhir baris dan jika akhir baris ditandai tanda (END). Perintah ini tidak dapat melihat pengetikan perintah sebelumnya karena fokus 1 file.

```
mazharrasyad@mazharrasyad: ~
total 1228
drwxr-xr-x  3 root root    4096 Feb 16  2017 acpi
-rw-r--r--  1 root root    3028 Feb 16  2017 adduser.conf
-rw-r--r--  1 root root     16 Jul 13 09:44 adjtime
drwxr-xr-x  2 root root    4096 Nov 18 13:19 alternatives
-rw-r--r--  1 root root    401 Des 29 2014 anacrontab
-rw-r--r--  1 root root   112 Jan 10 2014 apg.conf
drwxr-xr-x  6 root root    4096 Feb 16  2017 aptm
drwxr-xr-x  3 root root    4096 Sep 13 18:21 apparmor
drwxr-xr-x  8 root root    4096 Nov 18 13:19 apparmor.d
drwxr-xr-x  5 root root    4096 Nov 21 13:33 apport
-rw-r--r--  1 root root     389 Apr 18  2016 appstream.conf
drwxr-xr-x  6 root root    4096 Okt 16  08:49 apt
drwxr-xr-x  3 root root    4096 Feb 16  2017 aptdaemon
drwxr-xr-x  2 root root    4096 Feb 16  2017 at-spi2
drwxr-xr-x  3 root root    4096 Feb 16  2017 avahi
-rw-r--r--  1 root root   2188 Sep  1  2015 bash.bashrc
-rw-r--r--  1 root root     45 Agu 13  2015 bash_completion
drwxr-xr-x  2 root root    4096 Nov 21 13:33 bash_completion.d
-rw-r--r--  1 root root     367 Jan 27  2016 bindresvport.blacklist
drwxr-xr-x  2 root root    4096 Apr 12  2016 binfmt.d
drwxr-xr-x  2 root root    4096 Sep 13 18:21 bluetooth
-rw-r--r--  1 root root     33 Peb 16  2017 brlapi.key
drwxr-xr-x  7 root root    4096 Feb 16  2017 brltty
-rw-r--r--  1 root root  23444 Apr 28  2016 brltty.conf
drwxr-xr-x  3 root root    4096 Feb 16  2017 ca-certificates
-rw-r--r--  1 root root   8464 Okt  3 13:38 ca-certificates.conf
:
drwxr-xr-x  2 root root    4096 Apr 12  2016 tmpfiles.d
-rw-r--r--  1 root root   1260 Mar 17  2016 ucf.conf
drwxr-xr-x  4 root root    4096 Okt 29 20:10 udev
drwxr-xr-x  2 root root    4096 Apr  2  2016 udisks2
drwxr-xr-x  3 root root    4096 Feb 16  2017 ufw
-rw-r--r--  1 root root    338 Nov 18  2014 updatedb.conf
drwxr-xr-x  3 root root    4096 Nov  4 23:00 update-manager
drwxr-xr-x  2 root root    4096 Nov  4 23:00 update-motd.d
drwxr-xr-x  2 root root    4096 Des  9  2016 update-notifier
drwxr-xr-x  2 root root    4096 Feb 16  2017 UPower
-rw-r--r--  1 root root   270 Mei 19  2016 upstart-xsessions
-rw-r--r--  1 root root   1018 Okt  5  2015 usb_modeswitch.conf
drwxr-xr-x  2 root root    4096 Nov  2  2015 usb_modeswitch.d
-rw-r--r--  1 root root     51 Peb 19  2016 vdpau_wrapper.cfg
drwxr-xr-x  2 root root    4096 Feb 16  2017 vim
lrwxrwxrwx  1 root root     23 Jul 13 05:30 vtrgb -> /etc/alternatives/vtrgb
-rw-r--r--  1 root root   4942 Jun 14  2016 wgetrc
drwxr-xr-x  2 root root    4096 Jul 13 06:04 wildmidi
drwxr-xr-x  2 root root    4096 Okt 17 14:30 wpa_supplicant
drwxr-xr-x 11 root root    4096 Agu  1 08:09 X11
drwxr-xr-x  6 root root    4096 Sep 21 22:12 xdg
drwxr-xr-x  2 root root    4096 Okt 15 22:40 xml
-rw-r--r--  1 root root     477 Jul 20  2015 zsh_command_not_found
(END)
```

3. Menggunakan perintah head dan tail

\$ head /etc/passwd

Perintah head secara default hanya menampilkan 10 baris pertama dari isi file.

```
mazharrasyad@mazharrasyad:~$ head /etc/passwd
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/usr/sbin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/sync
games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
mazharrasyad@mazharrasyad:~$
```

\$ head -n5 /etc/passwd

Perintah head ditambah option -n5 yang artinya hanya menampilkan 5 baris pertama sebuah file.

```
mazharrasyad@mazharrasyad:~$ head -n5 /etc/passwd
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/usr/sbin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/sync
mazharrasyad@mazharrasyad:~$
```

\$ tail /etc/passwd

Perintah tail secara default hanya menampilkan 10 baris terakhir dari isi file.

```
mazharrasyad@mazharrasyad:~/modul8$ tail /etc/passwd
speech-dispatcher:x:114:29:Speech Dispatcher,,,:/var/run/speech-dispatcher:/bin/false
hplip:x:115:7:HPLIP system user,,,:/var/run/hplip:/bin/false
kernoops:x:116:65534:Kernel Oops Tracking Daemon,,,:/bin/false
pulse:x:117:124:PulseAudio daemon,,,:/var/run/pulse:/bin/false
rtkit:x:118:126:RealtimeKit,,,:/proc:/bin/false
saned:x:119:127::/var/lib/saned:/bin/false
usbmux:x:120:46:usbmux daemon,,,:/var/lib/usbmux:/bin/false
mysql:x:999:999::/home/mysql:
mazharrasyad:x:1000:1000:Muhammad Azhar Rasyad,,,:/home/mazharrasyad:/bin/bash
dudi:x:1001:1002:,,,:/home/dudi:/bin/bash
mazharrasyad@mazharrasyad:~/modul8$
```

```
$ tail -n5 /etc/passwd
```

Perintah tail ditambah option -n5 yang artinya hanya menampilkan 5 baris terakhir sebuah file.

```
mazharrysyad@mazharrysyad:~/modul8$ tail -n5 /etc/passwd
saned:x:119:127::/var/lib/saned:/bin/false
usbmux:x:120:46:usbmux daemon,,,,:/var/lib/usbmux:/bin/false
mysql:x:999:999::/home/mysql:
mazharrysyad:x:1000:1000:Muhammad Azhar Rasyad,,,,:/home/mazharrysyad:/bin/bash
dudi:x:1001:1002:,,,,:/home/dudi:/bin/bash
mazharrysyad@mazharrysyad:~/modul8$
```

```
$ tail -n+5 /etc/passwd
```

Perintah tail ditambah option -n+5 yang artinya menampilkan dari baris ke 5 sampai baris terakhir sebuah file.

```
mazharrysyad@mazharrysyad:~/modul8$ tail -n+5 /etc/passwd
sync:x:4:65534:sync:/bin/sync
games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin
irc:x:39:39:ircd:/var/run/ircd:/usr/sbin/nologin
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
systemd-timesync:x:100:102:systemd Time Synchronization,,,,:/run/systemd:/bin/false
systemd-network:x:101:103:systemd Network Management,,,,:/run/systemd/netif:/bin/false
systemd-resolve:x:102:104:systemd Resolver,,,,:/run/systemd/resolve:/bin/false
systemd-bus-proxy:x:103:105:systemd Bus Proxy,,,,:/run/systemd:/bin/false
syslog:x:104:108::/home/syslog:/bin/false
_apt:x:105:65534::/nonexistent:/bin/false
messagebus:x:106:110::/var/run/dbus:/bin/false
uuidd:x:107:111::/run/uuidd:/bin/false
lightdm:x:108:114:Light Display Manager:/var/lib/lightdm:/bin/false
whoopsie:x:109:116::/nonexistent:/bin/false
avahi-autoipd:x:110:119:Avahi autoip daemon,,,,:/var/lib/avahi-autoipd:/bin/false
avahi:x:111:120:Avahi mDNS daemon,,,,:/var/run/avahi-daemon:/bin/false
dnsmasq:x:112:65534:dnsmasq,,,,:/var/lib/misc:/bin/false
colord:x:113:123:colord colour management daemon,,,,:/var/lib/colord:/bin/false
speech-dispatcher:x:114:29:Speech Dispatcher,,,,:/var/run/speech-dispatcher:/bin/false
hplip:x:115:7:HPLIP system user,,,,:/var/run/hplip:/bin/false
kernoops:x:116:65534:Kernel Oops Tracking Daemon,,,:/bin/false
pulse:x:117:124:PulseAudio daemon,,,,:/var/run/pulse:/bin/false
rtkit:x:118:126:RealtimeKit,,,,:/proc:/bin/false
saned:x:119:127::/var/lib/saned:/bin/false
usbmux:x:120:46:usbmux daemon,,,,:/var/lib/usbmux:/bin/false
mysql:x:999:999::/home/mysql:
mazharrysyad:x:1000:1000:Muhammad Azhar Rasyad,,,,:/home/mazharrysyad:/bin/bash
dudi:x:1001:1002:,,,,:/home/dudi:/bin/bash
mazharrysyad@mazharrysyad:~/modul8$
```

4. Menggunakan perintah wc

\$ wc /etc/passwd

Menampilkan jumlah baris, kata, dan karakter pada suatu file.

```
mazharrasyad@mazharrasyad:~$ wc /etc/passwd
    41    72 2300 /etc/passwd
mazharrasyad@mazharrasyad:~$
```

\$ wc -l /etc/passwd

Menampilkan jumlah baris pada suatu file.

```
mazharrasyad@mazharrasyad:~$ wc -l /etc/passwd
41 /etc/passwd
mazharrasyad@mazharrasyad:~$
```

\$ wc -w /etc/passwd

Menampilkan jumlah kata pada suatu file.

```
mazharrasyad@mazharrasyad:~$ wc -w /etc/passwd
72 /etc/passwd
mazharrasyad@mazharrasyad:~$
```

\$ wc -c /etc/passwd

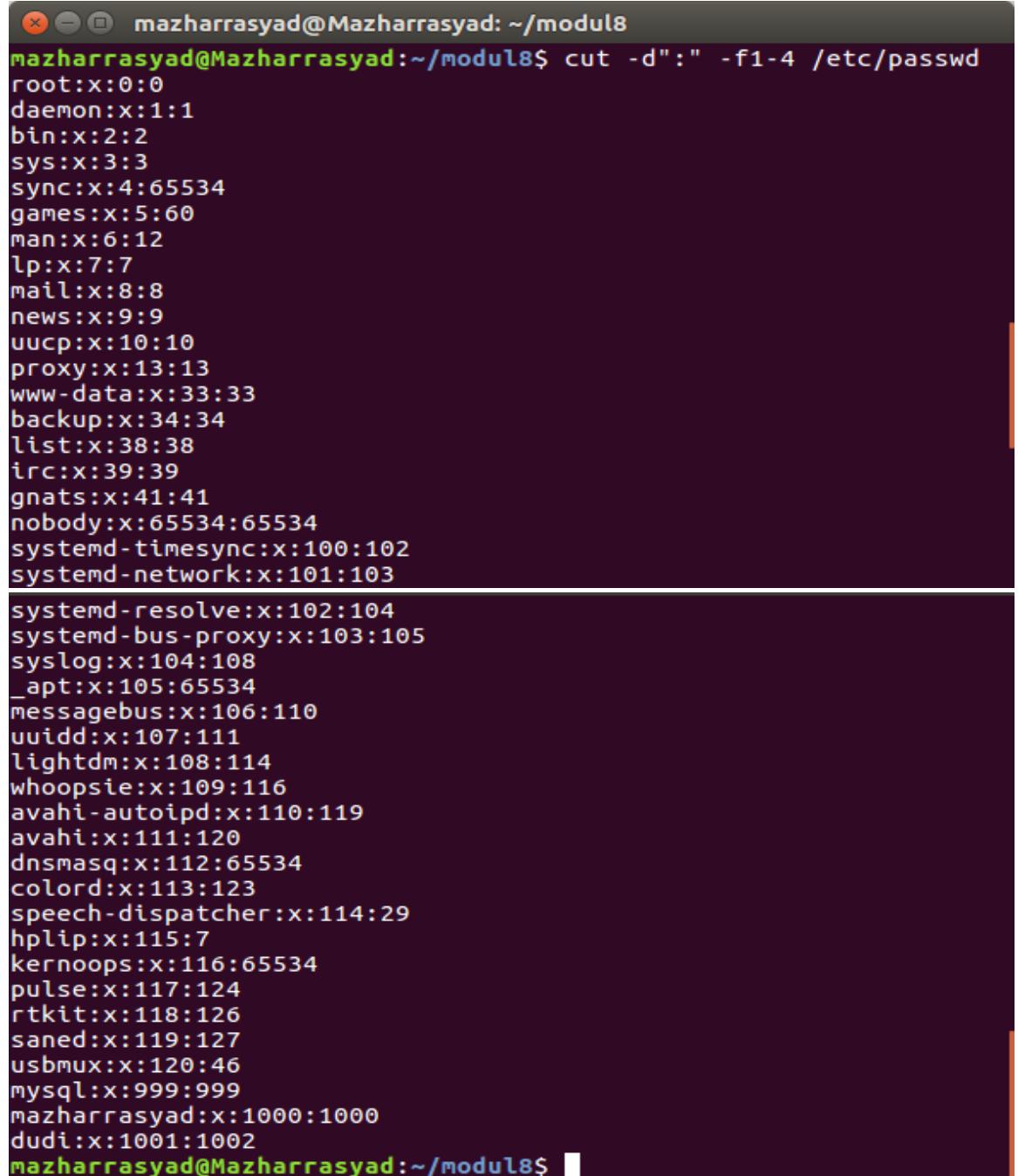
Menampilkan jumlah karakter pada suatu file.

```
mazharrasyad@mazharrasyad:~$ wc -c /etc/passwd
2300 /etc/passwd
mazharrasyad@mazharrasyad:~$
```

