

**LAPORAN PRAKTIKUM  
SISTEM OPERASI  
MODUL 5**



**DISUSUN OLEH:**

<b>NIM</b>	<b>L200220277</b>
<b>NAMA</b>	<b>MHD. FARHAN LUBIS</b>
<b>KELAS</b>	<b>F</b>

**PROGRAM STUDI INFORMATIKA  
FAKULTAS KOMUNIKASI DAN INFORMATIKA  
UNIVERSITAS MUHAMMADIYAH SURAKARTA**

**2023**

## **DAFTAR ISI**

<b>DAFTAR ISI.....</b>	2
<b>PETUNJUK PRAKTIKUM.....</b>	3
1. Nyalakan komputer dan pilih system operasi Linux yang tersedia.....	3
2. Tunggu proses booting selesai yaitu pada saat keluar permintaan untuk memasukkan username dan password. Masukkan username kemudian tekan enter .....	3
3. Buka Applications – Accessories – Terminal. Untuk menggunakan command line .....	3
4. Jika menggunakan ubuntu login root dengan menggunakan “sudo su” kemudian ‘enter’, setelah itu masukkan password milik user admin (tanyakan kepada asisten praktikum).....	3
5. Catat versi kernel yang digunakan saat itu dengan menggunakan perintah “uname -a” kemudian tekan ‘enter’ .....	18
<b>TUGAS.....</b>	18
1. Jelaskan distro linux yang ada saat ini (minimal 5) .....	18
2. Jelaskan 20 perintah yang sama di antara masing-masing distro.....	19
3. Jelaskan maksud perintah ‘init 0’, ‘init 1’, ‘init 2’, ‘init 3’, ‘init 4’, ‘init 5’, dan ‘init 6’ .....	19
4. Jelaskan maksud dari perintah ‘quota’ .....	20

## PETUNJUK PRAKTIKUM

1. Nyalakan komputer dan pilih system operasi Linux yang tersedia
2. Tunggu proses booting selesai yaitu pada saat keluar permintaan untuk memasukkan username dan password. Masukkan username kemudian tekan enter
3. Buka Applications – Accessories – Terminal. Untuk menggunakan command line
4. Jika menggunakan ubuntu login root dengan menggunakan “sudo su” kemudian ‘enter’, setelah itu masukkan password milik user admin (tanyakan kepada asisten praktikum)  
Setelah proses selesai dan berada dalam shell, tuliskan perintah-perintah berikut ini. Perintah harus dijalankan kemudian analisis atau maknai respon yang muncul pada layar monitor. Daftar perintah:

echo halo dunia ‘enter’
date ‘enter’
hostname ‘enter’
arch ‘enter’
uname –a ‘enter’
dmesg   more ‘enter’ (tekan ‘q’ untuk keluar)
uptime ‘enter’
whoami ‘enter’
who ‘enter’
id ‘enter’
last ‘enter’
finger ‘enter’
w ‘enter’
top ‘enter’ (tekan ‘q’ untuk keluar)
echo \$SHELL ‘enter’
echo {con,pre} {sent,fer} {s,ed} ‘enter’
man ls ‘enter’ (tekan ‘q’ untuk keluar)
man who ‘enter’ (tekan ‘q’ untuk keluar)
who can tell me about linux ‘enter’
last ‘enter’
clear ‘enter’
fdisk –l ‘enter’
users ‘enter’
cat /etc/fstab ‘enter’

```

cal 2000 'enter'
cal 9 1752 'enter'
cal 10 2007 'enter'
bc -l 'enter' (tulis "quit" untuk mengakhiri)
echo 5+4 | bc -l 'enter'
yes please 'enter' (tekan 'ctrl-c' untuk keluar)
pwd 'enter'
history 'enter'
tail -f /var/log/message 'enter' (tekan ctrl-c untuk keluar)
lsmod 'enter'
ps -axu 'enter'
lspci 'enter'
free 'enter'
cat /proc/cpuinfo 'enter'
finger root 'enter'
reboot 'enter'
halt 'enter'

```

```

dmesg
/home/mfl4
> echo halo dunia
halo dunia
root@mfl4 09:57:56 PM

/home/mfl4
> date
Mon Oct 23 21:58:14 WIB 2023
root@mfl4 09:58:01 PM

/home/mfl4
> hostname
mfl4
root@mfl4 09:58:14 PM

/home/mfl4
> arch
x86_64
root@mfl4 09:58:22 PM

/home/mfl4
> uname -a
Linux mfl4 5.15.133.1-microsoft-standard-WSL2 #1 SMP Thu Oct 5 21:02:42 UTC 2023 x86_64 x86_64 x86_64 GNU/Linux
root@mfl4 09:58:27 PM

/home/mfl4
> dmesg | more
[    0.000000] Linux version 5.15.133.1-microsoft-standard-WSL2 (root@1c602f52c2e4) (gcc (GCC) 11.2.0, GNU ld (GNU Binutils) 2.37) #1 SMP Thu Oct 5 21:02:42 UTC 2023
[    0.000000] Command line: initrd=\initrd.img WSL_ROOT_INIT=1 panic=-1 nr_cpus=8 bonding.max_bonds=0 dummy.numdummies=0
[    0.000000] fb_tunnels=none swiotlb=force console=hvc0 debug pty.legacy_count=0
[    0.000000] KERNEL supported cpus:
[    0.000000]   Intel GenuineIntel
[    0.000000]   AMD AuthenticAMD
[    0.000000]   Centaur CentaurHauls
root@mfl4 09:58:36 PM

