1.Shell Configuration
-ให้แสดงข้อความ Hello World หลังจาก Login

```
nano ~/.bashrc
echo "hello World"
```



```
nena login: nena
Password:
Welcome to Ubuntu 24.04.1 LTS (GNU/Linux 6.8.0-51-generic aarch64)

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

 System information as of Fri Jan 10 09:26:42 AM UTC 2025

  System load:  0.0                Temperature:            11758.9 C
  Usage of /:   43.1% of 9.75GB    Processes:              234
  Memory usage: 5%                 Users logged in:        0
  Swap usage:   0%                 IPv4 address for ens160: 192.168.39.130


Expanded Security Maintenance for Applications is not enabled.

77 updates can be applied immediately.
To see these additional updates run: apt list --upgradable

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status


hello world
nena@nena:~$ _
```

- ให้แดงข้อคาม Hello Moon ลังจากเปิด Shell ใหม่

```
nano ~/.bashrc
/bin/bash
```



```
echo "hello moon"



nena@nena:~$ /bin/bash
hello moon
nena@nena:~$
```

2. Environment Variable

- แสดงค่าตัวแปร PATH

    echo $PATH

```
nena@nena:~$ echo $PATH
/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games:/snap/bin
nena@nena:~$
```

- เปิด Shell ใหม่ด้วยคำสั่ง /bin/bash และแดงค่าตัแปร PATH

    /bin/bash

    echo $PATH

```
nena@nena:~$ /bin/bash
hello moon
nena@nena:~$ echo $PATH
/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games:/snap/bin
nena@nena:~$
```

- เปลี่ยนค่าตัแปร PATH เป็น Hahaha และแดงค่าตัแปรแล้วลองสั่ง ls -la

    export PATH=Hahaha

    echo $PATH (แสดงค่าตัวแปร PATH เพื่อยืนยัน)

    ls -la

```
nena@nena:~$ export PATH=Hahaha
nena@nena:~$ echo $PATH
Hahaha
nena@nena:~$ ls -la
Command 'ls' is available in the following places
 * /bin/ls
 * /usr/bin/ls
The command could not be located because '/bin:/usr/bin' is not included in the PATH environment variable.
ls: command not found
nena@nena:~$
```

- ใช้คำสั่ง exit เพื่อออกจาก Shell และแดงค่าตัแปรแล้วลองสั่ง ls -la

    exit

    echo $PATH

    ls -la

```
nena@nena:~$ exit
exit
nena@nena:~$ echo $PATH
/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games:/snap/bin
nena@nena:~$ ls -la
total 44
drwxr-x--- 5 nena nena 4096 Jan 10 07:41 .
drwxr-xr-x 3 root root 4096 Jan 10 02:23 ..
-rw------- 1 nena nena  978 Jan 10 07:45 .bash_history
-rw-rw-r-- 1 nena nena   20 Jan 10 03:36 .bash_login
-rw-r--r-- 1 nena nena  220 Mar 31  2024 .bash_logout
-rw-r--r-- 1 nena nena 3792 Jan 10 03:35 .bashrc
drwx------ 2 nena nena 4096 Jan  9 19:24 .cache
drwxrwxr-x 3 nena nena 4096 Jan 10 02:41 .local
-rw-rw-r-- 1 nena nena   20 Jan 10 02:42 .nena
-rw-r--r-- 1 nena nena  807 Mar 31  2024 .profile
drwx------ 2 nena nena 4096 Jan 10 02:23 .ssh
-rw-r--r-- 1 nena nena    0 Jan 10 03:26 .sudo_as_admin_successful
nena@nena:~$
```