5. Menggunakan perintah cut

```
$ cut -d":" -f1-4 /etc/passwd
```

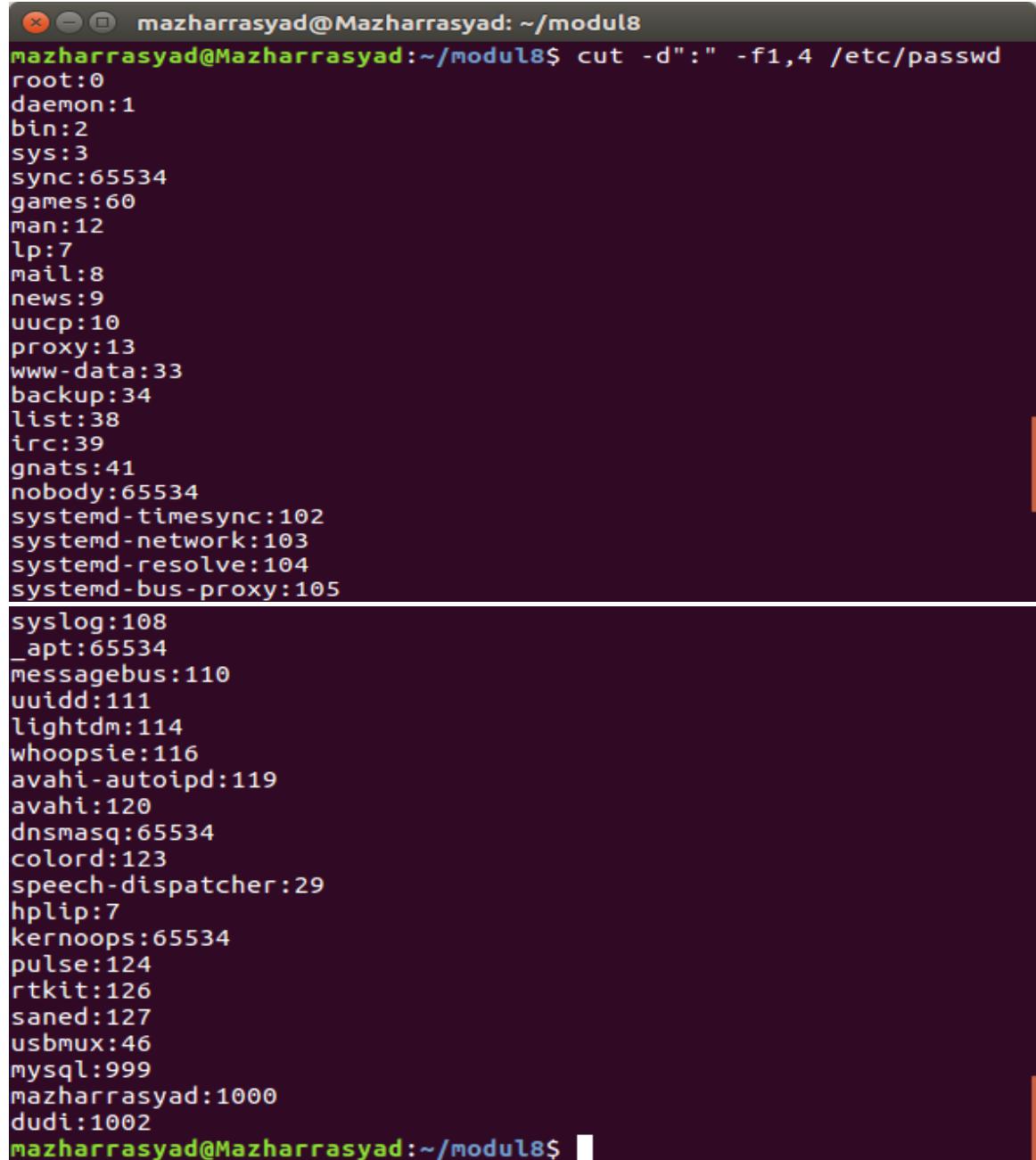
Mengambil bagian isi teks sesuai ketentuan, -d digunakan untuk memisahkan antar kolom sesuai yang tertulis pada “:” dan -f memisahkan dari kolom 1 sampai 4 pada suatu file.



```
mazharrasyad@Mazharrasyad: ~/modul8
mazharrasyad@Mazharrasyad:~/modul8$ cut -d":" -f1-4 /etc/passwd
root:x:0:0
daemon:x:1:1
bin:x:2:2
sys:x:3:3
sync:x:4:65534
games:x:5:60
man:x:6:12
lp:x:7:7
mail:x:8:8
news:x:9:9
uucp:x:10:10
proxy:x:13:13
www-data:x:33:33
backup:x:34:34
list:x:38:38
irc:x:39:39
gnats:x:41:41
nobody:x:65534:65534
systemd-timesync:x:100:102
systemd-network:x:101:103
systemd-resolve:x:102:104
systemd-bus-proxy:x:103:105
syslog:x:104:108
_apt:x:105:65534
messagebus:x:106:110
uuidd:x:107:111
lightdm:x:108:114
whoopsie:x:109:116
avahi-autoipd:x:110:119
avahi:x:111:120
dnsmasq:x:112:65534
colord:x:113:123
speech-dispatcher:x:114:29
hplip:x:115:7
kernoops:x:116:65534
pulse:x:117:124
rtkit:x:118:126
saned:x:119:127
usbmux:x:120:46
mysql:x:999:999
mazharrasyad:x:1000:1000
dudi:x:1001:1002
mazharrasyad@Mazharrasyad:~/modul8$
```

```
$ cut -d":" -f1,4 /etc/passwd
```

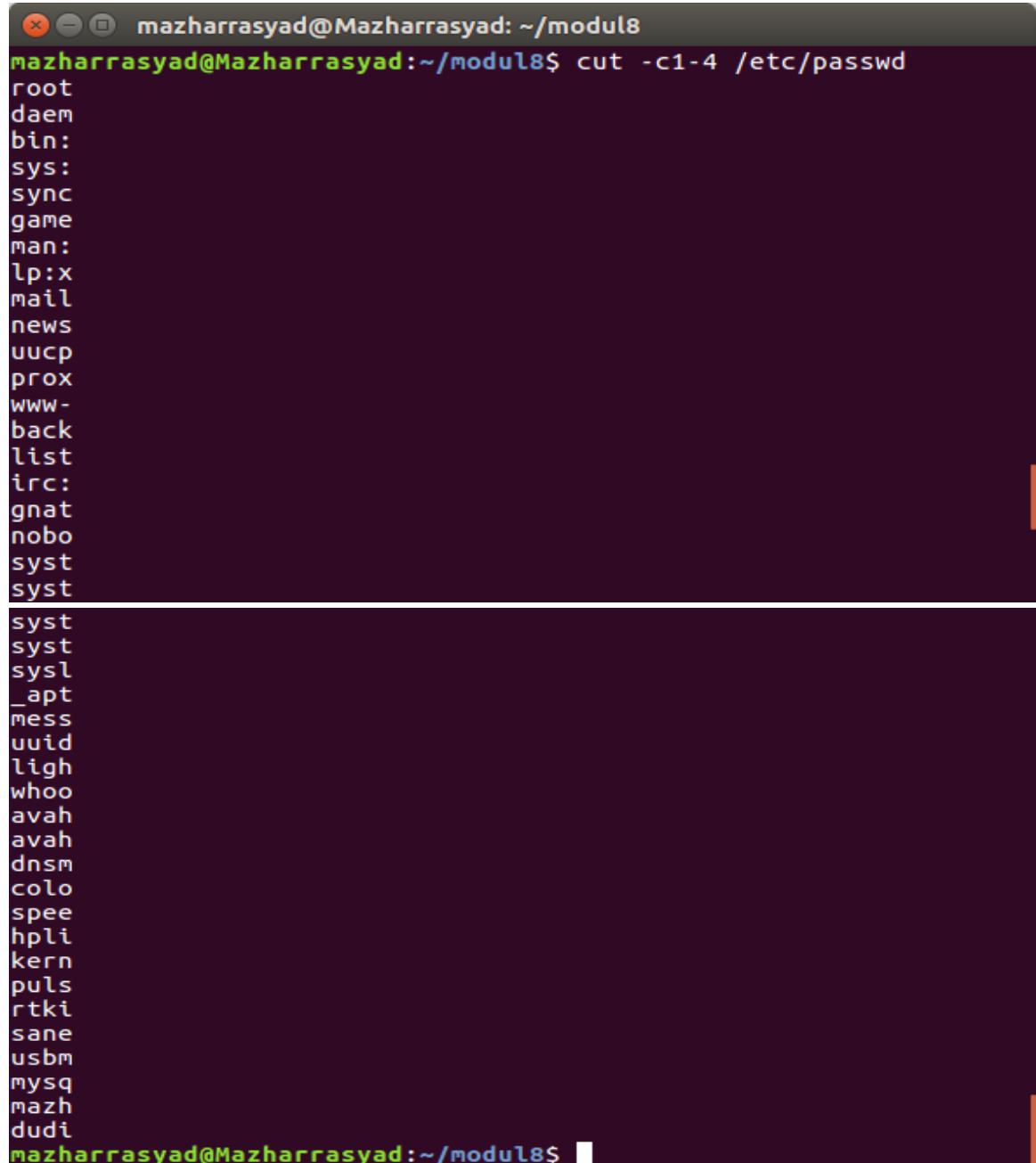
Mengambil bagian isi teks sesuai ketentuan, -d digunakan untuk memisahkan antar kolom sesuai yang tertulis pada ":" dan -f 1,4 hanya memisahkan kolom 1 dan kolom 4 pada suatu file.



```
mazharrasyad@mazharrasyad: ~/modul8
mazharrasyad@mazharrasyad:~/modul8$ cut -d":" -f1,4 /etc/passwd
root:0
daemon:1
bin:2
sys:3
sync:65534
games:60
man:12
lp:7
mail:8
news:9
uucp:10
proxy:13
www-data:33
backup:34
list:38
irc:39
gnats:41
nobody:65534
systemd-timesync:102
systemd-network:103
systemd-resolve:104
systemd-bus-proxy:105
syslog:108
_apt:65534
messagebus:110
uuid:111
lightdm:114
whoopsie:116
avahi-autoipd:119
avahi:120
dnsmasq:65534
colord:123
speech-dispatcher:29
hplip:7
kernoops:65534
pulse:124
rtkit:126
saned:127
usbmux:46
mysql:999
mazharrasyad:1000
dudi:1002
mazharrasyad@mazharrasyad:~/modul8$
```

```
$ cut -c1-4 /etc/passwd
```

Mengambil bagian isi teks sesuai ketentuan, -c digunakan untuk memisahkan karakter dari 1 sampai 4 pada suatu file.



```
mazharryad@mazharryad: ~/modul8
mazharryad@mazharryad:~/modul8$ cut -c1-4 /etc/passwd
root
daem
bin:
sys:
sync
game
man:
lp:x
mail
news
uucp
prox
www-
back
list
irc:
gnat
nobo
syst
syst
syst
syst
sysl
_apt
mess
uuid
ligh
whoo
avah
avah
dnsm
colo
spee
hpli
kern
puls
rtki
sane
usbm
mysq
mazh
dudi
mazharryad@mazharryad:~/modul8$ █
```

6. Menggunakan perintah sort

\$ sort /etc/passwd

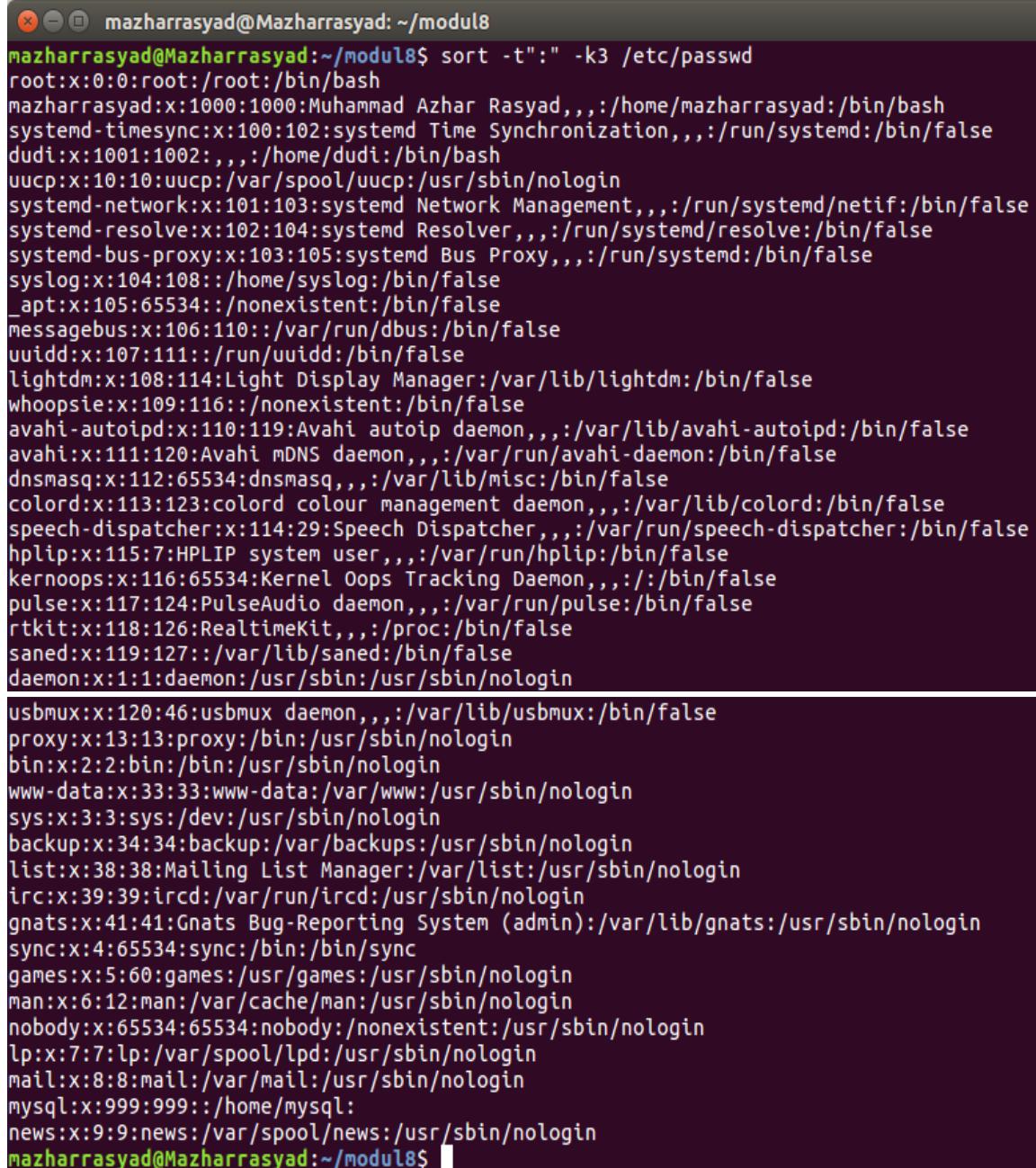
Mengurutkan isi file dengan perintah sort dari simbol – simbol, dari huruf a sampai huruf z atau diurutkan secara ascending dari atas ke bawah.

```
mazharrysyad@mazharrysyad:~/modul8$ sort /etc/passwd
mazharrysyad@mazharrysyad:~/modul8$ sort /etc/passwd
_apt:x:105:65534::/nonexistent:/bin/false
avahi-autoipd:x:110:119:Avahi autoip daemon,,,:/var/lib/avahi-autoipd:/bin/false
avahi:x:111:120:Avahi mDNS daemon,,,:/var/run/avahi-daemon:/bin/false
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
colord:x:113:123:colord colour management daemon,,,:/var/lib/colord:/bin/false
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
dnsmasq:x:112:65534:dnsmasq,,,:/var/lib/misc:/bin/false
dudi:x:1001:1002:,,,:/home/dudi:/bin/bash
games:x:5:60:games:/usr/games:/usr/sbin/nologin
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin
hplip:x:115:7:HPLIP system user,,,:/var/run/hplip:/bin/false
irc:x:39:39:ircd:/var/run/ircd:/usr/sbin/nologin
kernooops:x:116:65534:Kernel Oops Tracking Daemon,,,:/bin/false
lightdm:x:108:114:Light Display Manager:/var/lib/lightdm:/bin/false
list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
mazharrysyad:x:1000:1000:Muhammad Azhar Rasyad,,,:/home/mazharrysyad:/bin/bash
messagebus:x:106:110::/var/run/dbus:/bin/false
mysql:x:999:999::/home/mysql:
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin

nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
pulse:x:117:124:PulseAudio daemon,,,:/var/run/pulse:/bin/false
root:x:0:0:root:/root:/bin/bash
rtkit:x:118:126:RealtimeKit,,,:/proc:/bin/false
saned:x:119:127::/var/lib/saned:/bin/false
speech-dispatcher:x:114:29:Speech Dispatcher,,,:/var/run/speech-dispatcher:/bin/false
sync:x:4:65534:sync:/bin:/bin/sync
syslog:x:104:108::/home/syslog:/bin/false
systemd-bus-proxy:x:103:105:systemd Bus Proxy,,,:/run/systemd:/bin/false
systemd-network:x:101:103:systemd Network Management,,,:/run/systemd/netif:/bin/false
systemd-resolve:x:102:104:systemd Resolver,,,:/run/systemd/resolve:/bin/false
systemd-timesync:x:100:102:systemd Time Synchronization,,,:/run/systemd:/bin/false
sys:x:3:3:sys:/dev:/usr/sbin/nologin
usbmux:x:120:46:usbmux daemon,,,:/var/lib/usbmux:/bin/false
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
uuidd:x:107:111::/run/uuidd:/bin/false
whoopsie:x:109:116::/nonexistent:/bin/false
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
mazharrysyad@mazharrysyad:~/modul8$
```

```
$ sort -t":" -k3 /etc/passwd
```