```

```
dmesg
[    0.000000] Linux version 5.15.133.1-microsoft-standard-WSL2 (root@1c602f52c2e4) (gcc (GCC) 11.2.0, GNU ld (GNU Binutils) 2.37) #1 SMP Thu Oct 5 21:02:42 UTC 2023
[    0.000000] Command line: initrd=\initrd.img WSL_ROOT_INIT=1 panic=-1 nr_cpus=8 bonding.max_bonds=0 dummy.numdummies=0 fb_tunnels=none swiotlb=force console=hvc0 debug pty.legacy_count=0
[    0.000000] KERNEL supported cpus:
[    0.000000]   Intel GenuineIntel
[    0.000000]   AMD AuthenticAMD
[    0.000000]   Centaur CentaurHauls
[    0.000000] BIOS-provided physical RAM map:
[    0.000000] BIOS-e820: [mem 0x0000000000000000-0x00000000000ffff] usable
[    0.000000] BIOS-e820: [mem 0x0000000000000000-0x00000000000e0fff] reserved
[    0.000000] BIOS-e820: [mem 0x0000000000100000-0x00000000001fffff] ACPI data
[    0.000000] BIOS-e820: [mem 0x000000000200000-0x00000000f7fffff] usable
[    0.000000] BIOS-e820: [mem 0x0000000010000000-0x000000002011fffff] usable
[    0.000000] NX (Execute Disable) protection: active
[    0.000000] DMI not present or invalid.
[    0.000000] Hypervisor detected: Microsoft Hyper-V
[    0.000000] Hyper-V: privilege flags low 0xae7f, high 0xb8030, hints 0xa4e24, misc 0xe4bed7b6
[    0.000000] Hyper-V Host Build:22621-10.0-2-0.2428
[    0.000000] Hyper-V: Nested features: 0x3e0101
[    0.000000] Hyper-V: LAPIC Timer Frequency: 0x1e8480
[    0.000000] Hyper-V: Using hypercall for remote TLB flush
[    0.000000] clocksource: hyperv_clocksource_tsc_page: mask: 0xffffffffffffffff max_cycles: 0x24e6a1710, max_idle_ns: 440795202120 ns
[    0.000003] tsc: Detected 3302.411 MHz processor
[    0.000016] e820: update [mem 0x00000000-0x00000fff] usable ==> reserved
[    0.000020] e820: remove [mem 0x000a0000-0x000fffff] usable
[    0.000023] last_pfn = 0x201200 max_arch_pfn = 0x40000000
[    0.000051] x86/PAT: Configuration [0-7]: WB WC UC- UC WB WP UC- WT
--More--
```

```
/home/mfl4
[    0.000051] x86/PAT: Configuration [0-7]: WB WC UC- UC WB WP UC- WT
/home/mfl4
> uptime
22:00:12 up 19 min,  2 users,  load average: 0.00, 0.01, 0.00
55s root@mfl4 09:59:54 PM
/home/mfl4
> whoami
root
root@mfl4 10:00:12 PM
/home/mfl4
> who
mfl4    pts/1        2023-10-23 21:40
mfl4    pts/2        2023-10-23 21:50
root@mfl4 10:00:22 PM
/home/mfl4
> id
uid=0(root) gid=0(root) groups=0(root)
root@mfl4 10:00:27 PM
/home/mfl4
> last
mfl4    pts/1          Mon Oct 23 21:40  still logged in
reboot system boot  5.15.133.1-micro Mon Oct 23 21:40  still running
mfl4    pts/1          Sat Oct 21 19:17 - crash (2+02:23)
reboot system boot  5.15.123.1-micro Sat Oct 21 19:17  still running
mfl4    pts/1          Sat Oct 21 19:10 - crash (00:06)
reboot system boot  5.15.123.1-micro Sat Oct 21 19:10  still running
reboot system boot  5.15.123.1-micro Sat Oct 21 19:08  still running
mfl4    pts/1          Fri Oct 20 15:39 - crash (1+03:29)
reboot system boot  5.15.123.1-micro Fri Oct 20 15:39  still running
root@mfl4 10:00:35 PM
```

```

/home/mfl4
x + v

mfl4 pts/1 Fri Oct 20 02:17 - crash (00:02)
reboot system boot 5.15.123.1-micro Fri Oct 20 02:17 still running
mfl4 pts/1 Fri Oct 20 01:42 - crash (00:35)
reboot system boot 5.15.123.1-micro Fri Oct 20 01:41 still running
mfl4 pts/1 Thu Oct 19 20:22 - crash (05:19)
reboot system boot 5.15.123.1-micro Thu Oct 19 20:22 still running
mfl4 pts/1 Wed Oct 18 07:43 - crash (1+12:38)
reboot system boot 5.15.123.1-micro Wed Oct 18 07:43 still running
mfl4 pts/1 Tue Oct 17 23:57 - crash (07:45)
reboot system boot 5.15.123.1-micro Tue Oct 17 23:57 still running
mfl4 pts/1 Tue Oct 17 14:33 - crash (09:24)
reboot system boot 5.15.123.1-micro Tue Oct 17 14:33 still running
mfl4 pts/1 Tue Oct 17 11:09 - crash (03:24)
reboot system boot 5.15.123.1-micro Tue Oct 17 11:09 still running
mfl4 pts/1 Tue Oct 17 11:07 - crash (00:01)
reboot system boot 5.15.123.1-micro Tue Oct 17 11:07 still running
mfl4 pts/1 Tue Oct 17 11:03 - down (00:01)
reboot system boot 5.15.123.1-micro Tue Oct 17 11:03 - 11:05 (00:01)
mfl4 pts/1 Tue Oct 17 10:17 - down (00:41)
reboot system boot 5.15.123.1-micro Tue Oct 17 10:17 - 10:59 (00:41)
mfl4 pts/1 Tue Oct 17 00:22 - crash (09:55)
reboot system boot 5.15.123.1-micro Tue Oct 17 00:22 - 10:59 (10:36)
root pts/1 Tue Oct 17 00:22 - crash (00:00)
reboot system boot 5.15.123.1-micro Tue Oct 17 00:22 - 10:59 (10:37)
mfl4 pts/1 Tue Oct 17 00:22 - crash (00:00)
reboot system boot 5.15.123.1-micro Tue Oct 17 00:22 - 10:59 (10:37)
root pts/1 Tue Oct 17 00:21 - crash (00:00)
reboot system boot 5.15.123.1-micro Tue Oct 17 00:21 - 10:59 (10:37)

wtmp begins Tue Oct 17 00:21:36 2023

```

```

/home/mfl4
x + v

top
root@mfl4 10:00:39 PM

/home/mfl4
> finger
Login      Name      Tty      Idle  Login Time   Office      Office Phone
mfl4          *pts/1      21  Oct 23 21:40
mfl4          pts/2      Oct 23 21:50

/home/mfl4
root@mfl4 10:02:11 PM
> w
22:02:18 up 21 min,  2 users,  load average: 0.00, 0.00, 0.00
USER      TTY      FROM           LOGIN@    IDLE    JCPU   PCPU WHAT
mfl4      pts/1      -           21:40    21:45   0.01s  0.01s -bash
mfl4      pts/2      -           21:50    1.00s  2.16s  0.07s sudo su

/home/mfl4
root@mfl4 10:02:18 PM
> top
top - 22:02:29 up 22 min,  2 users,  load average: 0.00, 0.00, 0.00
Tasks: 45 total,  1 running, 44 sleeping,  0 stopped,  0 zombie
%Cpu(s):  0.0 us,  0.0 sy,  0.0 ni,100.0 id,  0.0 wa,  0.0 hi,  0.0 st,  0.0 st
MiB Mem : 7836.0 total, 6400.9 free,   558.4 used,   876.7 buff/cache
MiB Swap: 2048.0 total, 2048.0 free,   0.0 used. 7048.2 avail Mem

PID USER      PR  NI      VIRT      RES      SHR S %CPU %MEM      TIME+ COMMAND
 1 root      20   0 167064 12764  8356 S  0.0  0.2  0:00.68 systemd
 2 root      20   0  2448 1332 1220 S  0.0  0.0  0:00.01 init-systemd(Up
 5 root      20   0  2484 212 196 S  0.0  0.0  0:00.00 init
 40 root     19  -1 47728 15780 14744 S  0.0  0.2  0:00.09 systemd-journal
 58 root      20   0 22084 6024 4472 S  0.0  0.1  0:00.09 systemd-udevd
 73 root      20   0  4496 196   48 S  0.0  0.0  0:00.00 snapfuse
 74 root      20   0  4688 1712 1240 S  0.0  0.0  0:00.64 snapfuse
 75 root      20   0  4496  204   52 S  0.0  0.0  0:00.00 snapfuse