3. สร้างไดเร็กทอรีและไฟล์ โดยกำหนดให้ใช้รหัส นศ เป็นเบส 66070210

-ที่ Home Directory สร้างไดเร็กทอรีที่มีชื่อว่า 66070210-Dir

mkdir ~/66070210-Dir

-สร้างไฟล์ที่มีคำว่า HelloWorld ใช้ชื่อว่า 66070210-File ใน 66070210-Dir

echo "HelloWorld" > ~/66070210-Dir/66070210-File

```
nena@nena:~$ mkdir ~/66070210-Dir
nena@nena:~$ echo "helloWorld" > ~/66070210-Dir/66070210-File
nena@nena:~$ _
```

-สำเนาไฟล์ 66070210-File เป็น 66070210-File-copy ใน 66070210-Dir

Cp ~/66070210-Dir/66070210-File ~/66070210-Dir/66070210-File-copy

```
nena@nena:~$ cp ~/66070210-Dir/66070210-File ~/66070210-Dir/66070210-File-copy
nena@nena:~$
```

-ตรวจสอบผลลัพธ์โดยการสั่ง ls-laR จาก Home Directory

Ls -laR ~

```
-rw-r--r-- 1 nena nena 3792 Jan 10 03:35 .bashrc
drwx------ 2 nena nena 4096 Jan  9 19:24 .cache
drwxrwxr-x 3 nena nena 4096 Jan 10 02:41 .local
-rw-rw-r-- 1 nena nena   20 Jan 10 02:42 .nena
-rw-r--r-- 1 nena nena  807 Mar 31  2024 .profile
drwx------ 2 nena nena 4096 Jan 10 02:23 .ssh
-rw-r--r-- 1 nena nena    0 Jan 10 03:26 .sudo_as_admin_successful

/home/nena/.66070210-Dir:
total 8
drwxrwxr-x 2 nena nena 4096 Jan 10 07:51 .
drwxr-x--- 7 nena nena 4096 Jan 10 08:00 ..

/home/nena/66070210-Dir:
total 20
drwxrwxr-x 2 nena nena 4096 Jan 10 08:08 .
drwxr-x--- 7 nena nena 4096 Jan 10 08:00 ..
-rw-rw-r-- 1 nena nena   11 Jan 10 08:08 66070210-
-rw-rw-r-- 1 nena nena   11 Jan 10 08:02 66070210-File
-rw-rw-r-- 1 nena nena   11 Jan 10 08:08 66070210-File-copy

/home/nena/.cache:
total 8
drwx------ 2 nena nena 4096 Jan  9 19:24 .
drwxr-x--- 7 nena nena 4096 Jan 10 08:00 ..
-rw-r--r-- 1 nena nena    0 Jan  9 19:24 motd.legal-displayed

/home/nena/.local:
total 12
drwxrwxr-x 3 nena nena 4096 Jan 10 02:41 .
drwxr-x--- 7 nena nena 4096 Jan 10 08:00 ..
drwx------ 3 nena nena 4096 Jan 10 02:41 share

/home/nena/.local/share:
total 12
drwx------ 3 nena nena 4096 Jan 10 02:41 .
drwxrwxr-x 3 nena nena 4096 Jan 10 02:41 ..
drwx------ 2 nena nena 4096 Jan 10 02:41 nano

/home/nena/.local/share/nano:
total 8
drwx------ 2 nena nena 4096 Jan 10 02:41 .
drwx------ 3 nena nena 4096 Jan 10 02:41 ..

/home/nena/.ssh:
total 8
drwx------ 2 nena nena 4096 Jan 10 02:23 .
drwxr-x--- 7 nena nena 4096 Jan 10 08:00 ..
-rw------- 1 nena nena    0 Jan 10 02:23 authorized_keys
nena@nena:~$
```

