

MAKALAH
SISTEM OPERASI LINUX

Dosen Pengampu :
Edy Haryanto,S.Kom., M.Eng



Disusun oleh:

ERNA WATI	(23241057)
MUSTIATI	(23241097)
LUSI YANTI	(23241048)
AULIA ZASKIA	(23241045)

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Judul:
Sistem Operasi Linux
Pendahuluan

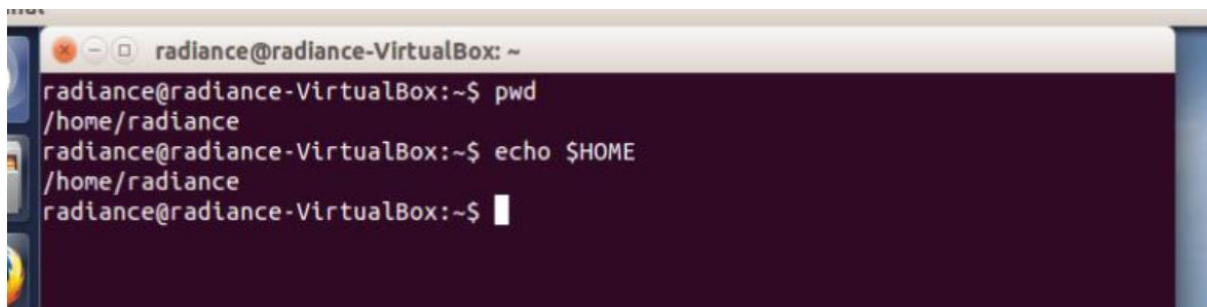
LATAR BELAKANG

Sistem operasi komputer secara terminologi merupakan sebuah software yang menjalankan peran untuk manajemen operasi–operasi dari perangkat komputer itu sendiri. Pada dasarnya sistem operasi adalah sebuah perangkat lunak yang fungsinya sebagai sistem dasar dari suatu perangkat. Ada macam–macam sistem operasi yang biasanya kita jumpai saat ini seperti windows, linux maupun android. Pembahasan kali ini menyinggung soal sistem operasi Linux Ubuntu. Setiap sistem operasi memiliki suatu software untuk menjalankan perintah dasar di dalam sistem operasi itu sendiri. Di Linux Ubuntu menggunakan software terminal untuk menjalankan perintah dasar dalam manajemen software–software di dalamnya. Di Linux dan Unix segala sesuatu adalah file. Direktori adalah file, file juga file, dan divais–divais juga merupakan file. Divais yang seringkali dirujuk sebagai inode; tetap saja, mereka dianggap sebagai file. Sistem file di Linux dan Unix diorganisasikan secara hirarki, seperti struktur pohon. Level tertinggi dari sistem file adalah direktori root atau /. Semua file dan direktori yang lain berada dibawah direktori root. Sebagai contoh, home/jebediah/cheeses.odt menunjukkan path lengkap ke file cheeses.odt yang berada di direktori jebediah, yang juga berada dibawah direktori home, dan semuanya berada dibawah direktori root (/).

TUJUAN

- 1.1 Dapat menggunakan perintah dasar Linux Ubuntu
- 1.2 Dapat memahami organisasi file dan direktori pada sistem operasi Linux
- 1.3 Dapat menciptakan dan memanipulasi direktori
- 1.4 Dapat memahami konsep link dan symbolic link

Percobaan:



```
radiance@radiance-VirtualBox: ~  
radiance@radiance-VirtualBox:~$ pwd  
/home/radiance  
radiance@radiance-VirtualBox:~$ echo $HOME  
/home/radiance  
radiance@radiance-VirtualBox:~$
```

Analisa: pwd dan echo \$HOME adalah suatu perintah yang sama untuk menunjukkan direktori

home user saat ini

```
radiance@radiance-VirtualBox: ~  
radiance@radiance-VirtualBox:~$ pwd  
/home/radiance  
radiance@radiance-VirtualBox:~$ cd .  
radiance@radiance-VirtualBox:~$ pwd  
/home/radiance  
radiance@radiance-VirtualBox:~$ cd ..  
radiance@radiance-VirtualBox:/home$ pwd  
/home  
radiance@radiance-VirtualBox:/home$ cd  
radiance@radiance-VirtualBox:~$
```

Analisa: cd . menunjukkan direktori home user sedangkan cd .. menunjukkan direktori home

```
radiance@radiance-VirtualBox: ~  
radiance@radiance-VirtualBox:~$ pwd  
/home/radiance  
radiance@radiance-VirtualBox:~$ mkdir A B C A/D A/E B/F A/D/A  
radiance@radiance-VirtualBox:~$ ls -l A  
total 8  
drwxrwxr-x 3 radiance radiance 4096 Sep 25 18:58 D  
drwxrwxr-x 2 radiance radiance 4096 Sep 25 18:58 E  
radiance@radiance-VirtualBox:~$ ls -l A/D  
total 4  
drwxrwxr-x 2 radiance radiance 4096 Sep 25 18:58 A  
radiance@radiance-VirtualBox:~$
```