Mengurutkan isi file dengan perintah sort serta option -t untuk memisahkan karakter antar kolom dengan ":" dan option -k mengurutkan berdasarkan kolom ke 3 pada suatu file.

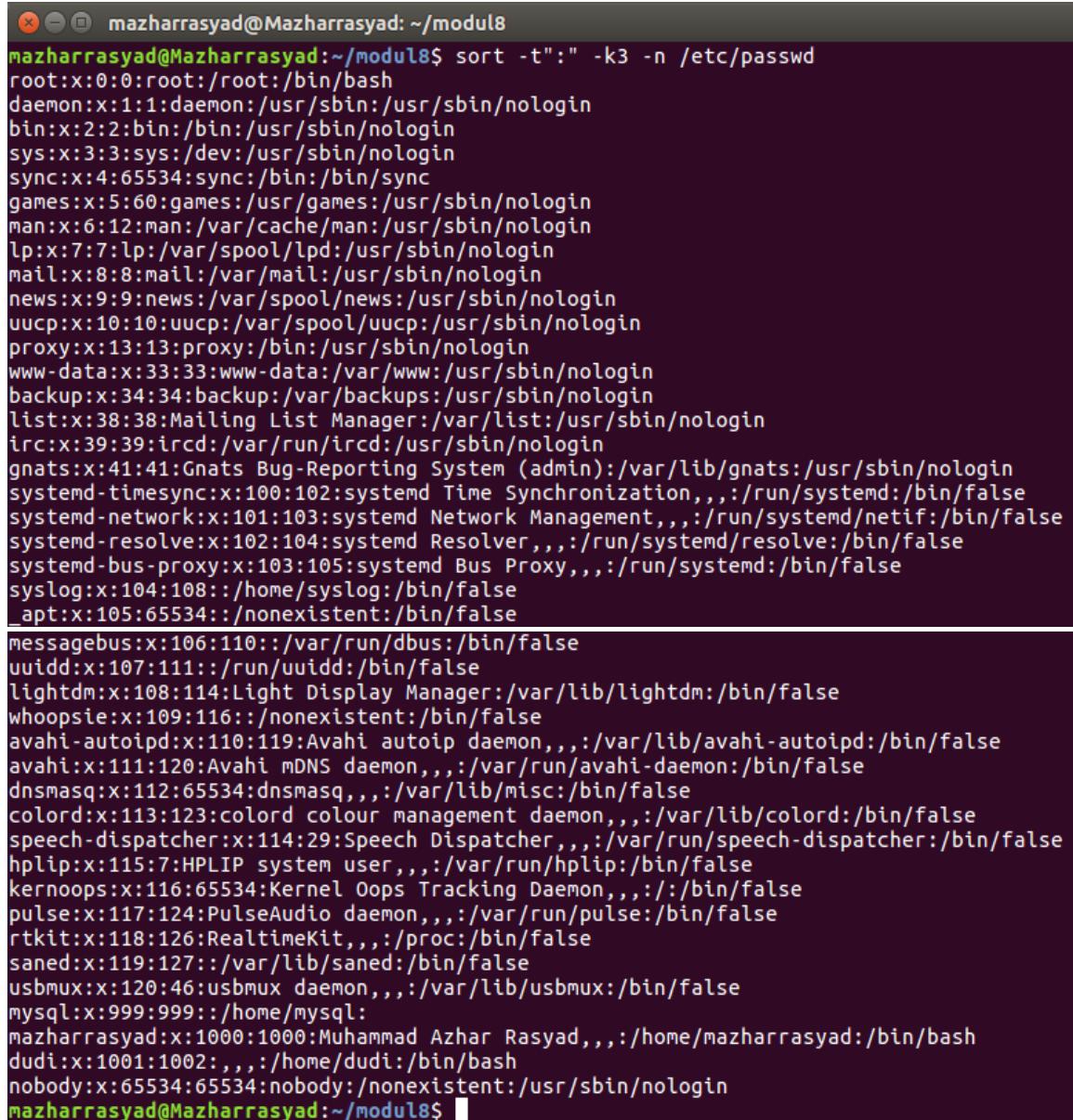


```
mazharryad@mazharryad:~/modul8
mazharryad@mazharryad:~/modul8$ sort -t":" -k3 /etc/passwd
root:x:0:0:root:/bin/bash
mazharryad:x:1000:1000:Muhammad Azhar Rasyad,,,,:/home/mazharryad:/bin/bash
systemd-timesync:x:100:102:systemd Time Synchronization,,,,:/run/systemd:/bin/false
dudi:x:1001:1002:,,,:/home/dudi:/bin/bash
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
systemd-network:x:101:103:systemd Network Management,,,,:/run/systemd/netif:/bin/false
systemd-resolve:x:102:104:systemd Resolver,,,,:/run/systemd/resolve:/bin/false
systemd-bus-proxy:x:103:105:systemd Bus Proxy,,,,:/run/systemd:/bin/false
syslog:x:104:108::/home/syslog:/bin/false
_apt:x:105:65534::/nonexistent:/bin/false
messagebus:x:106:110::/var/run/dbus:/bin/false
uuidd:x:107:111::/run/uuidd:/bin/false
lightdm:x:108:114:Light Display Manager:/var/lib/lightdm:/bin/false
whoopsie:x:109:116::/nonexistent:/bin/false
avahi-autoipd:x:110:119:Avahi autoip daemon,,,,:/var/lib/avahi-autoipd:/bin/false
avahi:x:111:120:Avahi mDNS daemon,,,,:/var/run/avahi-daemon:/bin/false
dnsmasq:x:112:65534:dnsmasq,,,,:/var/lib/misc:/bin/false
colord:x:113:123:colord colour management daemon,,,,:/var/lib/colord:/bin/false
speech-dispatcher:x:114:29:Speech Dispatcher,,,,:/var/run/speech-dispatcher:/bin/false
hplip:x:115:7:HPLIP system user,,,,:/var/run/hplip:/bin/false
kernoops:x:116:65534:Kernel Oops Tracking Daemon,,,,:/bin/false
pulse:x:117:124:PulseAudio daemon,,,,:/var/run/pulse:/bin/false
rtkit:x:118:126:RealtimeKit,,,,:/proc:/bin/false
saned:x:119:127::/var/lib/saned:/bin/false
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin

usbmux:x:120:46:usbmux daemon,,,,:/var/lib/usbmux:/bin/false
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin
irc:x:39:39:ircd:/var/run/ircd:/usr/sbin/nologin
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/bin/sync
games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
mysql:x:999:999::/home/mysql:
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
mazharryad@mazharryad:~/modul8$
```

```
$ sort -t":" -k3 -n /etc/passwd
```

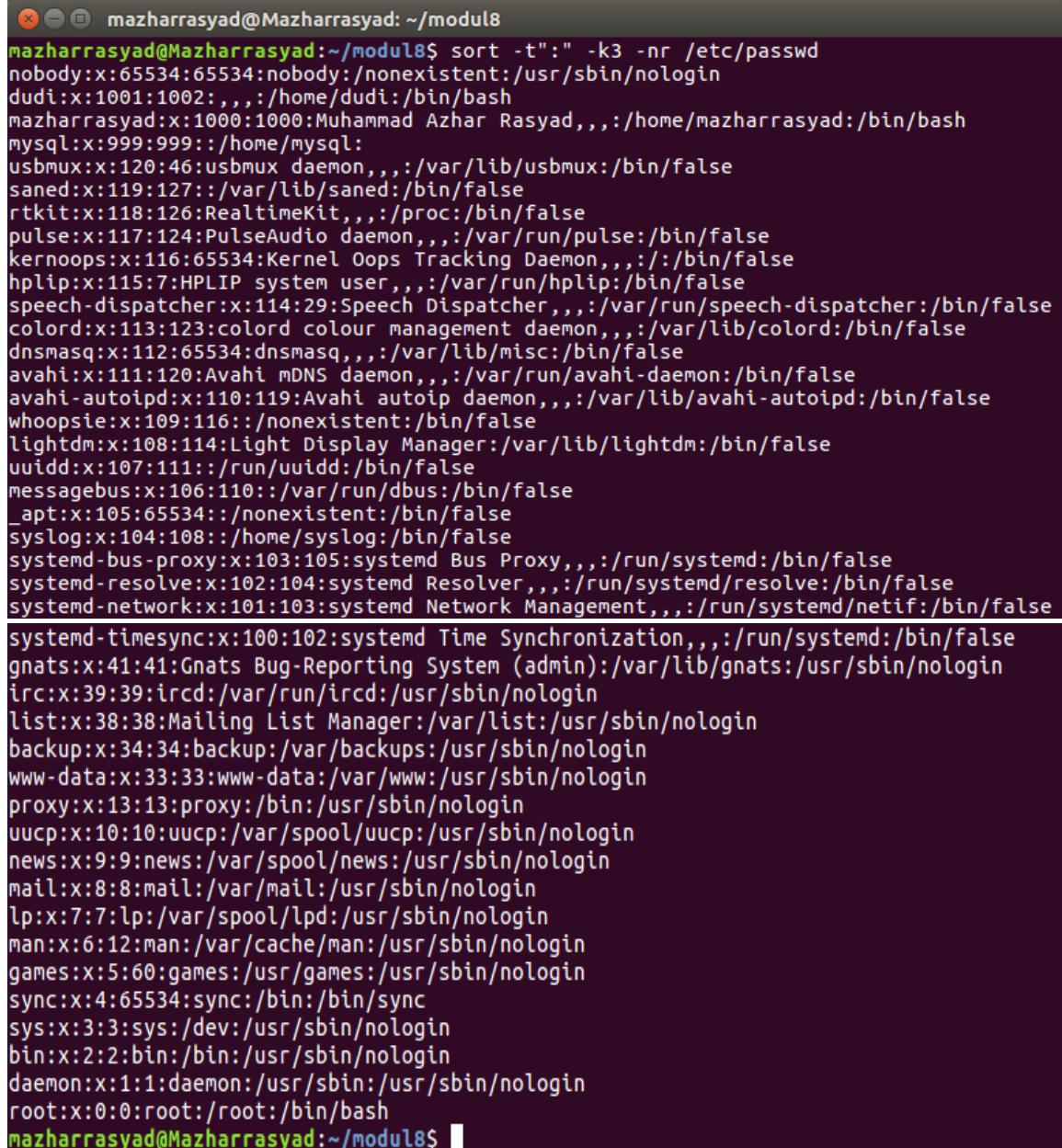
Mengurutkan isi file dengan perintah sort serta option -t untuk memisahkan karakter antar kolom dengan “：“, option -k mengurutkan berdasarkan kolom ke 3 dan option -n untuk mengurutkan berdasarkan nilai numerik pada suatu file.



```
mazharrasyad@mazharrasyad:~/modul8$ sort -t":" -k3 -n /etc/passwd
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/sync
games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin
irc:x:39:39:ircd:/var/run/ircd:/usr/sbin/nologin
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin
systemd-timesync:x:100:102:systemd Time Synchronization,,,:/run/systemd:/bin/false
systemd-network:x:101:103:systemd Network Management,,,:/run/systemd/netif:/bin/false
systemd-resolve:x:102:104:systemd Resolver,,,:/run/systemd/resolve:/bin/false
systemd-bus-proxy:x:103:105:systemd Bus Proxy,,,:/run/systemd:/bin/false
syslog:x:104:108::/home/syslog:/bin/false
_apt:x:105:65534::/nonexistent:/bin/false
messagebus:x:106:110::/var/run/dbus:/bin/false
uuidd:x:107:111::/run/uuidd:/bin/false
lightdm:x:108:114:Light Display Manager:/var/lib/lightdm:/bin/false
whoopsie:x:109:116::/nonexistent:/bin/false
avahi-autoipd:x:110:119:Avahi autoip daemon,,,:/var/lib/avahi-autoipd:/bin/false
avahi:x:111:120:Avahi mDNS daemon,,,:/var/run/avahi-daemon:/bin/false
dnsmasq:x:112:65534:dnsmasq,,,:/var/lib/misc:/bin/false
colord:x:113:123:colord colour management daemon,,,:/var/lib/colord:/bin/false
speech-dispatcher:x:114:29:Speech Dispatcher,,,:/var/run/speech-dispatcher:/bin/false
hplip:x:115:7:HPLIP system user,,,:/var/run/hplip:/bin/false
kernoops:x:116:65534:Kernel Oops Tracking Daemon,,,:/bin/false
pulse:x:117:124:PulseAudio daemon,,,:/var/run/pulse:/bin/false
rtkit:x:118:126:RealtimeKit,,,:/proc:/bin/false
saned:x:119:127::/var/lib/saned:/bin/false
usbmux:x:120:46:usbmux daemon,,,:/var/lib/usbmux:/bin/false
mysql:x:999:999::/home/mysql:
mazharrasyad:x:1000:1000:Muhammad Azhar Rasyad,,,:/home/mazharrasyad:/bin/bash
dudi:x:1001:1002,,,:/home/dudi:/bin/bash
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
mazharrasyad@mazharrasyad:~/modul8$
```

```
$ sort -t":" -k3 -nr /etc/passwd
```

Mengurutkan isi file dengan perintah sort serta option -t untuk memisahkan karakter antar kolom dengan “：“, option -k mengurutkan berdasarkan kolom ke 3 , option -n untuk mengurutkan berdasarkan nilai numerik dan option -r untuk mengurutkan berdasarkan dari yang terbesar ke terkecil atau descending pada suatu file.