4. ค้นหาไฟล์

-ค้นหาไฟล์หรือไดเร็กทอรีที่ชื่อ ls, passwd, log และ sudo

```
sudo find / -name "ls" -o -name "passwd" -o -name "log" -o -name
"sudo"
```

```
nena@nena:~$ sudo find / -name "ls" -o -name "passwd" -o -name "log" -o -name "sudo"
[sudo] password for nena:
/run/log
/run/sudo
/var/log
/var/lib/sudo
/dev/log
/etc/pam.d/passwd
/etc/pam.d/sudo
/etc/passwd
/usr/bin/ls
/usr/bin/passwd
/usr/bin/sudo
/usr/share/bash-completion/completions/passwd
/usr/share/bash-completion/completions/sudo
/usr/share/lintian/overrides/passwd
/usr/share/lintian/overrides/sudo
/usr/share/doc/passwd
/usr/share/doc/sudo
/usr/libexec/sudo
/usr/src/linux-headers-6.8.0-51/arch/arm/boot/dts/nxp/ls
/usr/lib/klibc/bin/ls
nena@nena:~$
```

5. จัดการ Packages

-ตรวจสอบว่ามี Packages อะไรที่ชื่อ net ขึ้นต้น Instal อยู่บ้าง

```
dpkg -l | grep "^ii" | grep "^ii net"
```

```
nena@nena:~$ dpkg -l | grep "^ii" | grep "^ii net"
nena@nena:~$
```

-ทดลองใช้คำสั่ง confg (ซึ่งอยู่ใน net-tools) ว่าใช่ได้หรือไม่

```
ifconfig
```

```
nena@nena:~$ ifconfig
Command 'ifconfig' not found, but can be installed with:
sudo apt install net-tools
```

-ทดลองเพิ่ม Packages ชื่อ net-tools แล้วลองตรวจสอบและลองสั่ง
ifconfig

```
sudo apt install net-tools
dpkg -l | grep net-tools
ifconfig
```

```
nena@nena:~$ sudo apt install net-tools
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following NEW packages will be installed:
  net-tools
0 upgraded, 1 newly installed, 0 to remove and 73 not upgraded.
Need to get 207 kB of archives.
After this operation, 1,229 kB of additional disk space will be used.
Get:1 http://ports.ubuntu.com/ubuntu-ports noble/main arm64 net-tools arm64 2.10-0.1ubuntu4 [207 kB]
Fetched 207 kB in 3s (71.7 kB/s)
Selecting previously unselected package net-tools.
(Reading database ... 84780 files and directories currently installed.)
Preparing to unpack .../net-tools_2.10-0.1ubuntu4_arm64.deb ...
Unpacking net-tools (2.10-0.1ubuntu4) ...
Setting up net-tools (2.10-0.1ubuntu4) ...
Processing triggers for man-db (2.12.0-4build2) ...
Scanning processes...
Scanning linux images...

Running kernel seems to be up-to-date.

No services need to be restarted.

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
nena@nena:~$
nena@nena:~$ dpkg -l | grep net-tools
ii  net-tools                        2.10-0.1ubuntu4                 arm64        NET-3 networl
nena@nena:~$ ifconfig
ens160: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 192.168.39.130  netmask 255.255.255.0  broadcast 192.168.39.255
        inet6 fe80::20c:29ff:fe71:1ad9  prefixlen 64  scopeid 0x20<link>
        ether 00:0c:29:71:1a:d9  txqueuelen 1000  (Ethernet)
        RX packets 3897  bytes 4865900 (4.8 MB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 1124  bytes 85224 (85.2 KB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0
        device interrupt 45  memory 0x3fe00000-3fe20000

lo: flags=73<UP,LOOPBACK,RUNNING>  mtu 65536
        inet 127.0.0.1  netmask 255.0.0.0
        inet6 ::1  prefixlen 128  scopeid 0x10<host>
        loop  txqueuelen 1000  (Local Loopback)
        RX packets 220  bytes 19183 (19.1 KB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 220  bytes 19183 (19.1 KB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

nena@nena:~$
```