Analisa: mkdir adalah perintah membuat direktori dan subdirektori A B C A/D A/E B/F dan A/D/A

, ls -l menampilkan seluruh file isi dari suatu direktori

```
radiance@radiance-VirtualBox: ~  
radiance@radiance-VirtualBox:~$ rmdir B  
rmdir: failed to remove 'B': Directory not empty  
radiance@radiance-VirtualBox:~$ ls -l B  
total 4  
drwxrwxr-x 2 radiance radiance 4096 Sep 25 18:58 F  
radiance@radiance-VirtualBox:~$ rmdir B/F B  
radiance@radiance-VirtualBox:~$ ls -l B  
ls: cannot access B: No such file or directory  
radiance@radiance-VirtualBox:~$
```

Analisa: rmdir B error karena direktori B mempunyai isi sehingga jika ingin dihapus dilakukan

dengan cara menyebutkan juga subdirektoriya yaitu rmdir B/F B baru dapat dihapus direktori B

```
radiance@radiance-VirtualBox:~$ pwd
/home/radiance
radiance@radiance-VirtualBox:~$ ls -l
total 76
drwxrwxr-x 4 radiance radiance 4096 Sep 25 18:58 A
drwxrwxr-x 2 radiance radiance 4096 Sep 20 13:09 backup
drwxrwxr-x 2 radiance radiance 4096 Sep 25 18:58 C
drwxr-xr-x 2 radiance radiance 4096 Sep 17 13:53 Desktop
drwxr-xr-x 2 radiance radiance 4096 Sep 17 13:53 Documents
drwxr-xr-x 2 radiance radiance 4096 Sep 19 15:31 Downloads
-rw-r--r-- 1 radiance radiance 8980 Sep 17 13:44 examples.desktop
-rw-r--r-- 1 radiance radiance 906 Sep 20 13:09 f1
-rw-r--r-- 1 radiance radiance 906 Sep 17 14:53 f2
-rw-r--r-- 1 radiance radiance 906 Sep 20 13:09 f3
drwxr-xr-x 2 radiance radiance 4096 Sep 17 13:53 Music
drwxrwxr-x 2 radiance radiance 4096 Sep 25 18:53 mydir
drwxr-xr-x 2 radiance radiance 4096 Sep 24 15:24 Pictures
drwxrwxr-x 2 radiance radiance 4096 Sep 20 15:29 prak1
drwxr-xr-x 2 radiance radiance 4096 Sep 17 13:53 Public
drwxr-xr-x 2 radiance radiance 4096 Sep 17 13:53 Templates
drwxr-xr-x 2 radiance radiance 4096 Sep 20 15:41 Videos
radiance@radiance-VirtualBox:~$ cd A
```

Analisa: ls -l menampilkan semua file dari direktori home user

```
radiance@radiance-VirtualBox:~$ cd A
radiance@radiance-VirtualBox:~/A$ pwd
/home/radiance/A
radiance@radiance-VirtualBox:~/A$ cd ..
radiance@radiance-VirtualBox:~$ pwd
/home/radiance
radiance@radiance-VirtualBox:~$ cd /home/radiance/C
radiance@radiance-VirtualBox:~/C$ pwd
/home/radiance/C
radiance@radiance-VirtualBox:~/C$ cd /radiance/C
bash: cd: /radiance/C: No such file or directory
radiance@radiance-VirtualBox:~/C$ pwd
/home/radiance/C
radiance@radiance-VirtualBox:~/C$
```

Analisa: cd A berfungsi untuk berpindah ke direktori A, terjadi error pada cd/radiance/C karena

