

LAPORAN RESMI

PRAKTIKUM SISTEM OPERASI

MODUL 2

PERINTAH DASAR LINUX



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JURUSAN : Teknik Informatika

KELAS : TI B 2022

TGL. PRAKTEK : 16 Desember 2024

JURUSAN TEKNIK INFORMATIKA

FAKULTAS TEKNOLOGI INFORMASI

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Disetujui,

Blitar, 19 Desember 2023

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BAB I

DASAR TEORI

1.1. Pengertian Runlevel

Runlevel adalah istilah yang digunakan dalam sistem operasi berbasis Unix atau Linux untuk mendefinisikan mode operasi sistem. Setiap runlevel menentukan layanan dan proses mana yang akan dijalankan oleh sistem, serta bagaimana sistem akan beroperasi pada saat tertentu. Runlevel diatur oleh sistem init (seperti SysVinit) dan digunakan untuk mengontrol keadaan sistem. Dengan kata lain, runlevel adalah (tingkat operasi) yang menentukan apa saja yang dilakukan oleh komputer, seperti apakah sistem hanya berjalan dalam mode pemeliharaan, mode teks, atau mode grafis penuh.

1.1.1. Runlevel Standar (Pada SysVinit)

Setiap angka runlevel memiliki makna tertentu:

- **0:** Mematikan sistem (Shutdown).
- **1:** Mode pengguna tunggal (Single-user mode, biasanya untuk pemeliharaan).
- **2:** Multi-user mode tanpa layanan jaringan.
- **3:** Multi-user mode dengan layanan jaringan (mode teks).
- **4:** Tidak digunakan secara umum (dapat disesuaikan).
- **5:** Multi-user mode dengan GUI (Graphical User Interface).
- **6:** Memulai ulang sistem (Reboot).

1.1.2. Fungsi Runlevel

Runlevel digunakan untuk :

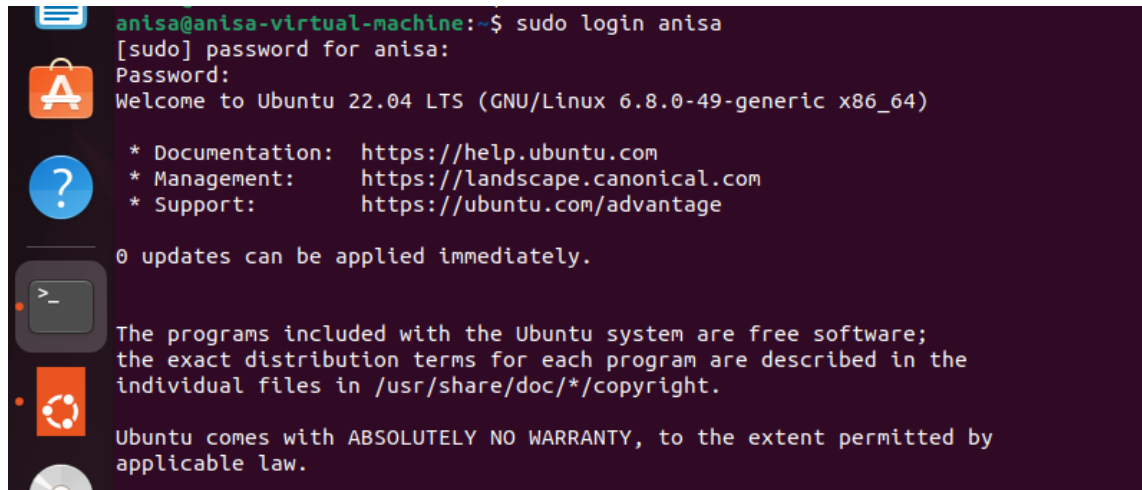
- Memulai sistem dalam mode yang sesuai dengan kebutuhan (misalnya, mode teks untuk server).
- Mengaktifkan atau menonaktifkan layanan tertentu berdasarkan mode operasi.
- Mengontrol bagaimana sistem dijalankan saat startup atau shutdown.