-ทดลองลบ Packages ชื่อ net-tools แล้วลองตรวจสอบและลองสั่ง

ifconfig

sudo apt remove net-tools
dpkg -l | grep net-tools
ifconfig

66070210 Sukwan Karoon

```
nena@nena:~$ sudo apt remove net-tools
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following packages will be REMOVED:
  net-tools
0 upgraded, 0 newly installed, 1 to remove and 73 not upgraded.
After this operation, 1,229 kB disk space will be freed.
Do you want to continue? [Y/n] dpkg -l |grep net-tools
Abort.
nena@nena:~$ ifconfig
ens160: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 192.168.39.130  netmask 255.255.255.0  broadcast 192.168.39.255
        inet6 fe80::20c:29ff:fe71:1ad9  prefixlen 64  scopeid 0x20<link>
        ether 00:0c:29:71:1a:d9  txqueuelen 1000  (Ethernet)
        RX packets 3897  bytes 4865900 (4.8 MB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 1124  bytes 85224 (85.2 KB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0
        device interrupt 45  memory 0x3fe00000-3fe20000

lo: flags=73<UP,LOOPBACK,RUNNING>  mtu 65536
        inet 127.0.0.1  netmask 255.0.0.0
        inet6 ::1  prefixlen 128  scopeid 0x10<host>
        loop  txqueuelen 1000  (Local Loopback)
        RX packets 220  bytes 19183 (19.1 KB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 220  bytes 19183 (19.1 KB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

nena@nena:~$
```

-อัพเดท package index files และอัพเกรดระบบ

    sudo apt update
    sudo apt upgrade

```
nena@nena:~$ sudo apt update
Hit:1 http://ports.ubuntu.com/ubuntu-ports noble InRelease
Hit:2 http://ports.ubuntu.com/ubuntu-ports noble-updates InRelease
Hit:3 http://ports.ubuntu.com/ubuntu-ports noble-backports InRelease
Hit:4 http://ports.ubuntu.com/ubuntu-ports noble-security InRelease
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
2 packages can be upgraded. Run 'apt list --upgradable' to see them.
nena@nena:~$ sudo apt upgrade
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Calculating upgrade... Done
The following upgrades have been deferred due to phasing:
  python3-distupgrade ubuntu-release-upgrader-core
0 upgraded, 0 newly installed, 0 to remove and 2 not upgraded.
nena@nena:~$
```

6. ใช้คำสั่งต่อไปนี้กับไฟล์หรือไดเร็กทอรีที่ชื่อ passwd ที่หาเจอในข้อ 4

-file แสดงชนิดของไฟล์

file /etc/passwd

```
nena@nena:~$ file /etc/passwd
/etc/passwd: ASCII text
nena@nena:~$
```

- wc แสดงจำนวนบรรทัดของแต่ละไฟล์ (เฉพาะ Text File)

wc -l /etc/passwd

```
nena@nena:~$ wc -l /etc/passwd
31 /etc/passwd
nena@nena:~$
```

7. ใช้คำสั่งต่อไปนี้กับไฟล์ syslog

-head, tail, sort

head /var/log/syslog

```
nena@nena:~$ head /var/log/syslog
2025-01-10T02:23:38.448017+00:00 nena systemd-modules-load[439]: Inserted module 'dm_multipath'
2025-01-10T02:23:38.448519+00:00 nena lvm[424]:   1 logical volume(s) in volume group "ubuntu-vg" monitored
2025-01-10T02:23:38.448527+00:00 nena systemd[1]: Mounted dev-hugepages.mount - Huge Pages File System.
2025-01-10T02:23:38.448529+00:00 nena systemd[1]: Mounted dev-mqueue.mount - POSIX Message Queue File System.
2025-01-10T02:23:38.448531+00:00 nena systemd[1]: Mounted sys-kernel-debug.mount - Kernel Debug File System.
2025-01-10T02:23:38.448532+00:00 nena systemd[1]: Mounted sys-kernel-tracing.mount - Kernel Trace File System.
2025-01-10T02:23:38.448660+00:00 nena systemd[1]: Finished keyboard-setup.service - Set the console keyboard layout.
2025-01-10T02:23:38.448662+00:00 nena systemd[1]: Finished kmod-static-nodes.service - Create List of Static Device Nodes.
2025-01-10T02:23:38.448665+00:00 nena systemd[1]: Finished lvm2-monitor.service - Monitoring of LVM2 mirrors, snapshots etc. using dmeventd or progress polling.
2025-01-10T02:23:38.448667+00:00 nena systemd[1]: modprobe@configfs.service: Deactivated successfully.
nena@nena:~$
```