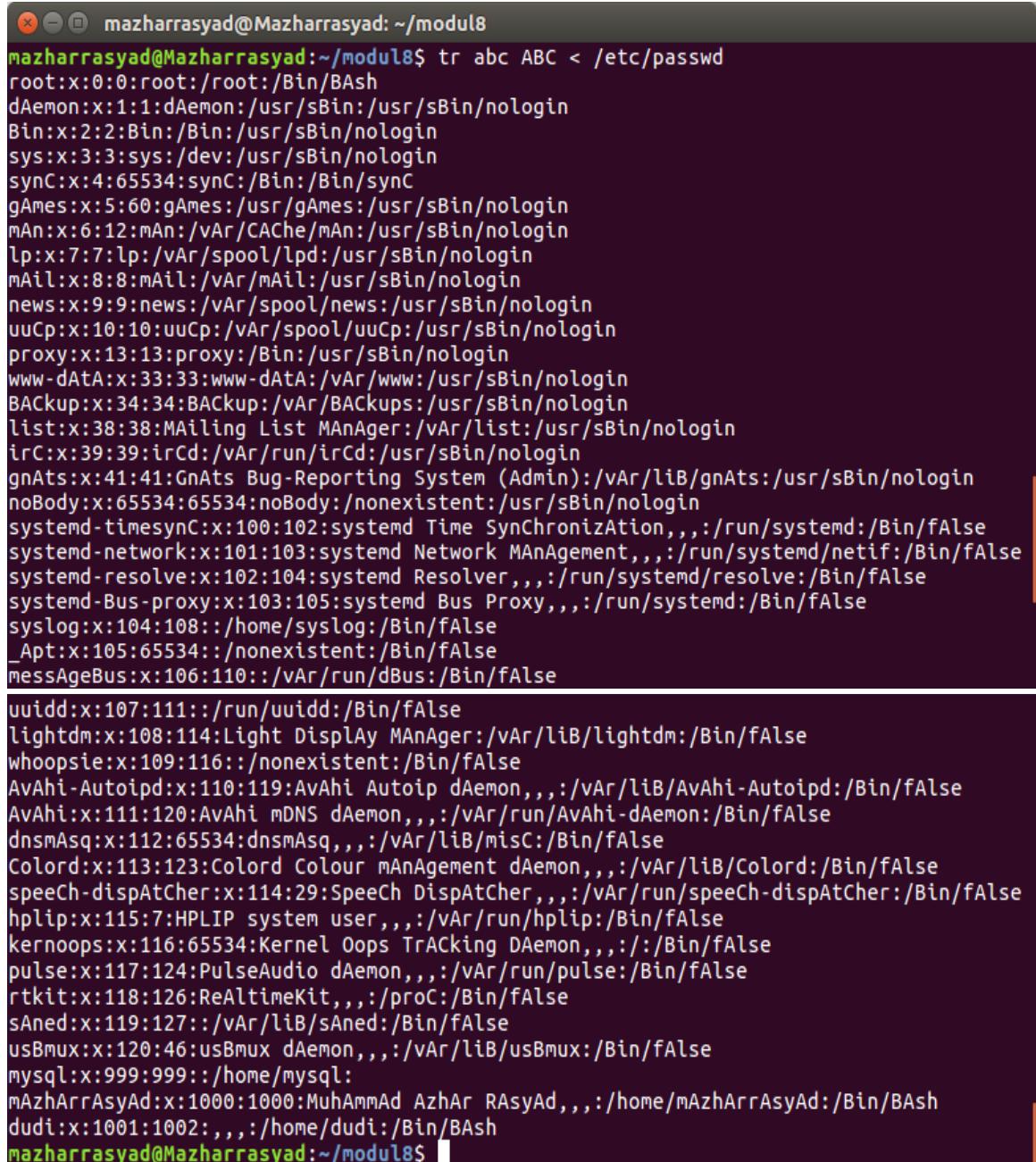


```
mazharryad@mazharryad:~/modul8
mazharryad@mazharryad:~/modul8$ sort -t":" -k3 -nr /etc/passwd
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
dudi:x:1001:1002:,,,:/home/dudi:/bin/bash
mazharryad:x:1000:1000:Muhammad Azhar Rasyad,,,:/home/mazharryad:/bin/bash
mysql:x:999:999::/home/mysql:
usbmux:x:120:46:usbmux daemon,,,:/var/lib/usbmux:/bin/false
saned:x:119:127::/var/lib/saned:/bin/false
rtkit:x:118:126:RealtimeKit,,,:/proc:/bin/false
pulse:x:117:124:PulseAudio daemon,,,:/var/run/pulse:/bin/false
kernooops:x:116:65534:Kernel Oops Tracking Daemon,,,:/bin/false
hplip:x:115:7:HPLIP system user,,,:/var/run/hplip:/bin/false
speech-dispatcher:x:114:29:Speech Dispatcher,,,:/var/run/speech-dispatcher:/bin/false
colord:x:113:123:colord colour management daemon,,,:/var/lib/colord:/bin/false
dnsmasq:x:112:65534:dnsmasq,,,:/var/lib/misc:/bin/false
avahi:x:111:120:Avahi mDNS daemon,,,:/var/run/avahi-daemon:/bin/false
avahi-autoipd:x:110:119:Avahi autoip daemon,,,:/var/lib/avahi-autoipd:/bin/false
whoopsie:x:109:116::/nonexistent:/bin/false
lightdm:x:108:114:Light Display Manager:/var/lib/lightdm:/bin/false
uuidd:x:107:111::/run/uuidd:/bin/false
messagebus:x:106:110::/var/run/dbus:/bin/false
_apt:x:105:65534::/nonexistent:/bin/false
syslog:x:104:108::/home/syslog:/bin/false
systemd-bus-proxy:x:103:105:systemd Bus Proxy,,,:/run/systemd:/bin/false
systemd-resolve:x:102:104:systemd Resolver,,,:/run/systemd/resolve:/bin/false
systemd-network:x:101:103:systemd Network Management,,,:/run/systemd/netif:/bin/false
systemd-timesync:x:100:102:systemd Time Synchronization,,,:/run/systemd:/bin/false
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin
irc:x:39:39:ircd:/var/run/ircd:/usr/sbin/nologin
list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
games:x:5:60:games:/usr/games:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/bin/sync
sys:x:3:3:sys:/dev:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
root:x:0:0:root:/root:/bin/bash
mazharryad@mazharryad:~/modul8$
```

7. Menggunakan perintah tr

```
$ tr abc ABC < /etc/passwd
```

Mengkonversi isi file perintah tr dengan option kar1 untuk karakter yang akan dikonversi dan option kar2 untuk hasil dari karakter yang akan dikonversi serta option < untuk mengambil sebuah file. Jadi karakter abc akan dikonversi menjadi ABC pada file /etc/passwd.



```
mazharryad@mazharryad:~/modul8
mazharryad@mazharryad:~/modul8$ tr abc ABC < /etc/passwd
root:x:0:0:root:/root:/Bin/BAsh
dAemon:x:1:1:dAemon:/usr/sBin:/usr/sBin/nologin
Bin:x:2:2:Bin:/Bin:/usr/sBin/nologin
sys:x:3:3:sys:/dev:/usr/sBin/nologin
synC:x:4:65534:synC:/Bin/synC
gAmes:x:5:60:gAmes:/usr/gAmes:/usr/sBin/nologin
mAn:x:6:12:mAn:/vAr/CAChe/mAn:/usr/sBin/nologin
lp:x:7:7:lp:/vAr/spool/lpd:/usr/sBin/nologin
mAil:x:8:8:mAil:/vAr/mAil:/usr/sBin/nologin
news:x:9:9:news:/vAr/spool/news:/usr/sBin/nologin
uuCp:x:10:10:uuCp:/vAr/spool/uuCp:/usr/sBin/nologin
proxy:x:13:13:proxy:/Bin:/usr/sBin/nologin
www-dAtA:x:33:33:www-dAtA:/vAr/www:/usr/sBin/nologin
BACKup:x:34:34:BACKup:/vAr/BACkups:/usr/sBin/nologin
list:x:38:38:MAiling List MAnAger:/vAr/list:/usr/sBin/nologin
ircC:x:39:39:ircCd:/vAr/run/ircCd:/usr/sBin/nologin
gnAts:x:41:41:GnAts Bug-Reporting System (Admin):/vAr/liB/gnAts:/usr/sBin/nologin
noBody:x:65534:65534:noBody:/nonexistent:/usr/sBin/nologin
systemd-timesync:x:100:102:systemD Time SynChronizAtion,,,:/run/systemD:/Bin/fAlSe
systemd-network:x:101:103:systemD Network MAnAgeMent,,,:/run/systemD/netif:/Bin/fAlSe
systemd-resolve:x:102:104:systemD ResolvEr,,,:/run/systemD/resolve:/Bin/fAlSe
systemD-Bus-proxy:x:103:105:systemD Bus Proxy,,,:/run/systemD:/Bin/fAlSe
syslog:x:104:108::/home/syslog:/Bin/fAlSe
_Apt:x:105:65534::/nonexistent:/Bin/fAlSe
messAgeBus:x:106:110::/vAr/run/dBus:/Bin/fAlSe

uuidd:x:107:111::/run/uuidd:/Bin/fAlSe
lightdm:x:108:114:Light DispLay MAnAger:/vAr/liB/lightdm:/Bin/fAlSe
whoopsie:x:109:116::/nonexistent:/Bin/fAlSe
AvAhi-Autoipd:x:110:119:AvAhi Autoip dAemon,,,:/vAr/liB/AvAhi-Autoipd:/Bin/fAlSe
AvAhi:x:111:120:AvAhi mDNS dAemon,,,:/vAr/run/AvAhi-dAemon:/Bin/fAlSe
dnsmAsq:x:112:65534:dnsmAsq,,,:/vAr/liB/misC:/Bin/fAlSe
Colord:x:113:123:Colord Colour mAnAgeMent dAemon,,,:/vAr/liB/Colord:/Bin/fAlSe
speeCh-dispatcher:x:114:29:SpeeCh DispAtcher,,,:/vAr/run/speeCh-dispatcher:/Bin/fAlSe
hplip:x:115:7:HPLIP system user,,,:/vAr/run/hplip:/Bin/fAlSe
kernoops:x:116:65534:Kernel Oops TrACking DAemon,,,:/Bin/fAlSe
pulse:x:117:124:PulseAudio dAemon,,,:/vAr/run/pulse:/Bin/fAlSe
rtkit:x:118:126:ReAltImeKit,,,:/proc:/Bin/fAlSe
sAned:x:119:127::/vAr/liB/sAned:/Bin/fAlSe
usBmux:x:120:46:usBmux dAemon,,,:/vAr/liB/usBmux:/Bin/fAlSe
mysql:x:999:999::/home/mysql:
mAzhArrAsyAd:x:1000:1000:MuhAmmAd AzhAr RAsyAd,,,:/home/mAzhArrAsyAd:/Bin/BAsh
dudi:x:1001:1002,,,:/home/dudi:/Bin/BAsh
mazharryad@mazharryad:~/modul8$
```

```
$ tr a-z A-Z < /etc/passwd
```