BAB II

TUGAS PRAKTIKUM

2.1. Login

Untuk masuk kedalam sistem linux, Anda harus melakukan proses login, yaitu dengan cara memasukkan nama user dan password. Masukkan Username dan Password.



```
anisa@anisa-virtual-machine:~$ sudo login anisa
[sudo] password for anisa:
Password:
Welcome to Ubuntu 22.04 LTS (GNU/Linux 6.8.0-49-generic x86_64)

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

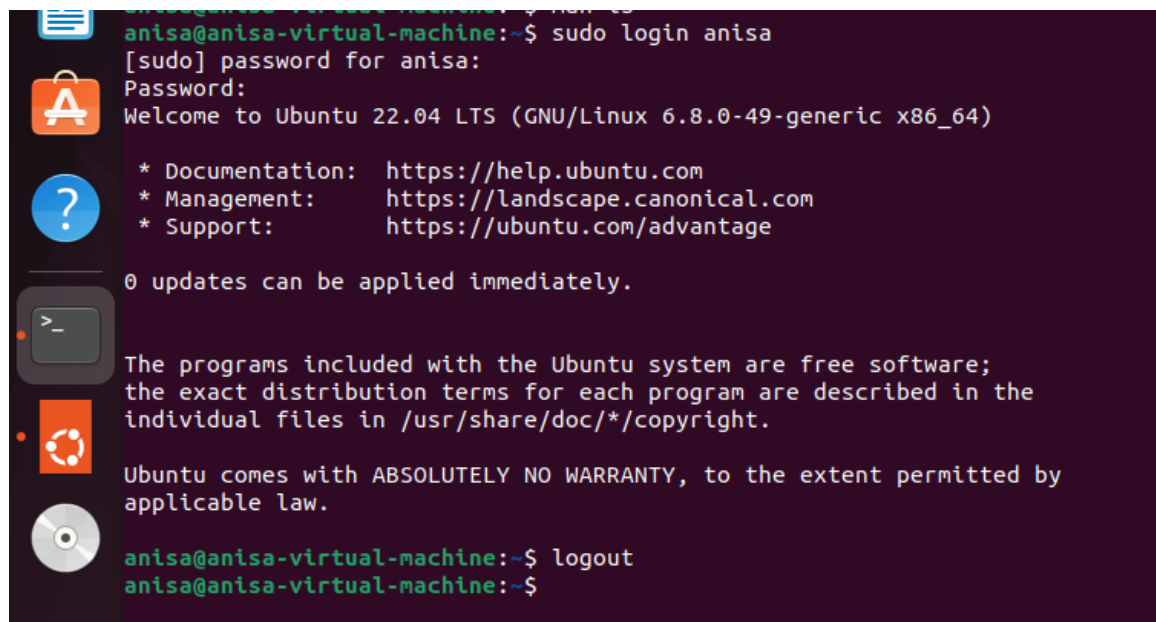
0 updates can be applied immediately.

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.
```

2.2. Logout

Untuk keluar dari user yang sedang login, anda dapat mengetikkan perintah logout.



```
anisa@anisa-virtual-machine:~$ sudo login anisa
[sudo] password for anisa:
Password:
Welcome to Ubuntu 22.04 LTS (GNU/Linux 6.8.0-49-generic x86_64)

 * Documentation:  https://help.ubuntu.com
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The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

anisa@anisa-virtual-machine:~$ logout
anisa@anisa-virtual-machine:~$
```

2.3. Mengetahui Posisi Virtual Terminal

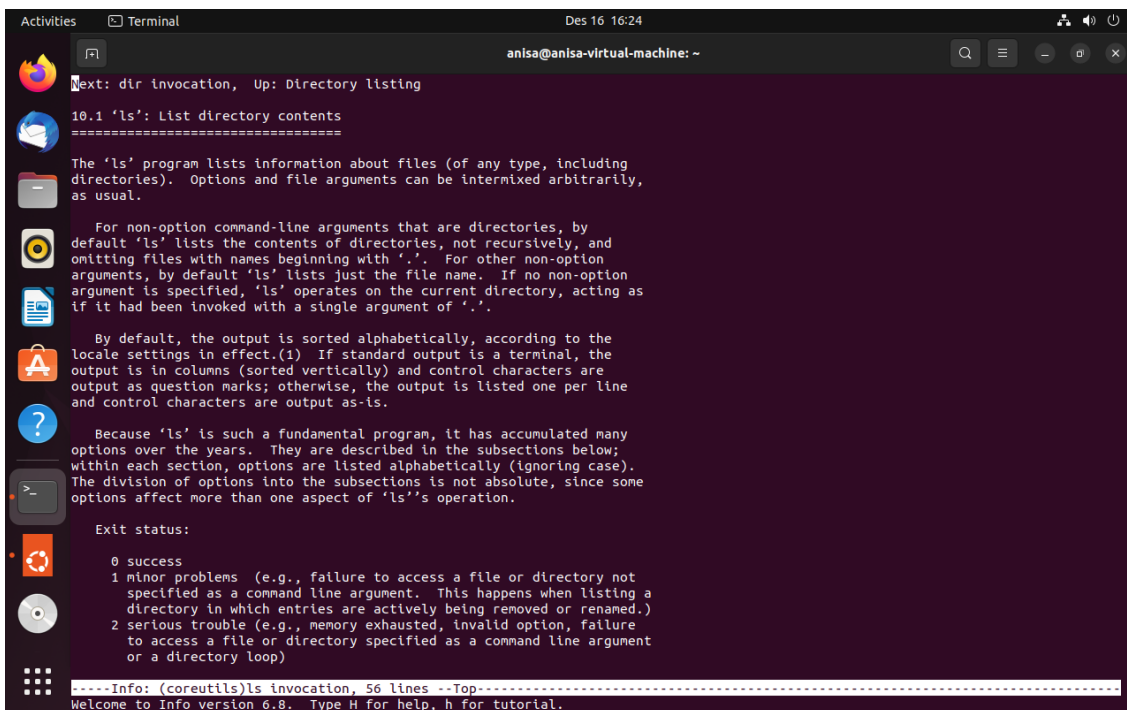
Untuk mengetahui posisi virtual terminal anda dapat menggunakan perintah `tty`. Hasilnya adalah `/dev/pts/0`, pts (pseudo-terminal) pada terminal ke-0.

```
anisa@anisa-virtual-machine:~$ tty
/dev/pts/0
anisa@anisa-virtual-machine:~$
```