tail /var/log/syslog

```
nena@nena:~$ tail /var/log/syslog
2025-01-10T08:53:36.694971+00:00 nena systemd[1]: Starting esm-cache.service - Update the local ESM caches...
2025-01-10T08:53:36.756623+00:00 nena systemd[1]: apt-news.service: Deactivated successfully.
2025-01-10T08:53:36.756727+00:00 nena systemd[1]: Finished apt-news.service - Update APT News.
2025-01-10T08:53:36.992069+00:00 nena systemd-resolved[15042]: Using degraded feature set UDP instead of UDP+EDNS0 for DNS server 192.168.39.2.
2025-01-10T08:53:39.515599+00:00 nena systemd[1]: esm-cache.service: Deactivated successfully.
2025-01-10T08:53:39.515656+00:00 nena systemd[1]: Finished esm-cache.service - Update the local ESM caches.
2025-01-10T08:55:01.982507+00:00 nena CRON[15400]: (root) CMD (command -v debian-sa1 > /dev/null && debian-sa1 1 1)
2025-01-10T08:44.289612+00:00 nena PackageKit: daemon quit
2025-01-10T08:44.296099+00:00 nena systemd[1]: packagekit.service: Deactivated successfully.
2025-01-10T09:05:02.004727+00:00 nena CRON[15418]: (root) CMD (command -v debian-sa1 > /dev/null && debian-sa1 1 1)
nena@nena:~$
```