didalam direktori user radiance tidak ada subdirektori C


```
radiance@radiance-VirtualBox: ~  
radiance@radiance-VirtualBox:~$ cat > contoh  
contoh1  
radiance@radiance-VirtualBox:~$ cp contoh contoh1  
radiance@radiance-VirtualBox:~$ ls -l  
total 84  
drwxrwxr-x 4 radiance radiance 4096 Sep 25 18:58 A  
drwxrwxr-x 2 radiance radiance 4096 Sep 20 13:09 backup  
drwxrwxr-x 2 radiance radiance 4096 Sep 25 18:58 C  
-rw-rw-r-- 1 radiance radiance 8 Sep 25 19:07 contoh  
-rw-rw-r-- 1 radiance radiance 8 Sep 25 19:08 contoh1  
drwxr-xr-x 2 radiance radiance 4096 Sep 17 13:53 Desktop  
drwxr-xr-x 2 radiance radiance 4096 Sep 17 13:53 Documents  
drwxr-xr-x 2 radiance radiance 4096 Sep 19 15:31 Downloads  
-rw-r--r-- 1 radiance radiance 8980 Sep 17 13:44 examples.desktop  
-rw-r--r-- 1 radiance radiance 906 Sep 20 13:09 f1  
-rw-r--r-- 1 radiance radiance 906 Sep 17 14:53 f2  
-rw-r--r-- 1 radiance radiance 906 Sep 20 13:09 f3  
drwxr-xr-x 2 radiance radiance 4096 Sep 17 13:53 Music  
drwxrwxr-x 2 radiance radiance 4096 Sep 25 18:53 mydir  
drwxr-xr-x 2 radiance radiance 4096 Sep 24 15:24 Pictures  
drwxrwxr-x 2 radiance radiance 4096 Sep 20 15:29 prak1  
drwxr-xr-x 2 radiance radiance 4096 Sep 17 13:53 Public  
drwxr-xr-x 2 radiance radiance 4096 Sep 17 13:53 Templates  
drwxr-xr-x 2 radiance radiance 4096 Sep 20 15:41 Videos
```

Analisa: cat contoh menampilkan isi file dari contoh, cp merupakan perintah untuk mengcopy file

ke suatu direktori

```
radiance@radiance-VirtualBox:~$ cp contoh A  
radiance@radiance-VirtualBox:~$ ls -l A  
total 12  
-rw-rw-r-- 1 radiance radiance 8 Sep 25 19:09 contoh  
drwxrwxr-x 3 radiance radiance 4096 Sep 25 18:58 D  
drwxrwxr-x 2 radiance radiance 4096 Sep 25 18:58 E  
radiance@radiance-VirtualBox:~$ cp contoh contoh1 A/D  
radiance@radiance-VirtualBox:~$ ls -l A/D  
total 12  
drwxrwxr-x 2 radiance radiance 4096 Sep 25 18:58 A  
-rw-rw-r-- 1 radiance radiance 8 Sep 25 19:10 contoh  
-rw-rw-r-- 1 radiance radiance 8 Sep 25 19:10 contoh1  
radiance@radiance-VirtualBox:~$
```

Analisa: cp contoh A untuk mengcopy contoh ke direktori A, ls -l A menampilkan isi direktori A

cp contoh contoh1 A/D mengcopy file contoh dan contoh1 ke subdirektori A/D, ls -l A/D menampilkan isi file subdirektori A/D.

```

radiance@radiance-VirtualBox:~$ mv contoh contoh2
radiance@radiance-VirtualBox:~$ ls -l
total 84
drwxrwxr-x 4 radiance radiance 4096 Sep 25 19:09 A
drwxrwxr-x 2 radiance radiance 4096 Sep 20 13:09 backup
drwxrwxr-x 2 radiance radiance 4096 Sep 25 18:58 C
-rw-rw-r-- 1 radiance radiance 8 Sep 25 19:08 contoh1
-rw-rw-r-- 1 radiance radiance 8 Sep 25 19:07 contoh2
drwxr-xr-x 2 radiance radiance 4096 Sep 17 13:53 Desktop
drwxr-xr-x 2 radiance radiance 4096 Sep 17 13:53 Documents
drwxr-xr-x 2 radiance radiance 4096 Sep 19 15:31 Downloads
-rw-r--r-- 1 radiance radiance 8980 Sep 17 13:44 examples.desktop
-rw-r--r-- 1 radiance radiance 906 Sep 20 13:09 f1
-rw-r--r-- 1 radiance radiance 906 Sep 17 14:53 f2
-rw-r--r-- 1 radiance radiance 906 Sep 20 13:09 f3
drwxr-xr-x 2 radiance radiance 4096 Sep 17 13:53 Music
drwxrwxr-x 2 radiance radiance 4096 Sep 25 18:53 mydir
drwxr-xr-x 2 radiance radiance 4096 Sep 24 15:24 Pictures
drwxrwxr-x 2 radiance radiance 4096 Sep 20 15:29 prak1
drwxr-xr-x 2 radiance radiance 4096 Sep 17 13:53 Public
drwxr-xr-x 2 radiance radiance 4096 Sep 17 13:53 Templates
drwxr-xr-x 2 radiance radiance 4096 Sep 20 15:41 Videos
radiance@radiance-VirtualBox:~$