2.4. Info

Membaca dokumentasi dari sebuah perintah.

Format: `info perintah-yang-diinginkan`



```
Text: dir invocation, Up: Directory listing
10.1 'ls': List directory contents
=====
The 'ls' program lists information about files (of any type, including
directories). Options and file arguments can be intermixed arbitrarily,
as usual.

For non-option command-line arguments that are directories, by
default 'ls' lists the contents of directories, not recursively, and
omitting files with names beginning with '.'. For other non-option
arguments, by default 'ls' lists just the file name. If no non-option
argument is specified, 'ls' operates on the current directory, acting as
if it had been invoked with a single argument of '.'.

By default, the output is sorted alphabetically, according to the
locale settings in effect.(1) If standard output is a terminal, the
output is in columns (sorted vertically) and control characters are
output as question marks; otherwise, the output is listed one per line
and control characters are output as-is.

Because 'ls' is such a fundamental program, it has accumulated many
options over the years. They are described in the subsections below;
within each section, options are listed alphabetically (ignoring case).
The division of options into the subsections is not absolute, since some
options affect more than one aspect of 'ls''s operation.

Exit status:

0 success
1 minor problems (e.g., failure to access a file or directory not
specified as a command line argument. This happens when listing a
directory in which entries are actively being removed or renamed.)
2 serious trouble (e.g., memory exhausted, invalid option, failure
to access a file or directory specified as a command line argument
or a directory loop)

-----Info: (coreutils)ls invocation, 56 lines --Top-----
Welcome to Info version 6.8. Type H for help, h for tutorial.
```

2.5. Whatis

Digunakan untuk mendapatkan informasi dari perintah secara singkat.

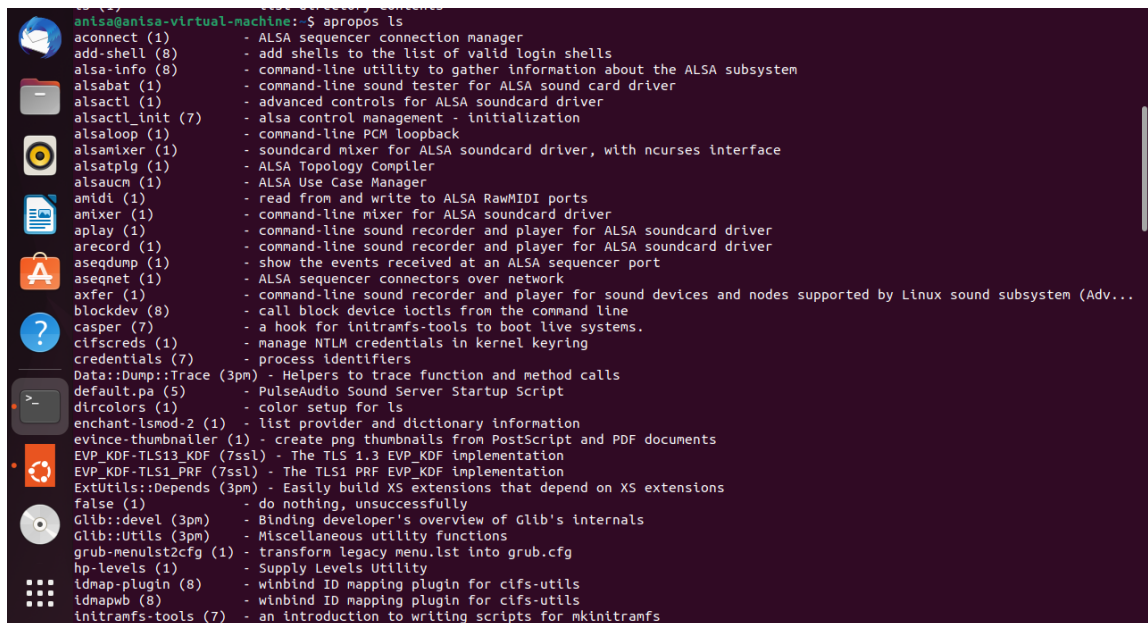
Format: `whatis perintah-yang-diinginkan`

```
anisa@anisa-virtual-machine:~$ whatis ls
ls (1) - list directory contents
anisa@anisa-virtual-machine:~$
```