sort /var/log/syslog

```
0.0': not supported by any plugin
2025-01-10T09:26:31.332635+00:00 nena snapd[882]: daemon.go:519: gracefully waiting for running hooks
2025-01-10T09:26:31.332856+00:00 nena snapd[882]: daemon.go:521: done waiting for running hooks
2025-01-10T09:26:34.334931+00:00 nena snapd[882]: overlord.go:515: Released state lock file
2025-01-10T09:26:34.335166+00:00 nena snapd[882]: daemon stop requested to wait for socket activation
2025-01-10T09:26:34.338225+00:00 nena systemd[1]: snapd.service: Deactivated successfully.
2025-01-10T09:26:42.869162+00:00 nena systemd[1]: Created slice user-1000.slice - User Slice of UID 1000.
2025-01-10T09:26:42.870548+00:00 nena systemd[1]: Starting user-runtime-dir@1000.service - User Runtime Directory /run/user/1000...
2025-01-10T09:26:42.878777+00:00 nena systemd[1]: Finished user-runtime-dir@1000.service - User Runtime Directory /run/user/1000.
2025-01-10T09:26:42.886805+00:00 nena systemd[1]: Starting user@1000.service - User Manager for UID 1000...
2025-01-10T09:26:42.939604+00:00 nena systemd[1269]: Queued start job for default target default.target.
2025-01-10T09:26:42.945430+00:00 nena kernel: systemd-journald[413]: /var/log/journal/6d5855f483374898ae84c73183e8f829/user-1000.journal: Journal file uses a different sequence number ID, rotating.
2025-01-10T09:26:42.955271+00:00 nena systemd[1269]: Created slice app.slice - User Application Slice.
2025-01-10T09:26:42.955463+00:00 nena systemd[1269]: Started launchpadlib-cache-clean.timer - Clean up old files in the Launchpadlib cache.
2025-01-10T09:26:42.955521+00:00 nena systemd[1269]: Reached target paths.target - Paths.
2025-01-10T09:26:42.955701+00:00 nena systemd[1269]: Reached target timers.target - Timers.
2025-01-10T09:26:42.955723+00:00 nena systemd[1269]: Starting dbus.socket - D-Bus User Message Bus Socket...
2025-01-10T09:26:42.955814+00:00 nena systemd[1269]: Listening on dirmngr.socket - GnuPG network certificate management daemon.
2025-01-10T09:26:42.955828+00:00 nena systemd[1269]: Listening on gpg-agent-browser.socket - GnuPG cryptographic agent and passphrase cache (access for web browsers).
2025-01-10T09:26:42.955844+00:00 nena systemd[1269]: Listening on gpg-agent-extra.socket - GnuPG cryptographic agent and passphrase cache (restricted).
2025-01-10T09:26:42.955856+00:00 nena systemd[1269]: Starting gpg-agent-ssh.socket - GnuPG cryptographic agent (ssh-agent emulation)...
2025-01-10T09:26:42.955870+00:00 nena systemd[1269]: Listening on gpg-agent.socket - GnuPG cryptographic agent and passphrase cache.
2025-01-10T09:26:42.955882+00:00 nena systemd[1269]: Listening on keyboxd.socket - GnuPG public key management service.
2025-01-10T09:26:42.955894+00:00 nena systemd[1269]: Listening on pk-debconf-helper.socket - debconf communication socket.
2025-01-10T09:26:42.955909+00:00 nena systemd[1269]: Listening on snapd.session-agent.socket - REST API socket for snapd user session agent.
2025-01-10T09:26:42.955925+00:00 nena systemd[1269]: Listening on dbus.socket - D-Bus User Message Bus Socket.
2025-01-10T09:26:42.960925+00:00 nena systemd[1269]: Listening on gpg-agent-ssh.socket - GnuPG cryptographic agent (ssh-agent emulation).
2025-01-10T09:26:42.960970+00:00 nena systemd[1269]: Reached target sockets.target - Sockets.
2025-01-10T09:26:42.960986+00:00 nena systemd[1269]: Reached target basic.target - Basic System.
2025-01-10T09:26:42.961020+00:00 nena systemd[1]: Started user@1000.service - User Manager for UID 1000.
2025-01-10T09:26:42.961372+00:00 nena systemd[1269]: Reached target default.target - Main User Target.
2025-01-10T09:26:42.961391+00:00 nena systemd[1269]: Startup finished in 71ms.
2025-01-10T09:26:42.961587+00:00 nena systemd[1]: Started session-1.scope - Session 1 of User nena.
2025-01-10T09:26:55.729953+00:00 nena systemd[1]: systemd-fsckd.service: Deactivated successfully.
2025-01-10T09:26:56.397771+00:00 nena systemd[1]: systemd-timedated.service: Deactivated successfully.
```

-แสดง Record 10 อันดับเก่าสุด

head -n 10 /var/log/syslog

```
nena@nena:~$ head -n 10 /var/log/syslog
2025-01-10T02:23:38.448017+00:00 nena systemd-modules-load[439]: Inserted module 'dm_multipath'
2025-01-10T02:23:38.448519+00:00 nena lvm[424]:   1 logical volume(s) in volume group "ubuntu-vg" monitored
2025-01-10T02:23:38.448527+00:00 nena systemd[1]: Mounted dev-hugepages.mount - Huge Pages File System.
2025-01-10T02:23:38.448529+00:00 nena systemd[1]: Mounted dev-mqueue.mount - POSIX Message Queue File System.
2025-01-10T02:23:38.448531+00:00 nena systemd[1]: Mounted sys-kernel-debug.mount - Kernel Debug File System.
2025-01-10T02:23:38.448532+00:00 nena systemd[1]: Mounted sys-kernel-tracing.mount - Kernel Trace File System.
2025-01-10T02:23:38.448660+00:00 nena systemd[1]: Finished keyboard-setup.service - Set the console keyboard layout.
2025-01-10T02:23:38.448662+00:00 nena systemd[1]: Finished kmod-static-nodes.service - Create List of Static Device Nodes.
2025-01-10T02:23:38.448665+00:00 nena systemd[1]: Finished lvm2-monitor.service - Monitoring of LVM2 mirrors, snapshots etc. using dmeventd or progress polling.
2025-01-10T02:23:38.448667+00:00 nena systemd[1]: modprobe@configfs.service: Deactivated successfully.
nena@nena:~$
```