```

Analisa: mv contoh contoh2 untuk memindahkan file contoh ke direktori contoh2, ls -l menampilkan semua file direktori home user

```

radiance@radiance-VirtualBox:~$ mv contoh1 contoh2 A/D
radiance@radiance-VirtualBox:~$ ls -l A/D
total 16
drwxrwxr-x 2 radiance radiance 4096 Sep 25 18:58 A
-rw-rw-r-- 1 radiance radiance 8 Sep 25 19:10 contoh
-rw-rw-r-- 1 radiance radiance 8 Sep 25 19:08 contoh1
-rw-rw-r-- 1 radiance radiance 8 Sep 25 19:07 contoh2
radiance@radiance-VirtualBox:~$ mv contoh contoh1 C
mv: cannot stat 'contoh': No such file or directory
mv: cannot stat 'contoh1': No such file or directory
radiance@radiance-VirtualBox:~$ ls -l C
total 0
radiance@radiance-VirtualBox:~$

```

Analisa: mv contoh1 contoh2 A/D untuk memindahkan contoh1 contoh2 ke subdirektori A/D dan

mv contoh contoh1 ke direktori C dan dibuktikan dengan konfirmasi ls -l.


```

radiance@radiance-VirtualBox:~$ rm contoh2
rm: cannot remove 'contoh2': No such file or directory
radiance@radiance-VirtualBox:~$ ls -l
total 76
drwxrwxr-x 4 radiance radiance 4096 Sep 25 19:09 A
drwxrwxr-x 2 radiance radiance 4096 Sep 20 13:09 backup
drwxrwxr-x 2 radiance radiance 4096 Sep 25 18:58 C
drwxr-xr-x 2 radiance radiance 4096 Sep 17 13:53 Desktop
drwxr-xr-x 2 radiance radiance 4096 Sep 17 13:53 Documents
drwxr-xr-x 2 radiance radiance 4096 Sep 19 15:31 Downloads
-rw-r--r-- 1 radiance radiance 8980 Sep 17 13:44 examples.desktop
-rw-r--r-- 1 radiance radiance 906 Sep 20 13:09 f1
-rw-r--r-- 1 radiance radiance 906 Sep 17 14:53 f2
-rw-r--r-- 1 radiance radiance 906 Sep 20 13:09 f3
drwxr-xr-x 2 radiance radiance 4096 Sep 17 13:53 Music
drwxrwxr-x 2 radiance radiance 4096 Sep 25 18:53 mydir
drwxr-xr-x 2 radiance radiance 4096 Sep 24 15:24 Pictures
drwxrwxr-x 2 radiance radiance 4096 Sep 20 15:29 prak1
drwxr-xr-x 2 radiance radiance 4096 Sep 17 13:53 Public
drwxr-xr-x 2 radiance radiance 4096 Sep 17 13:53 Templates
drwxr-xr-x 2 radiance radiance 4096 Sep 20 15:41 Videos
radiance@radiance-VirtualBox:~$

```

Analisa: rm contoh2 error karena file/direktori contoh2 tidak ada pada direktori home user
dibuktikan dengan konfirmasi ls -l

```

radiance@radiance-VirtualBox: ~/A
radiance@radiance-VirtualBox:~/A$ rm -i contoh
rm: remove regular file 'contoh'? no
radiance@radiance-VirtualBox:~/A$ rm -rf A C
radiance@radiance-VirtualBox:~/A$ ls -l
total 12
-rw-rw-r-- 1 radiance radiance 8 Sep 25 19:09 contoh
drwxrwxr-x 3 radiance radiance 4096 Sep 25 19:13 D
drwxrwxr-x 2 radiance radiance 4096 Sep 25 18:58 E
radiance@radiance-VirtualBox:~/A$

```

Analisa: rm -i merupakan perintah menghapus file tetapi dengan pertanyaan interaktif, rm -rf merupakan perintah menghapus file secara langsung, dibuktikan dengan konfirmasi ls -l.

```

radiance@radiance-VirtualBox:~$ echo "Hallo apa kabar" > halo.txt
radiance@radiance-VirtualBox:~$ LS -L
The program 'LS' is currently not installed. You can install it by typing:
sudo apt-get install sl
radiance@radiance-VirtualBox:~$ ls -l
total 80
drwxrwxr-x 4 radiance radiance 4096 Sep 25 19:09 A
drwxrwxr-x 2 radiance radiance 4096 Sep 20 13:09 backup
drwxrwxr-x 2 radiance radiance 4096 Sep 25 18:58 C
drwxr-xr-x 2 radiance radiance 4096 Sep 17 13:53 Desktop
drwxr-xr-x 2 radiance radiance 4096 Sep 17 13:53 Documents
drwxr-xr-x 2 radiance radiance 4096 Sep 19 15:31 Downloads
-rw-r--r-- 1 radiance radiance 8980 Sep 17 13:44 examples.desktop
-rw-r--r-- 1 radiance radiance 906 Sep 20 13:09 f1
-rw-r--r-- 1 radiance radiance 906 Sep 17 14:53 f2
-rw-r--r-- 1 radiance radiance 906 Sep 20 13:09 f3
-rw-rw-r-- 1 radiance radiance 16 Sep 25 19:21 halo.txt
drwxr-xr-x 2 radiance radiance 4096 Sep 17 13:53 Music
drwxrwxr-x 2 radiance radiance 4096 Sep 25 18:53 mydir
drwxr-xr-x 2 radiance radiance 4096 Sep 24 15:24 Pictures
drwxrwxr-x 2 radiance radiance 4096 Sep 20 15:29 prak1
drwxr-xr-x 2 radiance radiance 4096 Sep 17 13:53 Public
drwxr-xr-x 2 radiance radiance 4096 Sep 17 13:53 Templates
drwxr-xr-x 2 radiance radiance 4096 Sep 20 15:41 Videos