Mengkonversi isi file dari karakter a sampai z akan dikonversi menjadi A sampai Z pada file /etc/passwd.

```
mazharrysyad@mazharrysyad:~/modul8
mazharrysyad@mazharrysyad:~/modul8$ tr a-z A-Z < /etc/passwd
ROOT:X:0:0:ROOT:/ROOT:/BIN/BASH
DAEMON:X:1:1:DAEMON:/USR/SBIN:/USR/SBIN/NOLOGIN
BIN:X:2:2:BIN:/BIN:/USR/SBIN/NOLOGIN
SYS:X:3:3:SYS:/DEV:/USR/SBIN/NOLOGIN
SYNC:X:4:65534:SYNC:/BIN:/SYNC
GAMES:X:5:60:GAMES:/USR/GAMES:/USR/SBIN/NOLOGIN
MAN:X:6:12:MAN:/VAR/CACHE/MAN:/USR/SBIN/NOLOGIN
LP:X:7:7:LP:/VAR/SPOOL/LPD:/USR/SBIN/NOLOGIN
MAIL:X:8:8:MAIL:/VAR/MAIL:/USR/SBIN/NOLOGIN
NEWS:X:9:9:NEWS:/VAR/SPOOL/NEWS:/USR/SBIN/NOLOGIN
UUCP:X:10:10:UUCP:/VAR/SPOOL/UUCP:/USR/SBIN/NOLOGIN
PROXY:X:13:13:PROXY:/BIN:/USR/SBIN/NOLOGIN
WWW-DATA:X:33:33:WWW-DATA:/VAR/WWW:/USR/SBIN/NOLOGIN
BACKUP:X:34:34:BACKUP:/VAR/BACKUPS:/USR/SBIN/NOLOGIN
LIST:X:38:38:MAILING LIST MANAGER:/VAR/LIST:/USR/SBIN/NOLOGIN
IRC:X:39:39:IRCD:/VAR/RUN/IRCD:/USR/SBIN/NOLOGIN
GNATS:X:41:41:GNATS BUG-REPORTING SYSTEM (ADMIN):/VAR/LIB/GNATS:/USR/SBIN/NOLOGIN
NOBODY:X:65534:65534:NOBODY:/NONEXISTENT:/USR/SBIN/NOLOGIN
SYSTEMD-TIMESYNC:X:100:102:SYSTEMD TIME SYNCHRONIZATION,,,:/RUN/SYSTEMD:/BIN/False
SYSTEMD-NETWORK:X:101:103:SYSTEMD NETWORK MANAGEMENT,,,:/RUN/SYSTEMD/NETIF:/BIN/False
SYSTEMD-RESOLVE:X:102:104:SYSTEMD RESOLVER,,,:/RUN/SYSTEMD/RESOLVE:/BIN/False
SYSTEMD-BUS-PROXY:X:103:105:SYSTEMD BUS PROXY,,,:/RUN/SYSTEMD:/BIN/False
SYSLOG:X:104:108:/HOME/SYSLOG:/BIN/False
_APT:X:105:65534:::/NONEXISTENT:/BIN/False

MESSAGEBUS:X:106:110:/VAR/RUN/DBUS:/BIN/False
UUIDD:X:107:111:/RUN/UUIDD:/BIN/False
LIGHTDM:X:108:114:LIGHT DISPLAY MANAGER:/VAR/LIB/LIGHTDM:/BIN/False
WHOOPSIE:X:109:116:/NONEXISTENT:/BIN/False
AVAHIAUTOIPD:X:110:119:AVAHIAUTOIP DAEMON,,,:/VAR/LIB/AVAHIAUTOIPD:/BIN/False
AVAHIDNSMASQ:X:111:120:AVAHIMDNS DAEMON,,,:/VAR/RUN/AVAHIDAEMON:/BIN/False
DNSMASQ:X:112:65534:DNSMASQ,,,:/VAR/LIB/MISC:/BIN/False
COLORD:X:113:123:COLORD COLOUR MANAGEMENT DAEMON,,,:/VAR/LIB/COLORD:/BIN/False
SPEECHDISPATCHER:X:114:29:SPEECH DISPATCHER,,,:/VAR/RUN/SPEECHDISPATCHER:/BIN/False
HPLIP:X:115:7:HPLIP SYSTEM USER,,,:/VAR/RUN/HPLIP:/BIN/False
KERNOOOPS:X:116:65534:KERNEL OOPS TRACKING DAEMON,,,:/BIN/False
PULSE:X:117:124:PULSEAUDIO DAEMON,,,:/VAR/RUN/PULSE:/BIN/False
RTKIT:X:118:126:REALTIMEKIT,,,:/PROC:/BIN/False
SANED:X:119:127:/VAR/LIB/SANED:/BIN/False
USBMUX:X:120:46:USBMUX DAEMON,,,:/VAR/LIB/USBMUX:/BIN/False
MYSQL:X:999:999:/HOME/MySQL:
MAZHARRASYAD:X:1000:1000:MUHAMMAD AZHAR RASYAD,,,:/HOME/MAZHARRASYAD:/BIN/BASH
DUDI:X:1001:1002:,,,:/HOME/DUDI:/BIN/BASH
mazharrysyad@mazharrysyad:~/modul8$
```

```
$ tr -d aieuo < /etc/passwd
```

Mengkonversi isi file dengan option -d untuk menghapus karakter sesuai konversi yang akan dihasilkan yaitu karakter aieuo pada file /etc/passwd.

```
mazharrysyad@mazharrysyad:~/modul8$ tr -d aieuo < /etc/passwd
rt:x:0:0:rt:/rt:/bn/bsh
dmn:x:1:1:dmn:/sr/sbn:/sr/sbn/nlgn
bn:x:2:2:bn:/bn:/sr/sbn/nlgn
sys:x:3:3:sys:/dv:/sr/sbn/nlgn
sync:x:4:65534:sync:/bn:/bn/sync
gms:x:5:60:gms:/sr/gms:/sr/sbn/nlgn
mn:x:6:12:mn:/vr/cch/mn:/sr/sbn/nlgn
lp:x:7:7:lp:/vr/spl/lpd:/sr/sbn/nlgn
ml:x:8:8:ml:/vr/ml:/sr/sbn/nlgn
nws:x:9:9:nws:/vr/spl/nws:/sr/sbn/nlgn
cp:x:10:10:cp:/vr/spl/cp:/sr/sbn/nlgn
prxy:x:13:13:prxy:/bn:/sr/sbn/nlgn
www-dt:x:33:33:www-dt:/vr/www:/sr/sbn/nlgn
bckp:x:34:34:bckp:/vr/bckps:/sr/sbn/nlgn
lst:x:38:38:Mlng Lst Mngr:/vr/lst:/sr/sbn/nlgn
rc:x:39:39:rcd:/vr/rn/rcd:/sr/sbn/nlgn
gnts:x:41:41:Gnts Bg-Rprtng Systm (dmn):/vr/lb/gnts:/sr/sbn/nlgn
nbdy:x:65534:65534:nbdy:/nnxstnt:/sr/sbn/nlgn
systemd-tmsync:x:100:102:systemd Tm Synchrnzt,,,:/rn/systemd:/bn/fls
systemd-ntwrk:x:101:103:systemd Ntwrk Mngmnt,,,:/rn/systemd/ntf:/bn/fls
systemd-rslv:x:102:104:systemd Rslvr,,,:/rn/systemd/rslv:/bn/fls
systemd-bs-prxy:x:103:105:systemd Bs Prxy,,,:/rn/systemd:/bn/fls
syslg:x:104:108::/hm/syslg:/bn/fls
_pt:x:105:65534::/nnxstnt:/bn/fls

mssgbs:x:106:110::/vr/rn/dbs:/bn/fls
dd:x:107:111::/rn/dd:/bn/fls
lgthdm:x:108:114:Lght Dsply Mngr:/vr/lb/lgthdm:/bn/fls
whps:x:109:116::/nnxstnt:/bn/fls
vh-tpd:x:110:119:Avh tp dmn,,,:/vr/lb/vh-tpd:/bn/fls
vh:x:111:120:Avh mDNS dmn,,,:/vr/rn/vh-dmn:/bn/fls
dnsmsq:x:112:65534:dnsmsq,,,:/vr/lb/msc:/bn/fls
clrd:x:113:123:clrd clr mngmnt dmn,,,:/vr/lb/clrd:/bn/fls
spch-dsptchr:x:114:29:Spch Dsptchr,,,:/vr/rn/spch-dsptchr:/bn/fls
hplp:x:115:7:HPLIP systm sr,,,:/vr/rn/hplp:/bn/fls
krnps:x:116:65534:Krn1 Ops Trckng Dmn,,,:/bn/fls
pls:x:117:124:PlsAd dmn,,,:/vr/rn/pls:/bn/fls
rtkt:x:118:126:RltmKt,,,:/prc:/bn/fls
snd:x:119:127::/vr/lb/snd:/bn/fls
sbmx:x:120:46:sbmx dmn,,,:/vr/lb/sbmx:/bn/fls
mysql:x:999:999::/hm/mysql:
mzhrrsyd:x:1000:1000:Mhmmld Azhr Rsyd,,,:/hm/mzhrrsyd:/bn/bsh
dd:x:1001:1002:,,,:/hm/dd:/bn/bsh
mazharrysyad@mazharrysyad:~/modul8$
```

8. Menggunakan perintah sed

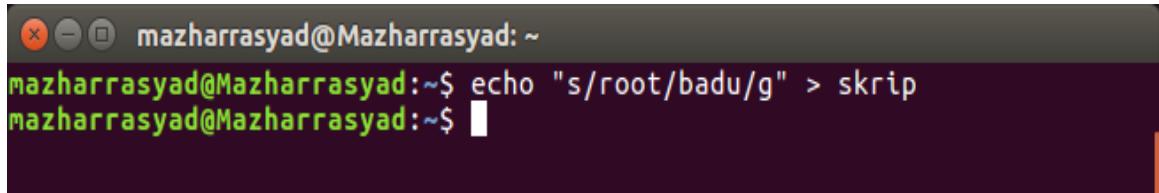
```
$ sed -e "s/root/badu/g" /etc/passwd
```

Mengedit isi file dengan perintah sed serta option -e script pada suatu file dari perintah diatas mengganti root menjadi badu di file /etc/passwd.

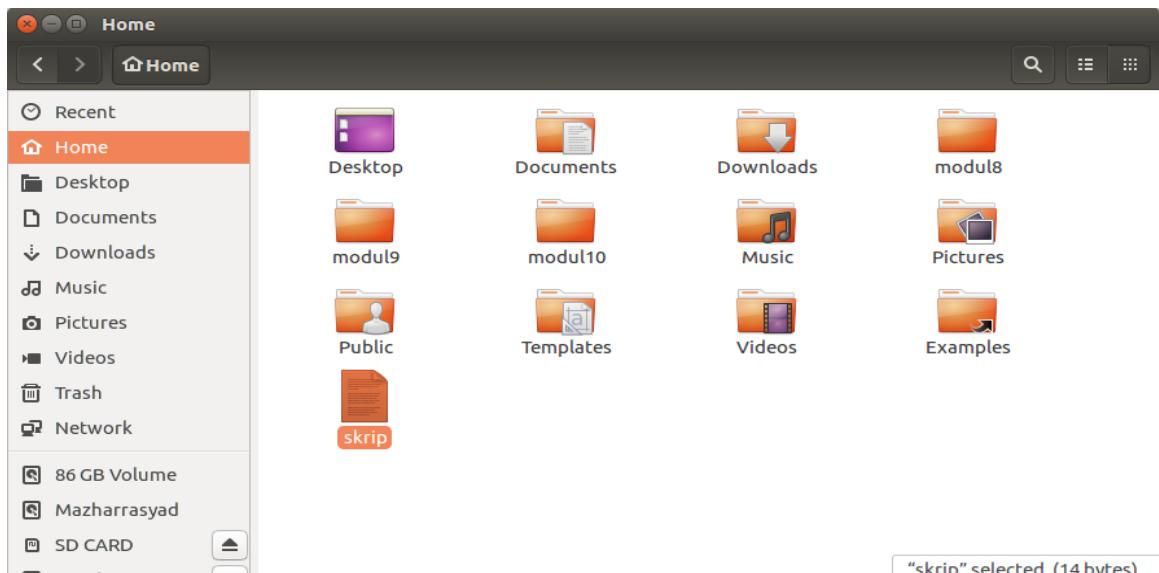
```
mazharrysyad@mazharrysyad:~/modul8$ sed -e "s/root/badu/g" /etc/passwd
badu:x:0:0:badu:/badu:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/sync
games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
proxy:x:13:13:proxy:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin
irc:x:39:39:ircd:/var/run/ircd:/usr/sbin/nologin
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
systemd-timesync:x:100:102:systemd Time Synchronization,,,:/run/systemd:/bin/false
systemd-network:x:101:103:systemd Network Management,,,:/run/systemd/netif:/bin/false
systemd-resolve:x:102:104:systemd Resolver,,,:/run/systemd/resolve:/bin/false
systemd-bus-proxy:x:103:105:systemd Bus Proxy,,,:/run/systemd:/bin/false
syslog:x:104:108::/home/syslog:/bin/false
_apt:x:105:65534::/nonexistent:/bin/false
messagebus:x:106:110::/var/run/dbus:/bin/false
uuidd:x:107:111::/run/uuidd:/bin/false
lightdm:x:108:114:Light Display Manager:/var/lib/lightdm:/bin/false
whoopsie:x:109:116::/nonexistent:/bin/false
avahi-autoipd:x:110:119:Avahi autoip daemon,,,:/var/lib/avahi-autoipd:/bin/false
avahi:x:111:120:Avahi mDNS daemon,,,:/var/run/avahi-daemon:/bin/false
dnsmasq:x:112:65534:dnsmasq,,,:/var/lib/misc:/bin/false
colord:x:113:123:colord colour management daemon,,,:/var/lib/colord:/bin/false
speech-dispatcher:x:114:29:Speech Dispatcher,,,:/var/run/speech-dispatcher:/bin/false
hplip:x:115:7:HPLIP system user,,,:/var/run/hplip:/bin/false
kernoops:x:116:65534:Kernel Oops Tracking Daemon,,,:/bin/false
pulse:x:117:124:PulseAudio daemon,,,:/var/run/pulse:/bin/false
rtkit:x:118:126:RealtimeKit,,,:/proc:/bin/false
saned:x:119:127::/var/lib/saned:/bin/false
usbmux:x:120:46:usbmux daemon,,,:/var/lib/usbmux:/bin/false
mysql:x:999:999::/home/mysql:
mazharrysyad:x:1000:1000:Muhammad Azhar Rasyad,,,:/home/mazharrysyad:/bin/bash
dudi:x:1001:1002:,,,:/home/dudi:/bin/bash
mazharrysyad@mazharrysyad:~/modul8$
```

```
$ echo "s/root/badu/g" > skrip
```

Menambahkan isi file dengan teks dengan perintah echo yang dituliskan untuk membuat file baru dengan option >, pada perintah diatas akan menuliskan teks “s/root/badu/g” pada file skrip yang sebelumnya belum dibuat.



```
mazharrasyad@Mazharrasyad:~$ echo "s/root/badu/g" > skrip
mazharrasyad@Mazharrasyad:~$
```



```
$ sed -f skrip /etc/passwd
```

Mengedit isi file dengan perintah sed dengan option -f untuk mengambil teks editan pada file tertentu untuk diedit di file baru. Pada perintah diatas mengedit file /etc/passwd dengan isi file skrip yang didalamnya ada perintah untuk mengedit sebuah file.