```

top - 22:03:14 up 22 min, 2 users, load average: 0.00, 0.00, 0.00  
 Tasks: 45 total, 1 running, 44 sleeping, 0 stopped, 0 zombie  
 %Cpu(s): 0.0 us, 0.0 sy, 0.0 ni, 100.0 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st  
 MiB Mem : 7836.0 total, 6402.7 free, 556.6 used, 876.7 buff/cache  
 MiB Swap: 2048.0 total, 2048.0 free, 0.0 used. 7050.0 avail Mem

PID	USER	PR	NI	VIRT	RES	SHR	S	%CPU	%MEM	TIME+	COMMAND
854	root	20	0	43212	37692	10256	S	0.3	0.5	0:01.60	python3
1	root	20	0	167064	12764	8356	S	0.0	0.2	0:00.68	systemd
2	root	20	0	2448	1332	1220	S	0.0	0.0	0:00.01	init-systemd(Up)
5	root	20	0	2484	212	196	S	0.0	0.0	0:00.00	init
40	root	19	-1	47728	15780	14744	S	0.0	0.2	0:00.09	systemd-journal
58	root	20	0	22084	6024	4472	S	0.0	0.1	0:00.09	systemd-udevd
73	root	20	0	4496	196	48	S	0.0	0.0	0:00.00	snapfuse
74	root	20	0	4688	1712	1240	S	0.0	0.0	0:00.64	snapfuse
75	root	20	0	4496	204	52	S	0.0	0.0	0:00.00	snapfuse
80	root	20	0	4628	160	8	S	0.0	0.0	0:00.00	snapfuse
82	root	20	0	4848	1904	1284	S	0.0	0.0	0:02.48	snapfuse
86	root	20	0	4944	1708	1240	S	0.0	0.0	0:00.74	snapfuse
128	systemd+	20	0	25528	12416	8224	S	0.0	0.2	0:00.08	systemd-resolve
145	root	20	0	4304	2696	2460	S	0.0	0.0	0:00.00	cron
147	message+	20	0	8588	4676	4128	S	0.0	0.1	0:00.08	dbus-daemon
151	root	20	0	30100	19308	10520	S	0.0	0.2	0:00.06	networkd-dispatcher
152	syslog	20	0	222400	7368	4560	S	0.0	0.1	0:00.02	rsyslogd
153	root	20	0	1466204	52636	19700	S	0.0	0.7	0:01.89	snapd
155	root	20	0	15320	7728	6740	S	0.0	0.1	0:00.07	systemd-logind
218	root	20	0	107208	21460	13112	S	0.0	0.3	0:00.05	unattended-upgrader
219	root	20	0	3236	1076	984	S	0.0	0.0	0:00.00	agetty
226	root	20	0	3192	1076	984	S	0.0	0.0	0:00.00	agetty
456	root	20	0	2464	112	0	S	0.0	0.0	0:00.00	SessionLeader

```
top - 22:03:14 up 22 min, 2 users, load average: 0.00, 0.00, 0.00
Tasks: 45 total, 1 running, 44 sleeping, 0 stopped, 0 zombie
%Cpu(s): 0.0 us, 0.0 sy, 0.0 ni, 100.0 id, 0.0 wa, 0.0 hi, 0.0 si, 0.0 st
MiB Mem : 7836.0 total, 6402.7 free, 556.6 used, 876.7 buff/cache
MiB Swap: 2048.0 total, 2048.0 free, 0.0 used. 7050.0 avail Mem

/home/mfl4
> echo $SHELL
/usr/bin/zsh
1m 23s root@mfl4 10:03:46 PM

/home/mfl4
> echo {con,pre}{sent,fer}{s,ed}
consents consented confers conferred presents presented prefers preferred
root@mfl4 10:04:13 PM

/home/mfl4
> man ls
root@mfl4 10:04:46 PM

/home/mfl4
> _
13s root@mfl4 10:05:23 PM
```

```

LS(1)                               User Commands                               LS(1)

NAME
    ls - list directory contents

SYNOPSIS
    ls [OPTION]... [FILE]...

DESCRIPTION
    List information about the FILEs (the current directory by default). Sort entries alphabetically if none of
    -cftuvSUX nor --sort is specified.

    Mandatory arguments to long options are mandatory for short options too.

-a, --all
        do not ignore entries starting with .

-A, --almost-all
        do not list implied . and ..

--author
        with -l, print the author of each file

-b, --escape
        print C-style escapes for nongraphic characters

--block-size=SIZE
        with -l, scale sizes by SIZE when printing them; e.g., '--block-size=M'; see SIZE format below

Manual page ls(1) line 1 (press h for help or q to quit)

```

	User	CPU	Memory	Time	Command
82	root	20	0	4848 1904 1284 S 0.0 0.0 0:02.48	snapfuse
86	root	20	0	4944 1708 1240 S 0.0 0.0 0:00.74	snapfuse
128	systemd+	20	0	25528 12416 8224 S 0.0 0.2 0:00.08	systemd-resolve
145	root	20	0	4304 2696 2460 S 0.0 0.0 0:00.00	cron
147	message+	20	0	8588 4676 4128 S 0.0 0.1 0:00.08	dbus-daemon
151	root	20	0	30100 19308 10520 S 0.0 0.2 0:00.06	networkd-dispat
152	syslog	20	0	222400 7368 4560 S 0.0 0.1 0:00.02	rsyslogd
153	root	20	0	1466204 52636 19700 S 0.0 0.7 0:01.89	snapd
155	root	20	0	15320 7728 6740 S 0.0 0.1 0:00.07	systemd-logind
218	root	20	0	107208 21460 13112 S 0.0 0.3 0:00.05	unattended-upgr
219	root	20	0	3236 1076 984 S 0.0 0.0 0:00.00	agetty
226	root	20	0	3192 1076 984 S 0.0 0.0 0:00.00	agetty
456	root	20	0	2464 112 0 S 0.0 0.0 0:00.00	SessionLeader

```

/home/mfl4
> echo $SHELL
/usr/bin/zsh

/home/mfl4
> echo {con,pre}{sent,fer}{s,ed}
consents consented confers conferred presents presented prefers preferred

/home/mfl4
> man ls

/home/mfl4
> man ls

/home/mfl4
> man who_