```

Analisa: echo kali ini digunakan untuk membuat shortcut dalam suatu file/direktori, dibuktikan

dengan konfirmasi ls -l.

```

radiance@radiance-VirtualBox: ~
radiance@radiance-VirtualBox:~$ ln halo.txt z
radiance@radiance-VirtualBox:~$ ls -l
total 84
drwxrwxr-x 4 radiance radiance 4096 Sep 25 19:09 A
drwxrwxr-x 2 radiance radiance 4096 Sep 20 13:09 backup
drwxrwxr-x 2 radiance radiance 4096 Sep 25 18:58 C
drwxr-xr-x 2 radiance radiance 4096 Sep 17 13:53 Desktop
drwxr-xr-x 2 radiance radiance 4096 Sep 17 13:53 Documents
drwxr-xr-x 2 radiance radiance 4096 Sep 19 15:31 Downloads
-rw-r--r-- 1 radiance radiance 8980 Sep 17 13:44 examples.desktop
-rw-r--r-- 1 radiance radiance 906 Sep 20 13:09 f1
-rw-r--r-- 1 radiance radiance 906 Sep 17 14:53 f2
-rw-r--r-- 1 radiance radiance 906 Sep 20 13:09 f3
-rw-rw-r-- 2 radiance radiance 16 Sep 25 19:21 halo.txt
drwxr-xr-x 2 radiance radiance 4096 Sep 17 13:53 Music
drwxrwxr-x 2 radiance radiance 4096 Sep 25 18:53 mydir
drwxr-xr-x 2 radiance radiance 4096 Sep 24 15:24 Pictures
drwxrwxr-x 2 radiance radiance 4096 Sep 20 15:29 prak1
drwxr-xr-x 2 radiance radiance 4096 Sep 17 13:53 Public
drwxr-xr-x 2 radiance radiance 4096 Sep 17 13:53 Templates
drwxr-xr-x 2 radiance radiance 4096 Sep 20 15:41 Videos
-rw-rw-r-- 2 radiance radiance 16 Sep 25 19:21 z
radiance@radiance-VirtualBox:~$

```

Analisa: ln adalah perintah membuat link dari satu file/direktori ke file direktori lain. Dibuktikan

dengan konfirmasi `ls -l`.

```
radiance@radiance-VirtualBox:~$ cat z
Hallo apa kabar
radiance@radiance-VirtualBox:~$ ln z mydir/halo.juga
radiance@radiance-VirtualBox:~$ cat mydir/halo.juga
Hallo apa kabar
radiance@radiance-VirtualBox:~$ ln -s z bye.txt
radiance@radiance-VirtualBox:~$ ls -l bye.txt
lrwxrwxrwx 1 radiance radiance 1 Sep 25 19:24 bye.txt -> z
radiance@radiance-VirtualBox:~$ cat bye.txt
Hallo apa kabar
radiance@radiance-VirtualBox:~$
```