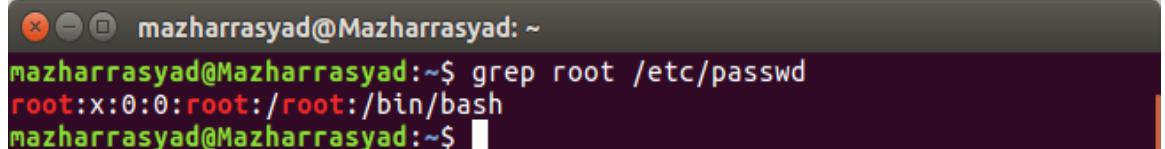
```
mazharrysyad@mazharrysyad:~/modul8$ sed -f skrip /etc/passwd
badu:x:0:0:badu:/badu:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/sync
games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin
irc:x:39:39:ircd:/var/run/ircd:/usr/sbin/nologin
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
systemd-timesync:x:100:102:systemd Time Synchronization,,,:/run/systemd:/bin/false
systemd-network:x:101:103:systemd Network Management,,,:/run/systemd/netif:/bin/false
systemd-resolve:x:102:104:systemd Resolver,,,:/run/systemd/resolve:/bin/false
systemd-bus-proxy:x:103:105:systemd Bus Proxy,,,:/run/systemd:/bin/false
syslog:x:104:108::/home/syslog:/bin/false
_apt:x:105:65534::/nonexistent:/bin/false
messagebus:x:106:110::/var/run/dbus:/bin/false
uuidd:x:107:111::/run/uuidd:/bin/false

lightdm:x:108:114:Light Display Manager:/var/lib/lightdm:/bin/false
whoopsie:x:109:116::/nonexistent:/bin/false
avahi-autoipd:x:110:119:Avahi autoip daemon,,,:/var/lib/avahi-autoipd:/bin/false
avahi:x:111:120:Avahi mDNS daemon,,,:/var/run/avahi-daemon:/bin/false
dnsmasq:x:112:65534:dnsmasq,,,:/var/lib/misc:/bin/false
colord:x:113:123:colord colour management daemon,,,:/var/lib/colord:/bin/false
speech-dispatcher:x:114:29:Speech Dispatcher,,,:/var/run/speech-dispatcher:/bin/false
hplip:x:115:7:HPLIP system user,,,:/var/run/hplip:/bin/false
kernoops:x:116:65534:Kernel Oops Tracking Daemon,,,:/bin/false
pulse:x:117:124:PulseAudio daemon,,,:/var/run/pulse:/bin/false
rtkit:x:118:126:RealtimeKit,,,:/proc:/bin/false
saned:x:119:127::/var/lib/saned:/bin/false
usbmux:x:120:46:usbmux daemon,,,:/var/lib/usbmux:/bin/false
mysql:x:999:999::/home/mysql:
mazharrysyad:x:1000:1000:Muhammad Azhar Rasyad,,,:/home/mazharrysyad:/bin/bash
dudi:x:1001:1002:,,,:/home/dudi:/bin/bash
mazharrysyad@mazharrysyad:~/modul8$
```

9. Menggunakan perintah grep

```
$ grep root /etc/passwd
```

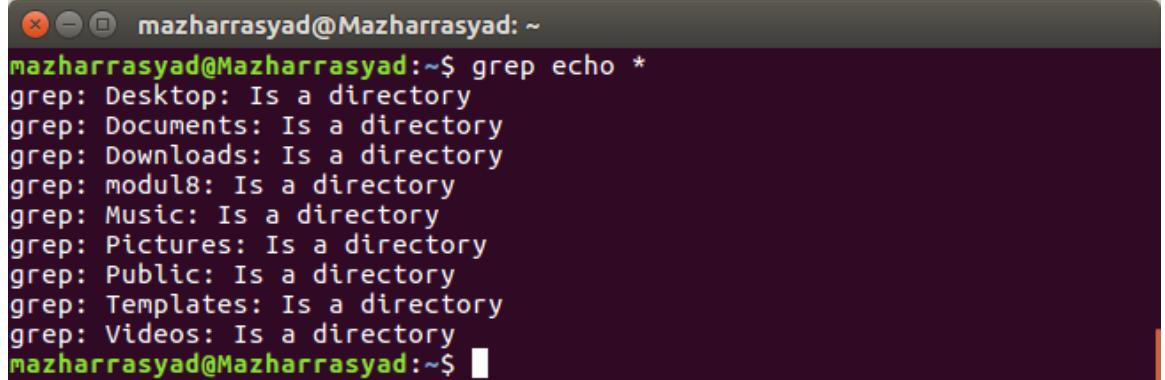
Perintah grep untuk menampilkan baris pada suatu file sesuai teks yang dituliskan. Pada perintah diatas menampilkan baris dengan teks root pada file /etc/passwd.



```
mazharrasyad@mazharrasyad:~$ grep root /etc/passwd
root:x:0:0:root:/root:/bin/bash
mazharrasyad@mazharrasyad:~$
```

```
$ grep echo *
```

Menampilkan semua direktori dan tidak menampilkan file dengan perintah grep dengan option echo secara detail.

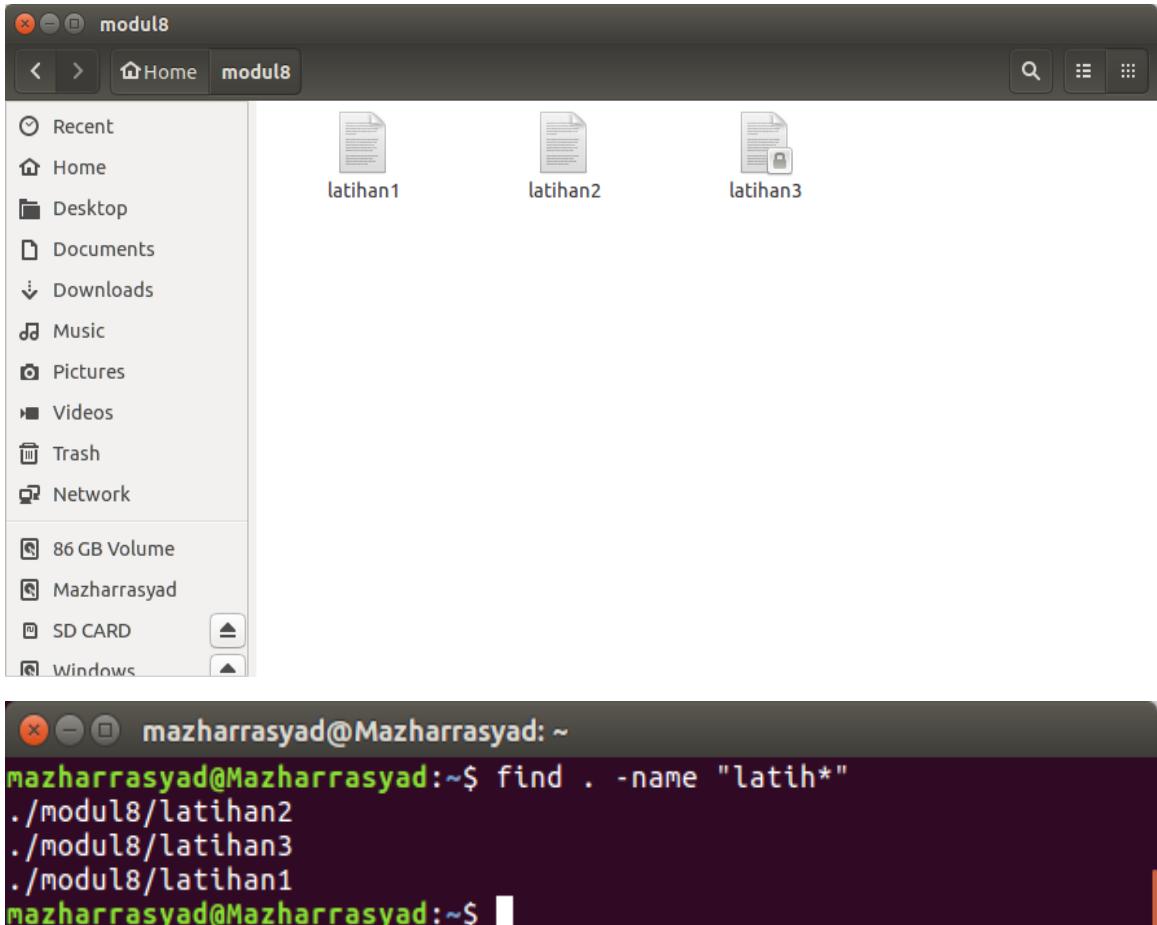


```
mazharrasyad@mazharrasyad:~$ grep echo *
grep: Desktop: Is a directory
grep: Documents: Is a directory
grep: Downloads: Is a directory
grep: modul8: Is a directory
grep: Music: Is a directory
grep: Pictures: Is a directory
grep: Public: Is a directory
grep: Templates: Is a directory
grep: Videos: Is a directory
mazharrasyad@mazharrasyad:~$
```

10. Menggunakan perintah find

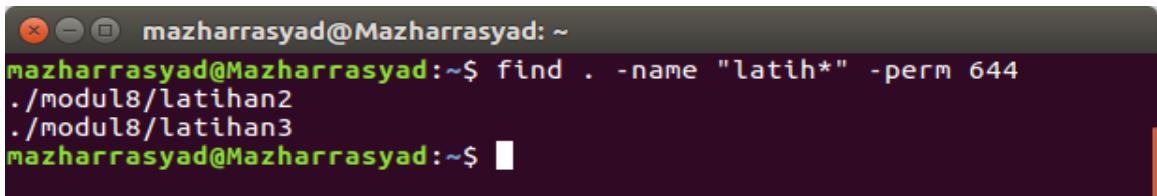
```
$ find . -name "latih*"
```

Mencari file dengan perintah find dari direktori awal pencarian dan option -name untuk mencari file berdasarkan nama. Pada perintah diatas mencari file pada direktori . atau /home/mazharrasyad dengan nama file berawalan latih untuk semua (*) file.



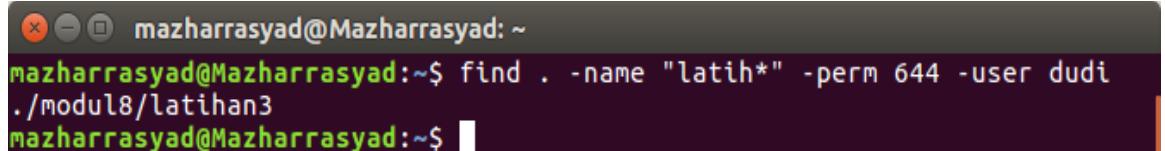
```
$ find . -name "latih*" -perm 644
```

Mencari file pada direktori . atau /home/mazharrasyad dengan nama file berawalan latih untuk semua (*) file tetapi juga berdasarkan dengan option perm yaitu berdasarkan hak akses file.



```
$ find . -name "latih*" -perm 644 -user budi
```

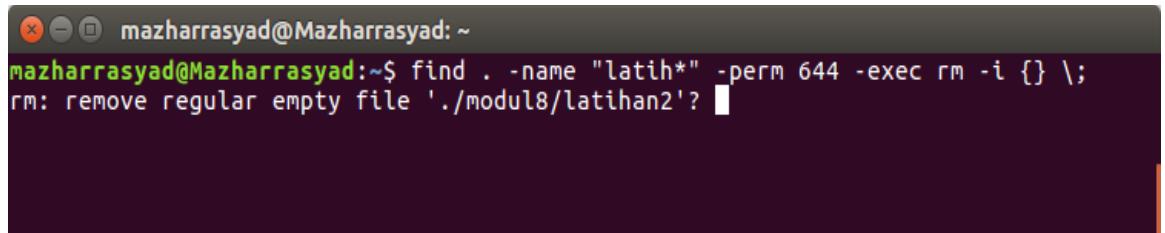
Mencari file pada direktori . atau /home/mazharrasyad dengan nama file berawalan latih untuk semua (*) file tetapi juga berdasarkan dengan option perm yaitu berdasarkan hak akses file dan mencari berdasarkan pemilik file dengan option user.



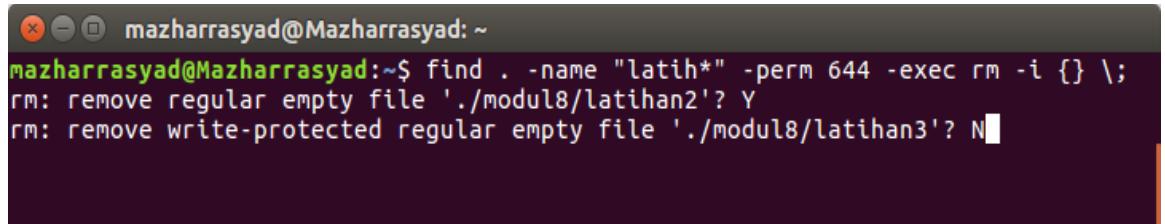
```
mazharrasyad@mazharrasyad:~$ find . -name "latih*" -perm 644 -user budi  
./modul8/latihan3  
mazharrasyad@mazharrasyad:~$
```

```
$ find . -name "latih*" -perm 644 -exec rm -i {} \;
```

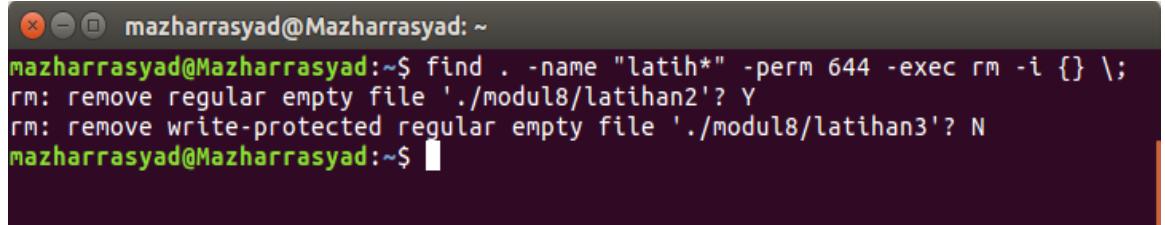
Mencari file pada direktori . atau /home/mazharrasyad dengan nama file berawalan latih untuk semua (*) file tetapi juga berdasarkan dengan option perm yaitu berdasarkan hak akses file dan mengeksekusi perintah shell sesuai perintah yang diberikan.



```
mazharrasyad@mazharrasyad:~$ find . -name "latih*" -perm 644 -exec rm -i {} \;  
rm: remove regular empty file './modul8/latihan2'? Y
```