```

1m 23s root@mfl4 10:03:46 PM  
root@mfl4 10:04:13 PM  
root@mfl4 10:04:46 PM  
13s root@mfl4 10:05:23 PM  
29s root@mfl4 10:06:39 PM

```
man WHO(1) User Commands WHO(1)

NAME
    who - show who is logged on

SYNOPSIS
    who [OPTION]... [ FILE | ARG1 ARG2 ]

DESCRIPTION
    Print information about users who are currently logged in.

    -a, --all
        same as -b -d --login -p -r -t -T -u

    -b, --boot
        time of last system boot

    -d, --dead
        print dead processes

    -H, --heading
        print line of column headings

    --ips
        print ips instead of hostnames. with --lookup, canonicalizes based on stored IP, if available, rather
        than stored hostname

    -l, --login
        print system login processes

Manual page who(1) line 1 (press h for help or q to quit)
```

```
/home/mfl4
> who can tell me about linux
who: extra operand 'me'
Try 'who --help' for more information.

/home/mfl4
> last
mfl4      pts/1                      Mon Oct 23 21:40  still logged in
reboot   system boot  5.15.133.1-micro Mon Oct 23 21:40  still running
mfl4      pts/1                      Sat Oct 21 19:17 - crash (2+02:23)
reboot   system boot  5.15.123.1-micro Sat Oct 21 19:17  still running
mfl4      pts/1                      Sat Oct 21 19:10 - crash (00:06)
reboot   system boot  5.15.123.1-micro Sat Oct 21 19:10  still running
reboot   system boot  5.15.123.1-micro Sat Oct 21 19:08  still running
mfl4      pts/1                      Fri Oct 20 15:39 - crash (1+03:29)
reboot   system boot  5.15.123.1-micro Fri Oct 20 15:39  still running
mfl4      pts/1                      Fri Oct 20 15:19 - crash (00:19)
reboot   system boot  5.15.123.1-micro Fri Oct 20 15:19  still running
mfl4      pts/1                      Fri Oct 20 12:49 - crash (02:29)
reboot   system boot  5.15.123.1-micro Fri Oct 20 12:49  still running
mfl4      pts/1                      Fri Oct 20 11:52 - crash (00:57)
reboot   system boot  5.15.123.1-micro Fri Oct 20 11:52  still running
mfl4      pts/1                      Fri Oct 20 04:01 - crash (07:50)
reboot   system boot  5.15.123.1-micro Fri Oct 20 04:01  still running
mfl4      pts/1                      Fri Oct 20 03:59 - crash (00:02)
reboot   system boot  5.15.123.1-micro Fri Oct 20 03:59  still running
mfl4      pts/1                      Fri Oct 20 03:04 - crash (00:54)
reboot   system boot  5.15.123.1-micro Fri Oct 20 03:04  still running
mfl4      pts/1                      Fri Oct 20 02:53 - crash (00:10)
reboot   system boot  5.15.123.1-micro Fri Oct 20 02:53  still running
mfl4      pts/1                      Fri Oct 20 02:50 - crash (00:03)
```

```
 ④ /home/mfl4 × + ▾
reboot    system boot  5.15.123.1-micro Fri Oct 20 01:41  still running
mfl4      pts/1          Thu Oct 19 20:22 - crash  (05:19)
reboot    system boot  5.15.123.1-micro Thu Oct 19 20:22  still running
mfl4      pts/1          Wed Oct 18 07:43 - crash (1+12:38)
reboot    system boot  5.15.123.1-micro Wed Oct 18 07:43  still running
mfl4      pts/1          Tue Oct 17 23:57 - crash (07:45)
reboot    system boot  5.15.123.1-micro Tue Oct 17 23:57  still running
mfl4      pts/1          Tue Oct 17 14:33 - crash (09:24)
reboot    system boot  5.15.123.1-micro Tue Oct 17 14:33  still running
mfl4      pts/1          Tue Oct 17 11:09 - crash (03:24)
reboot    system boot  5.15.123.1-micro Tue Oct 17 11:09  still running
mfl4      pts/1          Tue Oct 17 11:07 - crash (00:01)
reboot    system boot  5.15.123.1-micro Tue Oct 17 11:07  still running
mfl4      pts/1          Tue Oct 17 11:03 - down (00:01)
reboot    system boot  5.15.123.1-micro Tue Oct 17 11:03 - 11:05 (00:01)
mfl4      pts/1          Tue Oct 17 10:17 - down (00:41)
reboot    system boot  5.15.123.1-micro Tue Oct 17 10:17 - 10:59 (00:41)
mfl4      pts/1          Tue Oct 17 00:22 - crash (09:55)
reboot    system boot  5.15.123.1-micro Tue Oct 17 00:22 - 10:59 (10:36)
root     pts/1          Tue Oct 17 00:22 - crash (00:00)
reboot    system boot  5.15.123.1-micro Tue Oct 17 00:22 - 10:59 (10:37)
mfl4      pts/1          Tue Oct 17 00:22 - crash (00:00)
reboot    system boot  5.15.123.1-micro Tue Oct 17 00:22 - 10:59 (10:37)
root     pts/1          Tue Oct 17 00:21 - crash (00:00)
reboot    system boot  5.15.123.1-micro Tue Oct 17 00:21 - 10:59 (10:37)

wtmp begins Tue Oct 17 00:21:36 2023

/home/mfl4
> clear_
```

```
 ④ /home/mfl4 × + ▾
/home/mfl4
> fdisk -l
zsh: command not found: fdisk

/home/mfl4
> sudo apt install fdisk
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  libfdisk1
The following NEW packages will be installed:
  fdisk libfdisk1
0 upgraded, 2 newly installed, 0 to remove and 0 not upgraded.
Need to get 263 kB of archives.
After this operation, 891 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://archive.ubuntu.com/ubuntu jammy/main amd64 libfdisk1 amd64 2.37.2-4ubuntu3 [141 kB]
Get:2 http://archive.ubuntu.com/ubuntu jammy/main amd64 fdisk amd64 2.37.2-4ubuntu3 [122 kB]
Fetched 263 kB in 4s (67.9 kB/s)
Selecting previously unselected package libfdisk1:amd64.
(Reading database ... 25696 files and directories currently installed.)
Preparing to unpack .../libfdisk1_2.37.2-4ubuntu3_amd64.deb ...
Unpacking libfdisk1:amd64 (2.37.2-4ubuntu3) ...
Selecting previously unselected package fdisk.
Preparing to unpack .../fdisk_2.37.2-4ubuntu3_amd64.deb ...
Unpacking fdisk (2.37.2-4ubuntu3) ...
Setting up libfdisk1:amd64 (2.37.2-4ubuntu3) ...
Setting up fdisk (2.37.2-4ubuntu3) ...
Processing triggers for man-db (2.10.2-1) ...
```

```
/home/mfl4
> fdisk -l
Disk /dev/ram0: 64 MiB, 67108864 bytes, 131072 sectors
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 4096 bytes
I/O size (minimum/optimal): 4096 bytes / 4096 bytes

Disk /dev/ram1: 64 MiB, 67108864 bytes, 131072 sectors
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 4096 bytes
I/O size (minimum/optimal): 4096 bytes / 4096 bytes

Disk /dev/ram2: 64 MiB, 67108864 bytes, 131072 sectors
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 4096 bytes
I/O size (minimum/optimal): 4096 bytes / 4096 bytes

Disk /dev/ram3: 64 MiB, 67108864 bytes, 131072 sectors
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 4096 bytes
I/O size (minimum/optimal): 4096 bytes / 4096 bytes

Disk /dev/ram4: 64 MiB, 67108864 bytes, 131072 sectors
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 4096 bytes
```

```
/home/mfl4
> +
Disk /dev/ram15: 64 MiB, 67108864 bytes, 131072 sectors
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 4096 bytes
I/O size (minimum/optimal): 4096 bytes / 4096 bytes

Disk /dev/sda: 389.82 MiB, 408756224 bytes, 798352 sectors
Disk model: Virtual Disk
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes

Disk /dev/sdb: 2 GiB, 2147487744 bytes, 4194312 sectors
Disk model: Virtual Disk
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 4096 bytes
I/O size (minimum/optimal): 4096 bytes / 4096 bytes

Disk /dev/sdc: 1 TiB, 1099511627776 bytes, 2147483648 sectors
Disk model: Virtual Disk
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 4096 bytes
I/O size (minimum/optimal): 4096 bytes / 4096 bytes

/home/mfl4
> _
```

```
⌚ /home/mfl4 × + ✓
I/O size (minimum/optimal): 4096 bytes / 4096 bytes
/home/mfl4
> users
mfl4 mfl4

/home/mfl4
> cat /etc/fstab
# UNCONFIGURED FSTAB FOR BASE SYSTEM

/home/mfl4
> cal 2000
      2000
January          February          March
Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa
      1       1   2   3   4   5       1   2   3   4
2   3   4   5   6   7   8   6   7   8   9   10  11   5   6   7   8   9   10  11
9   10  11  12  13  14  15  13  14  15  16  17  18  19  12  13  14  15  16  17  18
16  17  18  19  20  21  22  20  21  22  23  24  25  26  19  20  21  22  23  24  25
23  24  25  26  27  28  29  27  28  29               26  27  28  29  30  31
30  31

April            May              June
Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa
      1       1   2   3   4   5   6       1   2   3
2   3   4   5   6   7   8   7   8   9   10  11  12  13   4   5   6   7   8   9   10
9   10  11  12  13  14  15  14  15  16  17  18  19  20  11  12  13  14  15  16  17
16  17  18  19  20  21  22  21  22  23  24  25  26  27  18  19  20  21  22  23  24
23  24  25  26  27  28  29  28  29  30  31               25  26  27  28  29  30
30
```

```
⌚ /home/mfl4 × + ✓
      April          May           June
Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa
      1       1   2   3   4   5   6       1   2   3
2   3   4   5   6   7   8   7   8   9   10  11  12  13   4   5   6   7   8   9   10
9   10  11  12  13  14  15  14  15  16  17  18  19  20  11  12  13  14  15  16  17
16  17  18  19  20  21  22  21  22  23  24  25  26  27  18  19  20  21  22  23  24
23  24  25  26  27  28  29  28  29  30  31               25  26  27  28  29  30
30

      July          August         September
Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa
      1       1   2   3   4   5       1   2
2   3   4   5   6   7   8   6   7   8   9   10  11  12   3   4   5   6   7   8   9
9   10  11  12  13  14  15  13  14  15  16  17  18  19  10  11  12  13  14  15  16
16  17  18  19  20  21  22  20  21  22  23  24  25  26  17  18  19  20  21  22  23
23  24  25  26  27  28  29  27  28  29  30  31               24  25  26  27  28  29  30
31

      October        November        December
Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa
      1   2   3   4   5   6   7       1   2   3   4       1   2
8   9   10  11  12  13  14   5   6   7   8   9   10  11   3   4   5   6   7   8   9
15  16  17  18  19  20  21   12  13  14  15  16  17  18   10  11  12  13  14  15  16
22  23  24  25  26  27  28   19  20  21  22  23  24  25   17  18  19  20  21  22  23
29  30  31               26  27  28  29  30               24  25  26  27  28  29  30
31
```