Analisa: `cat z` menampilkan file `z`, `ln z mydir/halo.juga` untuk membuat link file `z` ke `mydir/halo.juga` dibuktikan dengan `cat`, `ln -s z bye.txt` membuat link file `z` ke `bye.txt` dan dikonfirmasi `ls -l`, `cat bye.txt` karena `bye.txt` sudah link ke `Hallo apa kabar` maka ditampilkanlah kalimat tersebut.

```
drwxrwxr-x 2 radiance radiance 4096 Sep 20 13:09 backup
lrwxrwxrwx 1 radiance radiance 1 Sep 25 19:24 bye.txt -> z
drwxrwxr-x 2 radiance radiance 4096 Sep 25 18:58 C
drwxr-xr-x 2 radiance radiance 4096 Sep 17 13:53 Desktop
drwxr-xr-x 2 radiance radiance 4096 Sep 17 13:53 Documents
drwxr-xr-x 2 radiance radiance 4096 Sep 19 15:31 Downloads
-rw-r--r-- 1 radiance radiance 8980 Sep 17 13:44 examples.desktop
-rw-r--r-- 1 radiance radiance 906 Sep 20 13:09 f1
-rw-r--r-- 1 radiance radiance 906 Sep 17 14:53 f2
-rw-r--r-- 1 radiance radiance 906 Sep 20 13:09 f3
-rw-rw-r-- 3 radiance radiance 16 Sep 25 19:21 halo.txt
drwxr-xr-x 2 radiance radiance 4096 Sep 17 13:53 Music
drwxrwxr-x 2 radiance radiance 4096 Sep 25 19:23 mydir
drwxr-xr-x 2 radiance radiance 4096 Sep 24 15:24 Pictures
drwxrwxr-x 2 radiance radiance 4096 Sep 20 15:29 prak1
drwxr-xr-x 2 radiance radiance 4096 Sep 17 13:53 Public
drwxr-xr-x 2 radiance radiance 4096 Sep 17 13:53 Templates
drwxr-xr-x 2 radiance radiance 4096 Sep 20 15:41 Videos
-rw-rw-r-- 3 radiance radiance 16 Sep 25 19:21 z
radiance@radiance-VirtualBox:~$ file halo.txt
halo.txt: ASCII text
radiance@radiance-VirtualBox:~$ file bye.txt
bye.txt: symbolic link to 'z'
radiance@radiance-VirtualBox:~$
```

Analisa: file `halo.txt` menampilkan jenis text dari `halo.txt`, file `bye.txt` karena sudah ada symbolic linknya adalah `z` maka ditampilkan symbolic link to `z`

```
radiance@radiance-VirtualBox: ~  
radiance@radiance-VirtualBox:~$ find /home -name "*.txt" -print > myerror.txt  
radiance@radiance-VirtualBox:~$ cat myerror.txt  
/home/radiance/.mozilla/firefox/0t1bp22e.default/SiteSecurityServiceState.txt  
/home/radiance/.mozilla/firefox/0t1bp22e.default/revocations.txt  
/home/radiance/.mozilla/firefox/hizsd5ok.default/SiteSecurityServiceState.txt  
/home/radiance/.mozilla/firefox/hizsd5ok.default/revocations.txt  
/home/radiance/myerror.txt  
/home/radiance/bye.txt  
/home/radiance/.config/libreoffice/4/user/uno_packages/cache/log.txt  
/home/radiance/halo.txt  
/home/radiance/.local/share/Trash/files/myerror.txt  
/home/radiance/.local/share/Trash/files/A/D/praktikum2tik.txt  
/home/radiance/.local/share/Trash/files/bye.txt  
/home/radiance/.local/share/Trash/files/halo.txt  
radiance@radiance-VirtualBox:~$ find . name "*.txt" -exex wc -l ,,{},,,  
find: unknown predicate '-exex'  
radiance@radiance-VirtualBox:~$ find . name "*.txt" -exec wc -l ,,{},,,  
find: missing argument to '-exec'  
radiance@radiance-VirtualBox:~$
```

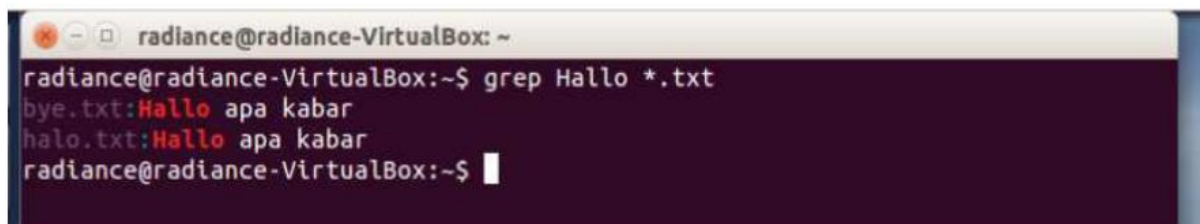
Analisa: find tersebut digunakan untuk mencari kata kunci “.txt” di direktori home user kemudian

dicetak, sementara exec tidak termasuk argumen dalam linux Ubuntu yang digunakan.

```
radiance@radiance-VirtualBox:~$ which ls  
/bin/ls  
radiance@radiance-VirtualBox:~$ locate "*.txt"  
/boot/grub/gfxblacklist.txt  
/etc/X11/rgb.txt  
/etc/brltty/brl-ba-all.txt  
/etc/brltty/brl-bd-all.txt  
/etc/brltty/brl-bl-18.txt  
/etc/brltty/brl-bl-40_m20_m40.txt  
/etc/brltty/brl-ec-all.txt  
/etc/brltty/brl-ec-spanish.txt  
/etc/brltty/brl-eu-all.txt  
/etc/brltty/brl-lb-all.txt  
/etc/brltty/brl-lt-all.txt  
/etc/brltty/brl-mb-all.txt  
/etc/brltty/brl-md-all.txt  
/etc/brltty/brl-mn-all.txt  
/etc/brltty/brl-tn-all.txt  
/etc/brltty/brl-ts-nav20_nav40.txt  
/etc/brltty/brl-ts-nav80.txt  
/etc/brltty/brl-ts-pb40.txt  
/etc/brltty/brl-ts-pb65_pb81.txt  
/etc/brltty/brl-tt-all.txt  
/etc/brltty/brl-vd-all.txt
```