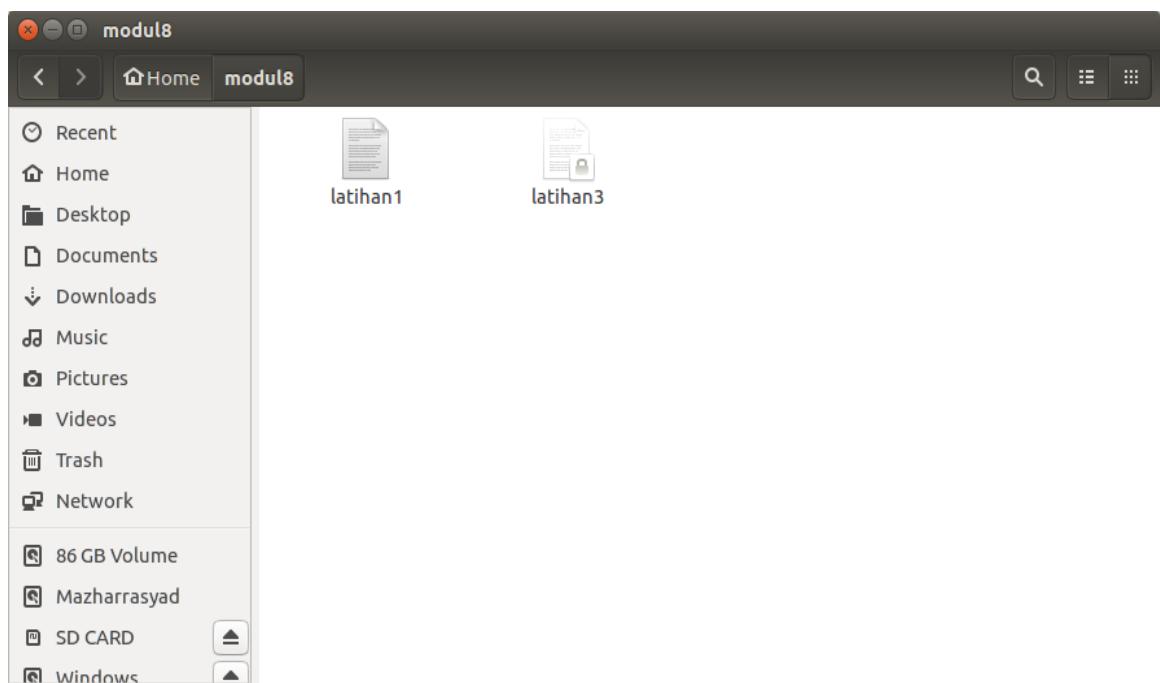


```
mazharrasyad@mazharrasyad:~$ find . -name "latih*" -perm 644 -exec rm -i {} \;  
rm: remove regular empty file './modul8/latihan2'? Y  
rm: remove write-protected regular empty file './modul8/latihan3'? N
```



```
mazharrasyad@mazharrasyad:~$ find . -name "latih*" -perm 644 -exec rm -i {} \;  
rm: remove regular empty file './modul8/latihan2'? Y  
rm: remove write-protected regular empty file './modul8/latihan3'? N  
mazharrasyad@mazharrasyad:~$
```

Hasilnya akan seperti gambar dibawah ini



D. Tugas

1. Tuliskan perintah untuk menampilkan baris ke 20 sampai dengan ke 25 dari file /etc/passwd ! (Gunakan head dan tail)

```
mazharrasyad@mazharrasyad:~$ cat /etc/passwd
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/sync
games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin
irc:x:39:39:ircd:/var/run/ircd:/usr/sbin/nologin
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
systemd-timesync:x:100:102:systemd Time Synchronization,,,:/run/systemd:/bin/false
systemd-network:x:101:103:systemd Network Management,,,:/run/systemd/netif:/bin/false
systemd-resolve:x:102:104:systemd Resolver,,,:/run/systemd/resolve:/bin/false
systemd-bus-proxy:x:103:105:systemd Bus Proxy,,,:/run/systemd:/bin/false
syslog:x:104:108::/home/syslog:/bin/false
_apt:x:105:65534::/nonexistent:/bin/false
messagebus:x:106:110::/var/run/dbus:/bin/false
uuidd:x:107:111::/run/uuidd:/bin/false
lightdm:x:108:114:Light Display Manager:/var/lib/lightdm:/bin/false

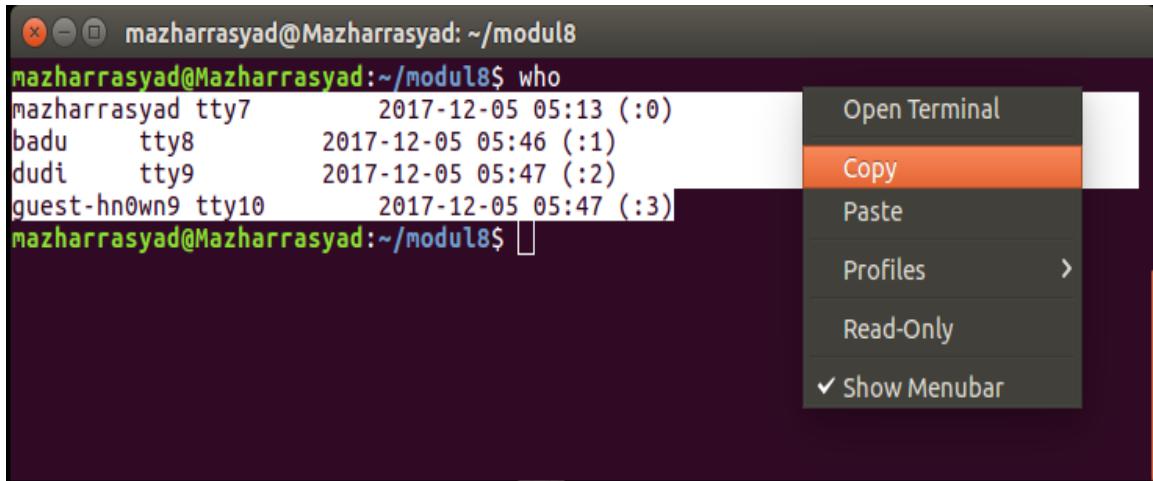
whoopsie:x:109:116::/nonexistent:/bin/false
avahi-autoipd:x:110:119:Avahi autoip daemon,,,:/var/lib/avahi-autoipd:/bin/false
avahi:x:111:120:Avahi mDNS daemon,,,:/var/run/avahi-daemon:/bin/false
dnsmasq:x:112:65534:dnsmasq,,,:/var/lib/misc:/bin/false
colord:x:113:123:colord colour management daemon,,,:/var/lib/colord:/bin/false
speech-dispatcher:x:114:29:Speech Dispatcher,,,:/var/run/speech-dispatcher:/bin/false
hplip:x:115:7:HPLIP system user,,,:/var/run/hplip:/bin/false
kernoops:x:116:65534:Kernel Oops Tracking Daemon,,,:/bin/false
pulse:x:117:124:PulseAudio daemon,,,:/var/run/pulse:/bin/false
rtkit:x:118:126:RealtimeKit,,,:/proc:/bin/false
saned:x:119:127::/var/lib/saned:/bin/false
usbmux:x:120:46:usbmux daemon,,,:/var/lib/usbmux:/bin/false
mysql:x:999:999::/home/mysql:
mazharrasyad:x:1000:1000:Muhammad Azhar Rasyad,,,:/home/mazharrasyad:/bin/bash
dudi:x:1001:1002,,,:/home/dudi:/bin/bash
badu:x:1002:1003::/home/badu:
mazharrasyad@mazharrasyad:~$
```

```
mazharrasyad@mazharrasyad:~$ head -n25 /etc/passwd | tail -n+20
systemd-network:x:101:103:systemd Network Management,,,:/run/systemd/netif:/bin/false
systemd-resolve:x:102:104:systemd Resolver,,,:/run/systemd/resolve:/bin/false
systemd-bus-proxy:x:103:105:systemd Bus Proxy,,,:/run/systemd:/bin/false
syslog:x:104:108::/home/syslog:/bin/false
_apt:x:105:65534::/nonexistent:/bin/false
messagebus:x:106:110::/var/run/dbus:/bin/false
mazharrasyad@mazharrasyad:~$
```

2. Tuliskan perintah untuk menghitung jumlah user yang sedang login saat ini !

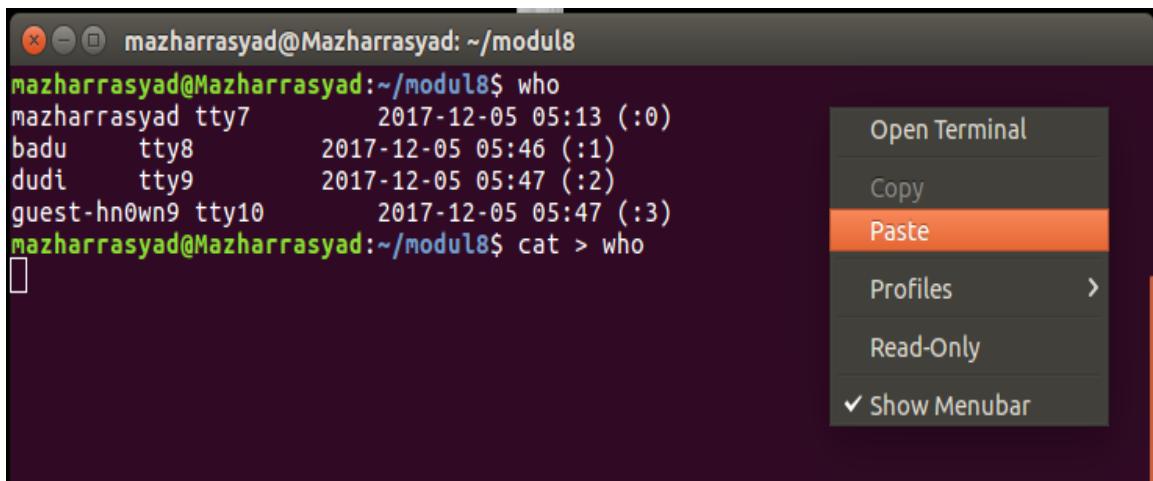
```
mazharrysyad@mazharrysyad:~/modul8
mazharrysyad@mazharrysyad:~/modul8$ who
mazharrysyad    2017-12-05 05:13 (:0)
badu          2017-12-05 05:46 (:1)
dudi          2017-12-05 05:47 (:2)
guest-hn0wn9  2017-12-05 05:47 (:3)
mazharrysyad@mazharrysyad:~/modul8$
```

```
mazharrysyad@mazharrysyad:~/modul8
mazharrysyad@mazharrysyad:~/modul8$ who
mazharrysyad    2017-12-05 05:13 (:0)
badu          2017-12-05 05:46 (:1)
dudi          2017-12-05 05:47 (:2)
guest-hn0wn9  2017-12-05 05:47 (:3)
mazharrysyad@mazharrysyad:~/modul8$
```



```
mazharrysyad@mazharrysyad:~/modul8
mazharrysyad@mazharrysyad:~/modul8$ who
mazharrysyad    2017-12-05 05:13 (:0)
badu          2017-12-05 05:46 (:1)
dudi          2017-12-05 05:47 (:2)
guest-hn0wn9  2017-12-05 05:47 (:3)
mazharrysyad@mazharrysyad:~/modul8$ cat > who
```

```
mazharrysyad@mazharrysyad:~/modul8
mazharrysyad@mazharrysyad:~/modul8$ who
mazharrysyad    2017-12-05 05:13 (:0)
badu          2017-12-05 05:46 (:1)
dudi          2017-12-05 05:47 (:2)
guest-hn0wn9  2017-12-05 05:47 (:3)
mazharrysyad@mazharrysyad:~/modul8$ cat > who
```



```
mazharrysyad@mazharrysyad:~/modul8
mazharrysyad@mazharrysyad:~/modul8$ who
mazharrysyad tty7      2017-12-05 05:13 (:0)
badu    tty8      2017-12-05 05:46 (:1)
dudi    tty9      2017-12-05 05:47 (:2)
guest-hn0wn9 tty10     2017-12-05 05:47 (:3)
mazharrysyad@mazharrysyad:~/modul8$ cat > who
mazharrysyad tty7      2017-12-05 05:13 (:0)
badu    tty8      2017-12-05 05:46 (:1)
dudi    tty9      2017-12-05 05:47 (:2)
guest-hn0wn9 tty10     2017-12-05 05:47 (:3)
```

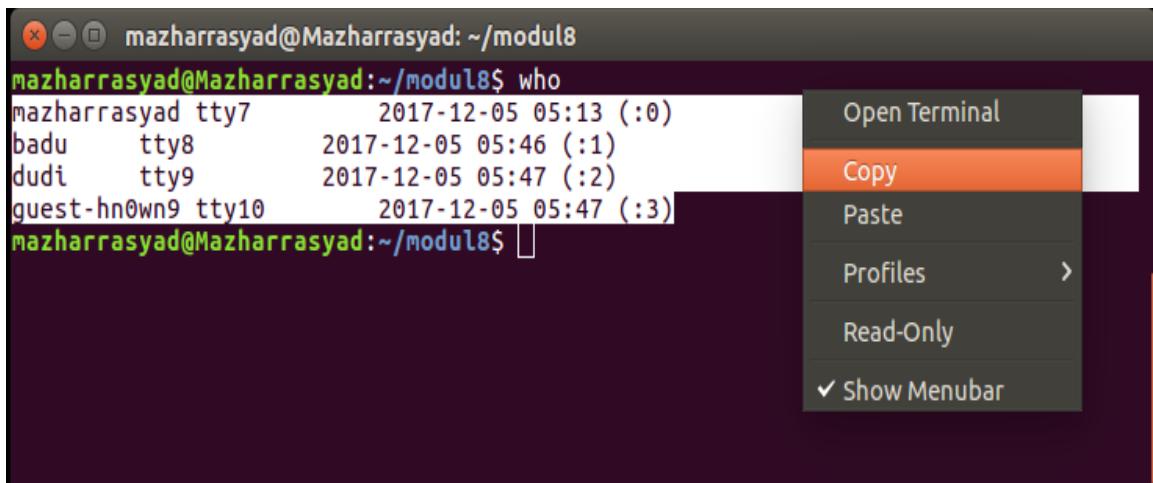
```
mazharrysyad@mazharrysyad:~/modul8
mazharrysyad@mazharrysyad:~/modul8$ who
mazharrysyad tty7      2017-12-05 05:13 (:0)
badu    tty8      2017-12-05 05:46 (:1)
dudi    tty9      2017-12-05 05:47 (:2)
guest-hn0wn9 tty10     2017-12-05 05:47 (:3)
mazharrysyad@mazharrysyad:~/modul8$ cat > who
mazharrysyad tty7      2017-12-05 05:13 (:0)
badu    tty8      2017-12-05 05:46 (:1)
dudi    tty9      2017-12-05 05:47 (:2)
guest-hn0wn9 tty10     2017-12-05 05:47 (:3)
mazharrysyad@mazharrysyad:~/modul8$
```

```
mazharrysyad@mazharrysyad:~/modul8
mazharrysyad@mazharrysyad:~/modul8$ who
mazharrysyad tty7      2017-12-05 05:13 (:0)
badu    tty8      2017-12-05 05:46 (:1)
dudi    tty9      2017-12-05 05:47 (:2)
guest-hn0wn9 tty10     2017-12-05 05:47 (:3)
mazharrysyad@mazharrysyad:~/modul8$ cat > who
mazharrysyad tty7      2017-12-05 05:13 (:0)
badu    tty8      2017-12-05 05:46 (:1)
dudi    tty9      2017-12-05 05:47 (:2)
guest-hn0wn9 tty10     2017-12-05 05:47 (:3)
mazharrysyad@mazharrysyad:~/modul8$ wc -l who
4 who
mazharrysyad@mazharrysyad:~/modul8$
```

3. Dari keluaran perintah who, tuliskan perintah agar yang tampil hanya kolom nama usernya saja (kolom pertama) !

```
mazharrysyad@mazharrysyad:~/modul8
mazharrysyad@mazharrysyad:~/modul8$ who
mazharrysyad    2017-12-05 05:13 (:0)
badu          2017-12-05 05:46 (:1)
dudi          2017-12-05 05:47 (:2)
guest-hn0wn9  2017-12-05 05:47 (:3)
mazharrysyad@mazharrysyad:~/modul8$
```