root@mfl4 10:14:31 PM

```
bc
```

```
/home/mfl4
> cal 9 1752
  September 1752
Su Mo Tu We Th Fr Sa
      1  2 14 15 16
17 18 19 20 21 22 23
24 25 26 27 28 29 30

root@mfl4 10:14:31 PM

/home/mfl4
> cal 10 2007
  October 2007
Su Mo Tu We Th Fr Sa
      1  2  3  4  5  6
 7  8  9 10 11 12 13
14 15 16 17 18 19 20
21 22 23 24 25 26 27
28 29 30 31

root@mfl4 10:15:29 PM

/home/mfl4
> bc -l
bc 1.07.1
Copyright 1991-1994, 1997, 1998, 2000, 2004, 2006, 2008, 2012-2017 Free Software Foundation, Inc.
This is free software with ABSOLUTELY NO WARRANTY.
For details type `warranty'.
-
```

```
/home/mfl4
> bc -l
bc 1.07.1
Copyright 1991-1994, 1997, 1998, 2000, 2004, 2006, 2008, 2012-2017 Free Software Foundation, Inc.
This is free software with ABSOLUTELY NO WARRANTY.
For details type `warranty'.
quit

/home/mfl4
> echo 5+4 | bc -l
9

root@mfl4 10:18:18 PM

5s root@mfl4 10:19:09 PM

/home/mfl4
> yes please_
```

```
p^C

/home/mfl4
> pwd
/home/mfl4

/home/mfl4
> history
 1 nano ~/.zshrc
 2 source ~/.zshrc
 3 cls
 4 clear
 5 ls -l $ZSH/themes
 6 git clone https://github.com/zsh-users/zsh-autosuggestions $ZSH_CUSTOM/plugins/zsh-autosuggestions
 7 git clone https://github.com/zsh-users/zsh-syntax-highlighting.git $ZSH_CUSTOM/plugins/zsh-syntax-highlighting
 8 git clone https://github.com/zsh-users/zsh-completions $ZSH_CUSTOM/plugins/zsh-completions
 9 nano ~/.zshrc
10 source ~/.zshrc
11 nano ~/.zshrc
12 source ~/.zshrc
13 cls
14 clear
15 git clone --depth=1 https://github.com/romkatv/powerlevel10k.git $ZSH_CUSTOM/themes/powerlevel10k
16 nano ~/.zshrc
17 source ~/.zshrc
18 cls
19 clear
20 echo halo dunia
21 date
22 hostname
```

```
157 echo {con,pre}{sent,fer}{s,ed}
158 man ls
159 man who
160 who can tell me about linux
161 last
162 clear
163 fdisk -l
164 sudo apt install fdisk
165 fdisk -l
166 users
167 cat /etc/fstab
168 cal 2000
169 cal 9 1752
170 cal 10 2007
171 bc -l
172 echo 5+4 | bc -l
173 yes please
174 clear
175 bc -l
176 echo 5+4 | bc -l
177 yes please
178 pwd

/home/mfl4
> tail -f /var/log/message
tail: cannot open '-f' for reading: No such file or directory
tail: cannot open '/var/log/message' for reading: No such file or directory

/home/mfl4
> _
```

```
tail: cannot open '/var/log/message' for reading: No such file or directory

/home/mfl4
> lsmod
Module           Size  Used by

/home/mfl4
> ps -axu
USER      PID %CPU %MEM    VSZ   RSS TTY      STAT START  TIME COMMAND
root      1  0.0  0.1 167064 12764 ?
root      2  0.0  0.0  2448 1332 ?
root      5  0.0  0.0  2484  212 ?
root     40  0.0  0.1 47728 15808 ?
root     58  0.0  0.0 22084  6024 ?
root     73  0.0  0.0  4496  196 ?
root     74  0.0  0.0  4688 1712 ?
root     75  0.0  0.0  4496  204 ?
root     80  0.0  0.0  4628  160 ?
root     82  0.0  0.0  4848 1904 ?
root     86  0.0  0.0  4944 1708 ?
systemd+ 128  0.0  0.1 25528 12416 ?
root    145  0.0  0.0  4304 2696 ?
message+ 147  0.0  0.0  8588 4676 ?
root    151  0.0  0.2 30100 19308 ?
sysLog   152  0.0  0.0 222400  7368 ?
root    153  0.0  0.6 1466204 52636 ?
root    155  0.0  0.0  15320 7728 ?
root    218  0.0  0.2 107208 21460 ?
root    219  0.0  0.0  3236 1076 hvc0
root    226  0.0  0.0  3192 1076 tty1
```

```
root@mfL4 ~ % ps -aux
root      811  0.1  1.1 1524688 96044 ?          Sl  21:45  0:03 /snap/ubuntu-desktop-installer/1271/usr/bin/python3.1
root      854  0.1  0.4  43212 37692 ?          S   21:45  0:02 python3 /snap/ubuntu-desktop-installer/1271/usr/bin/c
root      874  0.0  0.0   9084  5592 pts/0       R+  21:50  0:00 sudo su
root      875  0.0  0.0   9084  2400 pts/2       Ss  21:50  0:00 sudo su
root      876  0.0  0.0   7628  4032 pts/2       S   21:50  0:00 su
root      878  0.0  0.1  17020  9676 ?          Ss  21:50  0:00 /lib/systemd/systemd --user
root      879  0.0  0.0  169976  4700 ?          S   21:50  0:00 (sd-pam)