-แสดง Record 10 อันดับใหม่สุด

tail -n 10 /var/log/syslog

```
nena@nena:~$ tail -n 10 /var/log/syslog
2025-01-10T08:53:36.756623+00:00 nena systemd[1]: apt-news.service: Deactivated successfully.
2025-01-10T08:53:36.756727+00:00 nena systemd[1]: Finished apt-news.service - Update APT News.
2025-01-10T08:53:36.992069+00:00 nena systemd-resolved[15042]: Using degraded feature set UDP instead of UDP+EDNS0 for DNS server 192.168.39.2.
2025-01-10T08:53:39.515599+00:00 nena systemd[1]: esm-cache.service: Deactivated successfully.
2025-01-10T08:53:39.515656+00:00 nena systemd[1]: Finished esm-cache.service - Update the local ESM caches.
2025-01-10T08:55:01.982507+00:00 nena CRON[15400]: (root) CMD (command -v debian-sa1 > /dev/null && debian-sa1 1 1)
2025-01-10T08:58:44.289612+00:00 nena PackageKit: daemon quit
2025-01-10T08:58:44.296099+00:00 nena systemd[1]: packagekit.service: Deactivated successfully.
2025-01-10T09:05:02.004727+00:00 nena CRON[15418]: (root) CMD (command -v debian-sa1 > /dev/null && debian-sa1 1 1)
2025-01-10T09:15:01.021600+00:00 nena CRON[15435]: (root) CMD (command -v debian-sa1 > /dev/null && debian-sa1 1 1)
nena@nena:~$
```

8. แสดงผลการค้นหาไฟล์หรือไดเร็กทอรีที่มีคำว่า log อยู่ในชื่อ

-แสดง 10 อันดับแรก เรียงตามตัวอักษร

find / -name "*log*" 2>/dev/null (ซ่อนข้อความแสดงข้อผิดพลาด (เช่น ไฟล์ที่ไม่มีสิทธิ์เข้าถึง))| sort | head -n 10

```
nena@nena:~$ find / -name "*log*" 2>/dev/null | sort | head -n 10
/dev/log
/etc/apparmor.d/local/usr.sbin.rsyslogd
/etc/apparmor.d/rsyslog.d
/etc/apparmor.d/usr.sbin.rsyslogd
/etc/cloud/cloud.cfg.d/05_logging.cfg
/etc/cron.daily/logrotate
/etc/init.d/plymouth-log
/etc/logcheck
/etc/logcheck/ignore.d.server/rsyslog
/etc/login.defs
nena@nena:~$
```

-แสดง 10 อันดับสุดท้าย เรียงตามตัวอักษร

find / -name "*log*" 2>/dev/null (ซ่อนข้อความแสดงข้อผิดพลาด (เช่น ไฟล์ที่ไม่มีสิทธิ์เข้าถึง)) | sort | tail -n 10

```
nena@nena:~$ find / -name "*log*" 2>/dev/null | sort | tail -n 10
/var/log/syslog
/var/log/ubuntu-advantage-apt-hook.log
/var/log/unattended-upgrades/unattended-upgrades-dpkg.log
/var/log/unattended-upgrades/unattended-upgrades.log
/var/log/unattended-upgrades/unattended-upgrades-shutdown.log
/var/log/vmware-vmsvc-root.1.log
/var/log/vmware-vmsvc-root.log
/var/log/vmware-vmtoolsd-root.log
/var/spool/rsyslog
/var/tmp/systemd-private-d29c3bcf7e9b42289defd635e5b73da7-systemd-logind.service-Yi7DrI
nena@nena:~$
```