Analisa: which ls jarang digunakan tapi perintah tersebut menunjukkan pada subdirektori /bin/ls,

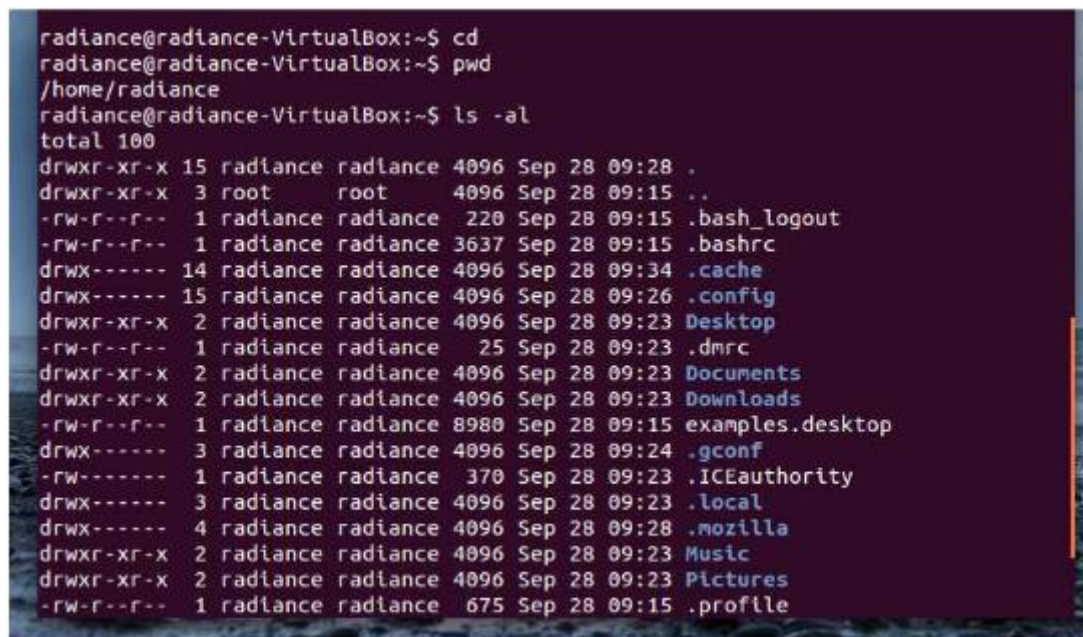
locat digunakan untuk menunjukkan letak kata kunci.

A terminal window titled 'radiance@radiance-VirtualBox: ~' showing the execution of the command 'grep Hallo *.txt'. The output shows two files: 'bye.txt:Hallo apa kabar' and 'halo.txt:Hallo apa kabar'. The terminal has a dark purple background with white text.

```
radiance@radiance-VirtualBox: ~  
radiance@radiance-VirtualBox:~$ grep Hallo *.txt  
bye.txt:Hallo apa kabar  
halo.txt:Hallo apa kabar  
radiance@radiance-VirtualBox:~$
```

Analisa: grep berguna untuk pencarian kata kunci dalam file yang efisien

Latihan

A terminal window titled 'radiance@radiance-VirtualBox:~\$' showing a series of commands: 'cd', 'pwd', and 'ls -al'. The output of 'ls -al' displays a detailed list of files and directories in the user's home directory, including permissions, owner, size, date, and filename. The terminal has a dark purple background with white text.

```
radiance@radiance-VirtualBox:~$ cd  
radiance@radiance-VirtualBox:~$ pwd  
/home/radiance  
radiance@radiance-VirtualBox:~$ ls -al  
total 100  
drwxr-xr-x 15 radiance radiance 4096 Sep 28 09:28 .  
drwxr-xr-x  3 root      root      4096 Sep 28 09:15 ..  
-rw-r--r--  1 radiance radiance  220 Sep 28 09:15 .bash_logout  
-rw-r--r--  1 radiance radiance 3637 Sep 28 09:15 .bashrc  
drwx----- 14 radiance radiance 4096 Sep 28 09:34 .cache  
drwx----- 15 radiance radiance 4096 Sep 28 09:26 .config  
drwxr-xr-x  2 radiance radiance 4096 Sep 28 09:23 Desktop  
-rw-r--r--  1 radiance radiance   25 Sep 28 09:23 .dnrc  
drwxr-xr-x  2 radiance radiance 4096 Sep 28 09:23 Documents  
drwxr-xr-x  2 radiance radiance 4096 Sep 28 09:23 Downloads  
-rw-r--r--  1 radiance radiance 8980 Sep 28 09:15 examples.desktop  
drwx-----  3 radiance radiance 4096 Sep 28 09:24 .gconf  
-rw-----  1 radiance radiance  370 Sep 28 09:23 .ICEauthority  
drwx-----  3 radiance radiance 4096 Sep 28 09:23 .local  
drwx-----  4 radiance radiance 4096 Sep 28 09:28 .mozilla  
drwxr-xr-x  2 radiance radiance 4096 Sep 28 09:23 Music  
drwxr-xr-x  2 radiance radiance 4096 Sep 28 09:23 Pictures  
-rw-r--r--  1 radiance radiance  675 Sep 28 09:15 .profile
```