root      884  0.1  0.4  38136  34140 pts/2      S   21:50  0:03 zsh
root      888  0.0  0.0   8200  4372 pts/2      S   21:50  0:00 zsh
root      936  0.0  0.0   9600  4848 pts/2      S   21:50  0:00 zsh
root      937  0.0  0.0   9584  3452 pts/2      S   21:50  0:00 zsh
root      939  0.0  0.0   4576  1008 pts/2      Sl  21:50  0:00 /root/.cache/gitstatus/gitstatusd-linux-x86_64 -G v1.
root     1390  0.0  0.2  293072  20128 ?          Ssl 21:52  0:00 /usr/libexec/packagekitd
root     1394  0.0  0.0  234492  6608 ?          Ssl 21:52  0:00 /usr/libexec/polkitd --no-debug
root     2095  0.0  0.0   7480  3220 pts/2       R+  22:22  0:00 ps -aux

/home/mfL4
> lspci
root@mfL4 10:22:06 PM

02a4:00:00.0 SCSI storage controller: Red Hat, Inc. Virtio filesystem (rev 01)
0c4c:00:00.0 SCSI storage controller: Red Hat, Inc. Virtio filesystem (rev 01)
2a9a:00:00.0 SCSI storage controller: Red Hat, Inc. Virtio filesystem (rev 01)
3018:00:00.0 SCSI storage controller: Red Hat, Inc. Virtio console (rev 01)
70cb:00:00.0 SCSI storage controller: Red Hat, Inc. Virtio filesystem (rev 01)
7bae:00:00.0 System peripheral: Red Hat, Inc. Virtio file system (rev 01)
af85:00:00.0 3D controller: Microsoft Corporation Device 008e
d366:00:00.0 SCSI storage controller: Red Hat, Inc. Virtio filesystem (rev 01)
f32f:00:00.0 3D controller: Microsoft Corporation Device 008e

/home/mfL4
> _
```

```
root@mfL4 ~ % free
root@mfL4 10:22:39 PM

total        used        free      shared  buff/cache   available
Mem:    8024044      565404    6553532      3292      905108    7222956
Swap:  2097152          0    2097152

/home/mfL4
> cat /proc/cpuinfo
root@mfL4 10:23:01 PM

processor       : 0
vendor_id       : GenuineIntel
cpu family      : 6
model           : 140
model name      : 11th Gen Intel(R) Core(TM) i7-11370H @ 3.30GHz
stepping         : 1
microcode       : 0xffffffff
cpu MHz         : 3302.411
cache size      : 12288 KB
physical id     : 0
siblings         : 8
core id         : 0
cpu cores       : 4
apicid          : 0
initial apicid  : 0
fpu              : yes
fpu_exception   : yes
cpuid level     : 27
wp               : yes
flags            : fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush mmx fxsr sse sse2 ss ht syscall nx pdpe1gb rdtscp lm constant_tsc arch_perfmon rep_good nopl xtopology tsc_reliable nonstop_tsc cpuid pri pclm ulqdq vmx ssse3 fma cx16 pdcm pcid sse4_1 sse4_2 x2apic movbe popcnt tsc_deadline_timer aes xsave avx f16c rdrand hyperv
```

```
/home/mfl4          X + | v
fpu_exception : yes
cpuid level   : 27
wp            : yes
flags          : fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush mmx fxsr sse sse2 ss h
t syscall nx pdpe1gb rdtscp lm constant_tsc arch_perfmon rep_good nopl xtopology tsc_reliable nonstop_tsc cpuid pri pclm
ulqdq vmx ssse3 fma cx16 pdcm pcid sse4_1 sse4_2 x2apic movbe popcnt tsc_deadline_timer aes xsave avx f16c rdrand hyperv
isor lahf_lm abm 3dnoprefetch invpcid_single ssbd ibrs ibpb stibp ibrs_enhanced tpr_shadow vnmi ept vpid ept_ad fsgsba
e tsc_adjust bmi1 avx2 smep bmi2 erms invpcid avx512f avx512dq rdseed adx smap avx512ifma clflushopt clwb avx512cd sha_n
i avx512bw avx512vl xsaveopt xsavec xgetbv1 xsaves avx512vmbi umip avx512_vmbi2 gfni vaes vpclmulqdq avx512_vnni avx512_
bitalg avx512_vpocntdq rdpid movdir64b fsrm avx512_vp2intersect flush_l1d arch_capabilities
vmx flags       : vnmi invvpid ept_x_only ept_ad ept_1gb tsc_offset vptr ept vpid unrestricted_guest ept_mode_based_exec
tsc_scaling
bugs           : spectre_v1 spectre_v2 spec_store_bypass swapgs retbleed eibrps_pbrsb gds
bogomips       : 6604.82
clflush size   : 64
cache_alignment : 64
address sizes   : 39 bits physical, 48 bits virtual
power management:

/home/mfl4
> finger root