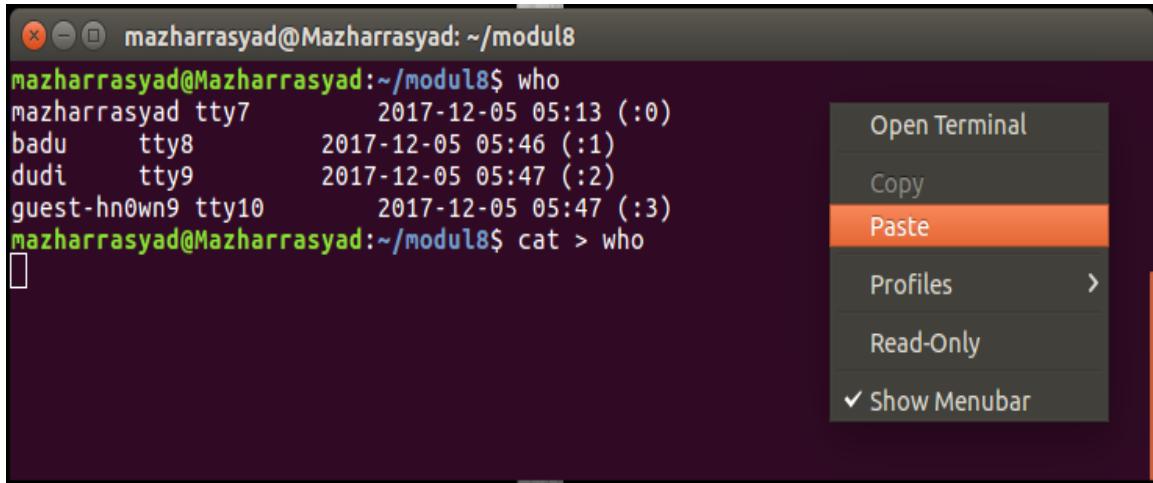
```
mazharrysyad@mazharrysyad:~/modul8
mazharrysyad@mazharrysyad:~/modul8$ who
mazharrysyad    2017-12-05 05:13 (:0)
badu          2017-12-05 05:46 (:1)
dudi          2017-12-05 05:47 (:2)
guest-hn0wn9  2017-12-05 05:47 (:3)
mazharrysyad@mazharrysyad:~/modul8$
```



A context menu is open over the terminal window, with the 'Copy' option highlighted in orange. Other options visible in the menu include 'Open Terminal', 'Paste', 'Profiles', 'Read-Only', and 'Show Menubar'.

```
mazharrysyad@mazharrysyad:~/modul8
mazharrysyad@mazharrysyad:~/modul8$ who
mazharrysyad    2017-12-05 05:13 (:0)
badu          2017-12-05 05:46 (:1)
dudi          2017-12-05 05:47 (:2)
guest-hn0wn9  2017-12-05 05:47 (:3)
mazharrysyad@mazharrysyad:~/modul8$ cat > who
```

```
mazharrysyad@mazharrysyad:~/modul8
mazharrysyad@mazharrysyad:~/modul8$ who
mazharrysyad    2017-12-05 05:13 (:0)
badu          2017-12-05 05:46 (:1)
dudi          2017-12-05 05:47 (:2)
guest-hn0wn9  2017-12-05 05:47 (:3)
mazharrysyad@mazharrysyad:~/modul8$ cat > who
```



A context menu is open over the terminal window, with the 'Paste' option highlighted in orange. Other options visible in the menu include 'Open Terminal', 'Copy', 'Profiles', 'Read-Only', and 'Show Menubar'.

```
mazharrasyad@mazharrasyad:~/modul8
mazharrasyad@mazharrasyad:~/modul8$ who
mazharrasyad  tty7          2017-12-05 05:13 (:0)
badu        tty8          2017-12-05 05:46 (:1)
dudi        tty9          2017-12-05 05:47 (:2)
guest-hn0wn9  tty10         2017-12-05 05:47 (:3)
mazharrasyad@mazharrasyad:~/modul8$ cat > who
mazharrasyad  tty7          2017-12-05 05:13 (:0)
badu        tty8          2017-12-05 05:46 (:1)
dudi        tty9          2017-12-05 05:47 (:2)
guest-hn0wn9  tty10         2017-12-05 05:47 (:3)
```

```
mazharrasyad@mazharrasyad:~/modul8
mazharrasyad@mazharrasyad:~/modul8$ who
mazharrasyad  tty7          2017-12-05 05:13 (:0)
badu        tty8          2017-12-05 05:46 (:1)
dudi        tty9          2017-12-05 05:47 (:2)
guest-hn0wn9  tty10         2017-12-05 05:47 (:3)
mazharrasyad@mazharrasyad:~/modul8$ cat > who
mazharrasyad  tty7          2017-12-05 05:13 (:0)
badu        tty8          2017-12-05 05:46 (:1)
dudi        tty9          2017-12-05 05:47 (:2)
guest-hn0wn9  tty10         2017-12-05 05:47 (:3)
mazharrasyad@mazharrasyad:~/modul8$
```

```
mazharrasyad@mazharrasyad:~/modul8
mazharrasyad@mazharrasyad:~/modul8$ who
mazharrasyad  tty7          2017-12-05 05:13 (:0)
badu        tty8          2017-12-05 05:46 (:1)
dudi        tty9          2017-12-05 05:47 (:2)
guest-hn0wn9  tty10         2017-12-05 05:47 (:3)
mazharrasyad@mazharrasyad:~/modul8$ cat > who
mazharrasyad  tty7          2017-12-05 05:13 (:0)
badu        tty8          2017-12-05 05:46 (:1)
dudi        tty9          2017-12-05 05:47 (:2)
guest-hn0wn9  tty10         2017-12-05 05:47 (:3)
mazharrasyad@mazharrasyad:~/modul8$ cut -d " " -f 1 who
mazharrasyad
badu
dudi
guest-hn0wn9
mazharrasyad@mazharrasyad:~/modul8$
```

4. Tuliskan perintah untuk mengubah semua hak akses (permission) file (tipenya file) di direktori /home/badu menjadi 600 !

```
mazharrysyad@mazharrysyad: ~
mazharrysyad@mazharrysyad:~$ sudo chmod 600 /home/badu/*
```

```
mazharrysyad@mazharrysyad: ~
mazharrysyad@mazharrysyad:~$ sudo chmod 600 /home/badu/*
[sudo] password for mazharrysyad: 
```

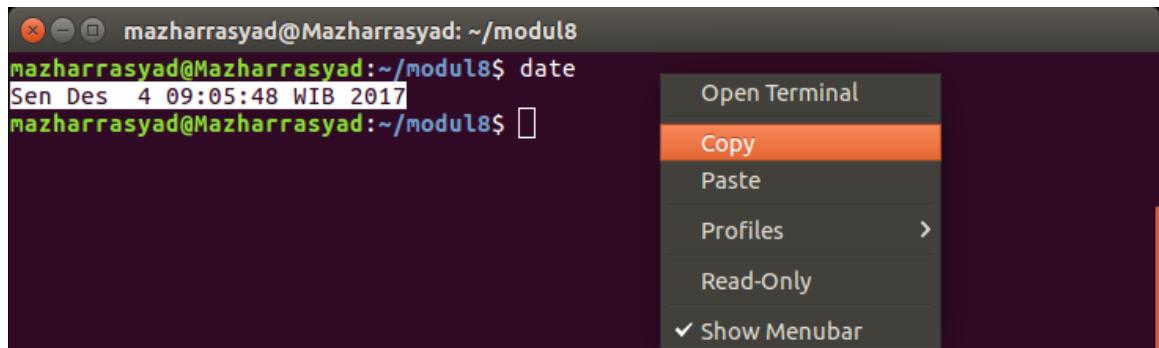
```
mazharrysyad@mazharrysyad: ~
mazharrysyad@mazharrysyad:~$ sudo chmod 600 /home/badu/*
[sudo] password for mazharrysyad:
mazharrysyad@mazharrysyad:~$ ls -l /home/badu
total 44
drw----- 2 badu badu 4096 Des 4 17:51 Desktop
drw----- 2 badu badu 4096 Des 4 17:51 Documents
drw----- 2 badu badu 4096 Des 4 17:51 Downloads
-rw----- 1 badu badu 8980 Apr 20 2016 examples.desktop
drw----- 2 badu badu 4096 Des 4 17:51 Music
drw----- 2 badu badu 4096 Des 4 17:51 Pictures
drw----- 2 badu badu 4096 Des 4 17:51 Public
drw----- 2 badu badu 4096 Des 4 17:51 Templates
drw----- 2 badu badu 4096 Des 4 17:51 Videos
mazharrysyad@mazharrysyad:~$ 
```

```
mazharrysyad@mazharrysyad: ~
mazharrysyad@mazharrysyad:~$ sudo find /home/badu -perm 600
/home/badu/.config/user-dirs.dirs
/home/badu/.config/pulse/cookie
/home/badu/.xsession-errors.old
/home/badu/Downloads
/home/badu/.ICEauthority
/home/badu/Documents
/home/badu/examples.desktop
/home/badu/.xsession-errors
/home/badu/Videos
/home/badu/.local/share/zeitgeist/activity.sqlite-wal
/home/badu/.local/share/zeitgeist/activity.sqlite
/home/badu/.local/share/zeitgeist/activity.sqlite-shm
/home/badu/.local/share/gvfs-metadata/home
/home/badu/.local/share/keyrings/login.keyring
/home/badu/.local/share/keyrings/user.keystore
/home/badu/.Xauthority
/home/badu/.cache/gstremer-1.0/registry.x86_64.bin
/home/badu/Public
/home/badu/Templates
/home/badu/Desktop
/home/badu/Music
/home/badu/Pictures
mazharrysyad@mazharrysyad:~$ 
```

5. Dari keluaran perintah date, tuliskan perintah agar yang tampil hanya bagian jam dan menitnya saja !

```
mazharryad@Mazharryad: ~/modul8
mazharryad@Mazharryad:~/modul8$ date
Sen Des 4 09:05:48 WIB 2017
mazharryad@Mazharryad:~/modul8$
```

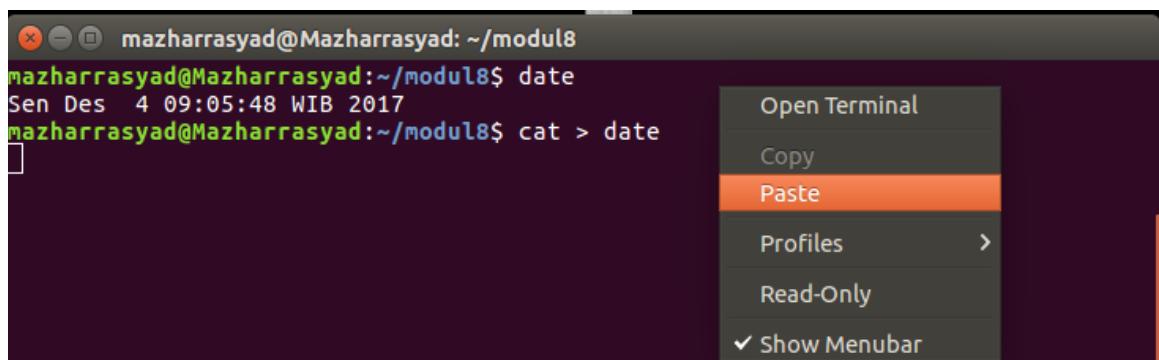
```
mazharryad@Mazharryad: ~/modul8
mazharryad@Mazharryad:~/modul8$ date
Sen Des 4 09:05:48 WIB 2017
mazharryad@Mazharryad:~/modul8$
```



A context menu is open over the terminal window, showing options: Open Terminal, Copy (highlighted in orange), Paste, Profiles >, Read-Only, and Show Menubar.

```
mazharryad@Mazharryad: ~/modul8
mazharryad@Mazharryad:~/modul8$ date
Sen Des 4 09:05:48 WIB 2017
mazharryad@Mazharryad:~/modul8$ cat > date
```

```
mazharryad@Mazharryad: ~/modul8
mazharryad@Mazharryad:~/modul8$ date
Sen Des 4 09:05:48 WIB 2017
mazharryad@Mazharryad:~/modul8$ cat > date
```



A context menu is open over the terminal window, showing options: Open Terminal, Copy, Paste (highlighted in orange), Profiles >, Read-Only, and Show Menubar.

```
mazharryad@Mazharryad: ~/modul8
mazharryad@Mazharryad:~/modul8$ date
Sen Des 4 09:05:48 WIB 2017
mazharryad@Mazharryad:~/modul8$ cat > date
Sen Des 4 09:05:48 WIB 2017
```

```
mazharryad@Mazharryad: ~/modul8
mazharryad@Mazharryad:~/modul8$ date
Sen Des 4 09:05:48 WIB 2017
mazharryad@Mazharryad:~/modul8$ cat > date
Sen Des 4 09:05:48 WIB 2017
mazharryad@Mazharryad:~/modul8$
```

```
mazharryad@Mazharryad:~/modul8
mazharryad@Mazharryad:~/modul8$ date
Sen Des 4 09:05:48 WIB 2017
mazharryad@Mazharryad:~/modul8$ cat > date
Sen Des 4 09:05:48 WIB 2017
mazharryad@Mazharryad:~/modul8$ cat date
Sen Des 4 09:05:48 WIB 2017
mazharryad@Mazharryad:~/modul8$
```

```
mazharryad@Mazharryad:~/modul8
mazharryad@Mazharryad:~/modul8$ date
Sen Des 4 09:05:48 WIB 2017
mazharryad@Mazharryad:~/modul8$ cat > date
Sen Des 4 09:05:48 WIB 2017
mazharryad@Mazharryad:~/modul8$ cat date
Sen Des 4 09:05:48 WIB 2017
mazharryad@Mazharryad:~/modul8$ cut -c 12-16 date
09:05
mazharryad@Mazharryad:~/modul8$
```

Kesimpulan

Dalam linux untuk memanipulasi file memiliki banyak perintah – perintah diantaranya cat untuk membuat dan menambah file teks. more dan less untuk tampilan berhenti per layar. head and tail untuk menampilkan bagian awal atau akhir suatu file. wc untuk menghitung jumlah baris, kata, dan karakter. cut untuk mengambil bagian isi file tertentu. sort untuk mengurutkan isi file. tr untuk mengkonversi karakter menjadi karakter lain. sed untuk mengedit file. grep untuk menampilkan baris suatu file. find mencari file dalam direktori. Demikian beberapa perintah untuk memanipulasi file.