Analisa: cd untuk berpindah ke direktori home user, ls -al menampilkan seluruh file dalam direktori tersebut.


```
radiance@radiance-VirtualBox: /
radiance@radiance-VirtualBox:~$ cd .
radiance@radiance-VirtualBox:~$ pwd
/home/radiance
radiance@radiance-VirtualBox:~$ cd ..
radiance@radiance-VirtualBox:/home$ pwd $ls -al
bash: pwd: -a: invalid option
pwd: usage: pwd [-LP]
radiance@radiance-VirtualBox:/home$ cd ..
radiance@radiance-VirtualBox:/$ pwd
/
radiance@radiance-VirtualBox:/$ ls -al
total 104
drwxr-xr-x 23 root root 4096 Sep 28 09:17 .
drwxr-xr-x 23 root root 4096 Sep 28 09:17 ..
drwxr-xr-x 2 root root 4096 Sep 28 09:18 bin
drwxr-xr-x 3 root root 4096 Sep 28 09:18 boot
drwxrwxr-x 2 root root 4096 Sep 28 09:14 cdrom
drwxr-xr-x 17 root root 4180 Sep 28 09:22 dev
drwxr-xr-x 128 root root 12288 Sep 28 09:23 etc
drwxr-xr-x 3 root root 4096 Sep 28 09:15 home
lrwxrwxrwx 1 root root 32 Sep 28 09:17 initrd.img -> boot/initrd.img-4.4.0-31-generic
drwxr-xr-x 23 root root 4096 Sep 28 09:18 lib
drwxr-xr-x 2 root root 4096 Agu 3 2016 lib64
```

Analisa: cd. Beralih ke home user directory, cd. beralih ke direktori home sistem ext4, ls -al menunjukkan seluruh file di direktori home sistem ext4

```
radiance@radiance-VirtualBox:/$ cd /etc
radiance@radiance-VirtualBox:/etc$ ls -al | more
total 1128
drwxr-xr-x 128 root root 12288 Sep 28 09:23 .
drwxr-xr-x 23 root root 4096 Sep 28 09:17 ..
drwxr-xr-x 3 root root 4096 Agu 3 2016 acpi
-rw-r--r-- 1 root root 2981 Agu 3 2016 adduser.conf
drwxr-xr-x 2 root root 4096 Sep 28 09:17 alternatives
-rw-r--r-- 1 root root 401 Feb 20 2014 anacrontab
-rw-r--r-- 1 root root 112 Jan 10 2014 apg.conf
drwxr-xr-x 6 root root 4096 Agu 3 2016 apm
drwxr-xr-x 3 root root 4096 Agu 3 2016 apparmor
drwxr-xr-x 8 root root 4096 Agu 3 2016 apparmor.d
drwxr-xr-x 5 root root 4096 Agu 3 2016 apport
drwxr-xr-x 6 root root 4096 Sep 28 09:19 apt
drwxr-xr-x 3 root root 4096 Agu 3 2016 aptdaemon
drwxr-xr-x 2 root root 4096 Agu 3 2016 at-spi2
drwxr-xr-x 3 root root 4096 Agu 3 2016 avahi
-rw-r--r-- 1 root root 2177 Apr 9 2014 bash.bashrc
-rw-r--r-- 1 root root 45 Mar 23 2014 bash_completion
drwxr-xr-x 2 root root 4096 Sep 28 09:18 bash_completion.d
-rw-r--r-- 1 root root 356 Jan 2 2012 bindresvport.blacklist
-rw-r--r-- 1 root root 321 Apr 16 2014 blkid.conf
lrwxrwxrwx 1 root root 15 Sep 28 09:01 blkid.tab -> /dev/blkid.tab
```

Analisa: cd /etc adalah perintah untuk berpindah ke direktori etc dan dibuktikan dengan konfirmasi

ls -al | more