Login: root                      Name: root
Directory: /root                  Shell: /usr/bin/zsh
Last login Tue Oct 17 00:22 (WIB) on pts/1
No mail.
No Plan.

root@mfl4 10:23:21 PM

/home/mfl4
> reboot_
```

```
mfl4@mfl4: ~          X + | v
bitalg avx512_vpocntdq rdpid movdir64b fsrm avx512_vp2intersect flush_l1d arch_capabilities
vmx flags       : vnmi invvpid ept_x_only ept_ad ept_1gb tsc_offset vptr ept vpid unrestricted_guest ept_mode_based_exec
tsc_scaling
bugs           : spectre_v1 spectre_v2 spec_store_bypass swapgs retbleed eibrps_pbrsb gds
bogomips       : 6604.82
clflush size   : 64
cache_alignment : 64
address sizes   : 39 bits physical, 48 bits virtual
power management:

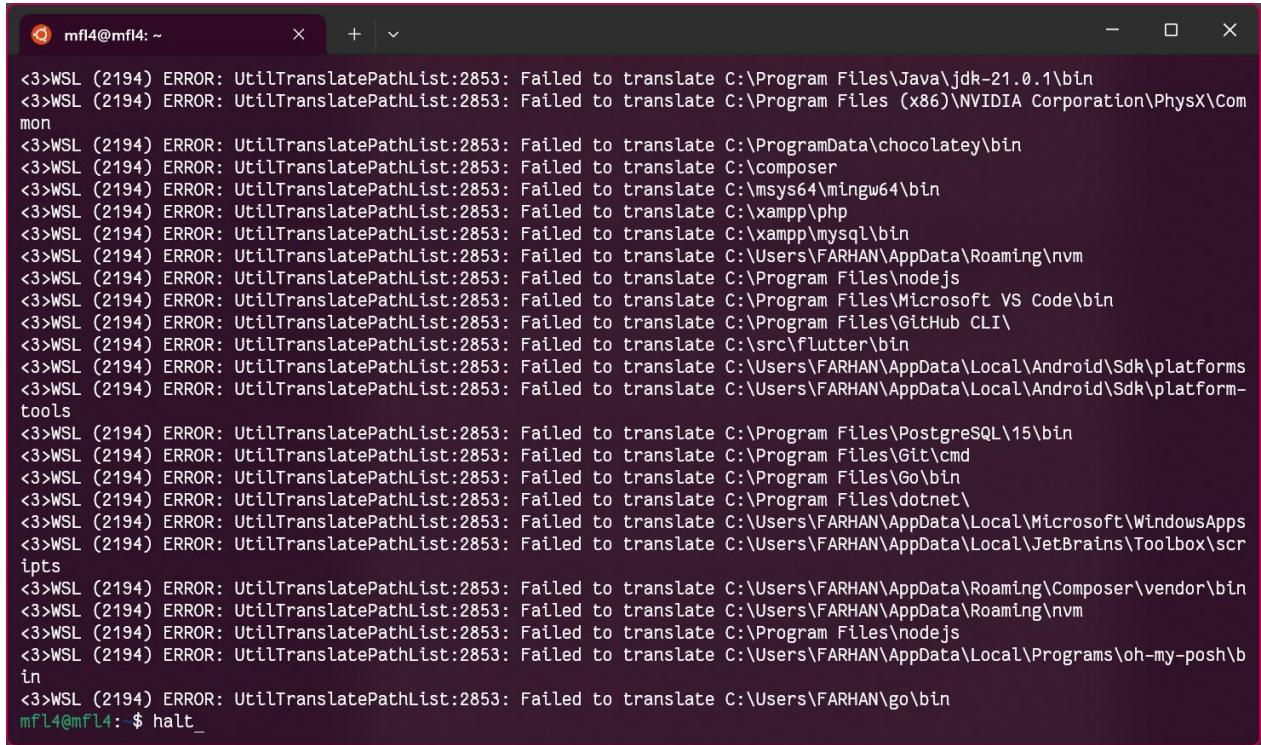
/home/mfl4
> finger root
Login: root                      Name: root
Directory: /root                  Shell: /usr/bin/zsh
Last login Tue Oct 17 00:22 (WIB) on pts/1
No mail.
No Plan.

root@mfl4 10:23:21 PM

/home/mfl4
> reboot

Session terminated, killing shell...[1]    2147 terminated  reboot
...killed.
Terminated
mfl4@mfl4: $

[process exited with code 1 (0x00000001)]
You can now close this terminal with Ctrl+D, or press Enter to restart.
```



```
<3>WSL (2194) ERROR: UtilTranslatePathList:2853: Failed to translate C:\Program Files\Java\jdk-21.0.1\bin
<3>WSL (2194) ERROR: UtilTranslatePathList:2853: Failed to translate C:\Program Files (x86)\NVIDIA Corporation\PhysX\Com
mon
<3>WSL (2194) ERROR: UtilTranslatePathList:2853: Failed to translate C:\ProgramData\chocolatey\bin
<3>WSL (2194) ERROR: UtilTranslatePathList:2853: Failed to translate C:\composer
<3>WSL (2194) ERROR: UtilTranslatePathList:2853: Failed to translate C:\msys64\mingw64\bin
<3>WSL (2194) ERROR: UtilTranslatePathList:2853: Failed to translate C:\xampp\php
<3>WSL (2194) ERROR: UtilTranslatePathList:2853: Failed to translate C:\xampp\mysql\bin
<3>WSL (2194) ERROR: UtilTranslatePathList:2853: Failed to translate C:\Users\FARHAN\AppData\Roaming\nvm
<3>WSL (2194) ERROR: UtilTranslatePathList:2853: Failed to translate C:\Program Files\nodejs
<3>WSL (2194) ERROR: UtilTranslatePathList:2853: Failed to translate C:\Program Files\Microsoft VS Code\bin
<3>WSL (2194) ERROR: UtilTranslatePathList:2853: Failed to translate C:\Program Files\GitHub CLI\
<3>WSL (2194) ERROR: UtilTranslatePathList:2853: Failed to translate C:\src\flutter\bin
<3>WSL (2194) ERROR: UtilTranslatePathList:2853: Failed to translate C:\Users\FARHAN\AppData\Local\Android\Sdk\platforms
<3>WSL (2194) ERROR: UtilTranslatePathList:2853: Failed to translate C:\Users\FARHAN\AppData\Local\Android\Sdk\platform-
tools
<3>WSL (2194) ERROR: UtilTranslatePathList:2853: Failed to translate C:\Program Files\PostgreSQL\15\bin
<3>WSL (2194) ERROR: UtilTranslatePathList:2853: Failed to translate C:\Program Files\Git\cmd
<3>WSL (2194) ERROR: UtilTranslatePathList:2853: Failed to translate C:\Program Files\Go\bin
<3>WSL (2194) ERROR: UtilTranslatePathList:2853: Failed to translate C:\Program Files\dotnet\
<3>WSL (2194) ERROR: UtilTranslatePathList:2853: Failed to translate C:\Users\FARHAN\AppData\Local\Microsoft\WindowsApps
<3>WSL (2194) ERROR: UtilTranslatePathList:2853: Failed to translate C:\Users\FARHAN\AppData\Local\JetBrains\Toolbox\scr
ipts
<3>WSL (2194) ERROR: UtilTranslatePathList:2853: Failed to translate C:\Users\FARHAN\AppData\Roaming\Composer\vendor\bin
<3>WSL (2194) ERROR: UtilTranslatePathList:2853: Failed to translate C:\Users\FARHAN\AppData\Roaming\nvm
<3>WSL (2194) ERROR: UtilTranslatePathList:2853: Failed to translate C:\Program Files\nodejs
<3>WSL (2194) ERROR: UtilTranslatePathList:2853: Failed to translate C:\Users\FARHAN\AppData\Local\Programs\oh-my-posh\b
in
<3>WSL (2194) ERROR: UtilTranslatePathList:2853: Failed to translate C:\Users\FARHAN\go\bin
mfl4@mfl4: $ halt_
```