2.6. Apropos

Mencari informasi secara massal. Perintah ini berguna jika anda tidak tahu persis perintah yang dimaksudkan atau jika hanya mengetahui sebagian dari perintah.

Format: apropos perintah-yang-diinginkan

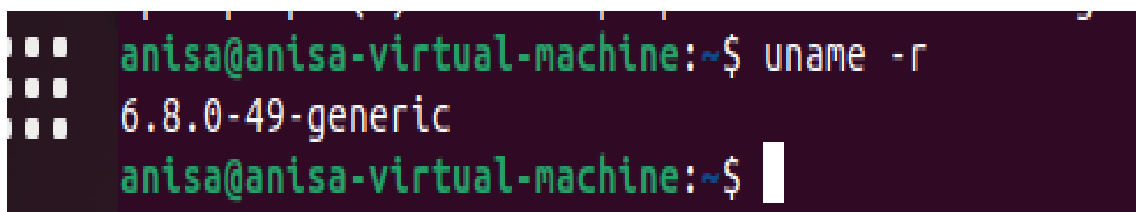


```
anisa@anisa-virtual-machine:~$ apropos ls
aconnect (1) - ALSA sequencer connection manager
add-shell (8) - add shells to the list of valid login shells
alsa-info (8) - command-line utility to gather information about the ALSA subsystem
alsabat (1) - command-line sound tester for ALSA sound card driver
alsactl (1) - advanced controls for ALSA soundcard driver
alsactl_init (7) - alsa control management - initialization
alsaloop (1) - command-line PCM loopback
alsamixer (1) - soundcard mixer for ALSA soundcard driver, with ncurses interface
alsatplg (1) - ALSA Topology Compiler
alsaucm (1) - ALSA Use Case Manager
amidi (1) - read from and write to ALSA RawMIDI ports
amixer (1) - command-line mixer for ALSA soundcard driver
aplay (1) - command-line sound recorder and player for ALSA soundcard driver
arecord (1) - command-line sound recorder and player for ALSA soundcard driver
aseqdump (1) - show the events received at an ALSA sequencer port
aseqnet (1) - ALSA sequencer connectors over network
axfer (1) - command-line sound recorder and player for sound devices and nodes supported by Linux sound subsystem (Adv...
blockdev (8) - call block device ioctl's from the command line
casper (7) - a hook for initramfs-tools to boot live systems.
cifscrds (1) - manage NTLM credentials in kernel keyring
credentials (7) - process identifiers
Data::Dump::Trace (3pm) - Helpers to trace function and method calls
default.pa (5) - PulseAudio Sound Server Startup Script
dircolors (1) - color setup for ls
enchant-lsmod-2 (1) - list provider and dictionary information
evince-thumbnailer (1) - create png thumbnails from PostScript and PDF documents
EVP_KDF-TLS13_KDF (7ssl) - The TLS 1.3 EVP_KDF implementation
EVP_KDF-TLS1_PRF (7ssl) - The TLS1 PRF EVP_KDF implementation
ExtUtils::Depends (3pm) - Easily build XS extensions that depend on XS extensions
false (1) - do nothing, unsuccessfully
Glib::devel (3pm) - Binding developer's overview of Glib's internals
Glib::Utils (3pm) - Miscellaneous utility functions
grub-menulst2cfg (1) - transform legacy menu.lst into grub.cfg
hp-levels (1) - Supply Levels Utility
idmap-plugin (8) - winbind ID mapping plugin for cifs-utils
idmapwb (8) - winbind ID mapping plugin for cifs-utils
initramfs-tools (7) - an introduction to writing scripts for mkinitramfs
```

2.7. Informasi Sistem

Menampilkan informasi sistem. Sistem yang dimaksud adalah versi kernel yang digunakan, sistem operasi, platform dan lainnya. Perintah yang digunakan adalah `uname`.

Format: `uname option`



```
anisa@anisa-virtual-machine:~$ uname -r
6.8.0-49-generic
anisa@anisa-virtual-machine:~$
```

2.8. Merestart Sistem

Untuk merestart sistem , anda dapat menggunakan perintah `reboot` dan `init 6`