5. Catat versi kernel yang digunakan saat itu dengan menggunakan perintah “uname -a” kemudian tekan ‘enter’



```
/home/mfl4
> uname -a
Linux mfl4 5.15.133.1-microsoft-standard-WSL2 #1 SMP Thu Oct 5 21:02:42 UTC 2023 x86_64 x86_64 x86_64 GNU/Linux
root@mfl4 09:58:27 PM
```

## TUGAS

1. Jelaskan distro linux yang ada saat ini (minimal 5)
  - Ubuntu: Distro Linux berbasis Debian yang dikenal dengan fokus pada kemudahan penggunaan dan desktop.
  - CentOS: Distro Linux berbasis Red Hat yang sering digunakan dalam lingkungan server dan data center.
  - Fedora: Distro yang dikembangkan oleh komunitas dan sering menjadi platform eksperimen untuk teknologi Linux terbaru.
  - Debian: Distro Linux yang menjadi dasar bagi banyak distro lainnya dan dikenal dengan stabilitasnya.
  - Arch Linux: Distro yang sangat konfigurasi dengan pendekatan "rolling release" yang terus menerus diperbarui.

2. Jelaskan 20 perintah yang sama di antara masing-masing distro

- ls: Menampilkan daftar file dan direktori.
- pwd: Menampilkan direktori kerja saat ini.
- cd: Mengganti direktori.
- mkdir: Membuat direktori baru.
- rm: Menghapus file atau direktori.
- cp: Menyalin file atau direktori.
- mv: Memindahkan file atau direktori.
- touch: Membuat file kosong.
- cat: Menampilkan isi file.
- nano atau vim: Mengedit file teks.
- ps: Menampilkan proses yang berjalan.
- kill: Menghentikan proses.
- top atau htop: Menampilkan daftar proses dalam waktu nyata.
- ifconfig atau ip: Menampilkan informasi jaringan.
- ping: Mengirim paket ICMP ke tujuan untuk menguji koneksi.
- ssh: Mengakses remote server melalui SSH.
- grep: Mencari teks dalam file.
- tar: Mengarsipkan dan mengekstrak file.
- df: Menampilkan penggunaan disk.
- chmod: Mengubah izin file atau direktori.

3. Jelaskan maksud perintah ‘init 0’, ‘init 1’, ‘init 2’, ‘init 3’, ‘init 4’, ‘init 5’, dan ‘init 6’

Perintah 'init' pada Linux sebelumnya digunakan untuk mengganti runlevel, yang mengendalikan tingkat layanan yang aktif pada sistem. Namun, sejak banyak distro Linux modern beralih ke sistem init alternatif seperti systemd, inittab, runit, atau Upstart, perintah 'init' tidak lagi digunakan seperti dulu. Di masa lalu, perintah 'init' digunakan dengan angka yang sesuai dengan runlevel tertentu:

- init 0: Mematikan sistem.
- init 1 atau init S: Mode pemulihan (Single User Mode).
- init 2: Mode multi-user tanpa layanan jaringan.
- init 3: Mode multi-user dengan layanan jaringan.
- init 4: Biasanya tidak digunakan.
- init 5: Mode multi-user dengan antarmuka grafis.
- init 6: Merestart sistem.

4. Jelaskan maksud dari perintah 'quota'

perintah 'quota' digunakan untuk mengelola dan memantau kuota disk pada sistem Linux. Ini memungkinkan administrator sistem untuk mengatur batasan penggunaan disk untuk pengguna atau kelompok pengguna tertentu, sehingga dapat mencegah pengguna melebihi kuota yang ditetapkan. Dengan 'quota', Anda dapat memantau penggunaan disk, menghapus file yang melebihi kuota, dan mengatur kebijakan penggunaan disk yang lebih baik di sistem.