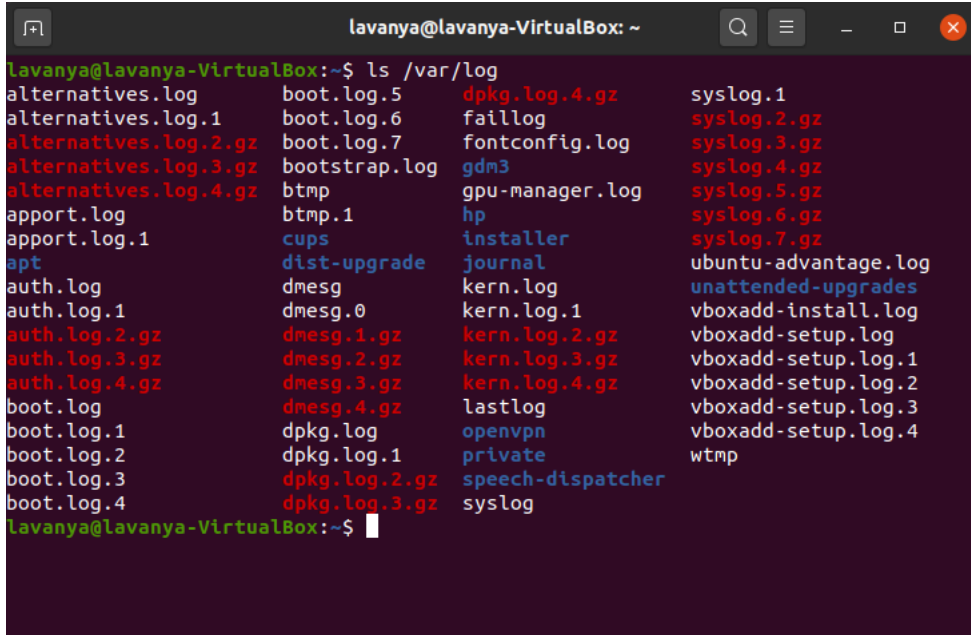


## ASSIGNMENT 2

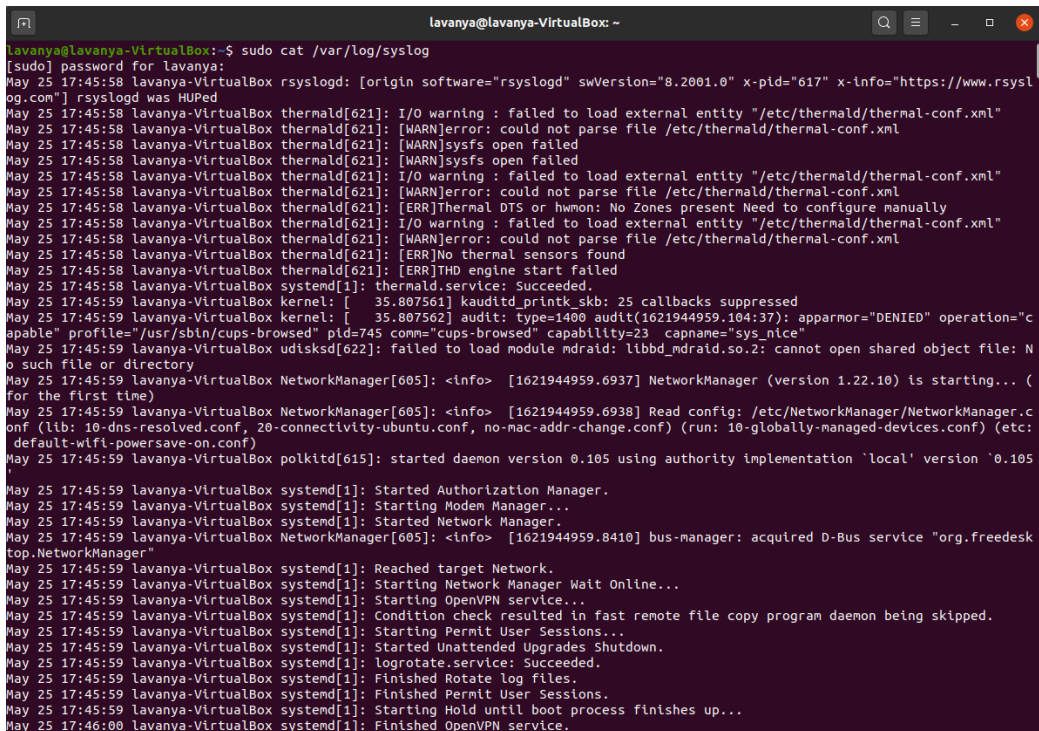
### Using Logs to Help You Track Down an Issue In Linux

#### 1. View log files



```
lavanya@lavanya-VirtualBox: ~  
lavanya@lavanya-VirtualBox:~$ ls /var/log  
alternatives.log      boot.log.5           dpkg.log.4.gz        syslog.1  
alternatives.log.1    boot.log.6           faillog              syslog.2.gz  
alternatives.log.2.gz boot.log.7           fontconfig.log       syslog.3.gz  
alternatives.log.3.gz bootstrap.log        gdm3                 syslog.4.gz  
alternatives.log.4.gz btmtp                gpu-manager.log      syslog.5.gz  
apport.log            btmtmp.1            hp                   syslog.6.gz  
apport.log.1          cups                installer            syslog.7.gz  
apt                   dist-upgrade        journal              ubuntu-advantage.log  
auth.log              dmesg               kern.log             unattended-upgrades  
auth.log.1            dmesg.0             kern.log.1           vboxadd-install.log  
auth.log.2.gz         dmesg.1.gz          kern.log.2.gz        vboxadd-setup.log  
auth.log.3.gz         dmesg.2.gz          kern.log.3.gz        vboxadd-setup.log.1  
auth.log.4.gz         dmesg.3.gz          kern.log.4.gz        vboxadd-setup.log.2  
boot.log              dmesg.4.gz          lastlog              vboxadd-setup.log.3  
boot.log.1            dpkg.log             openvpn              vboxadd-setup.log.4  
boot.log.2            dpkg.log.1           private              wtmp  
boot.log.3            dpkg.log.2.gz        speech-dispatcher  
boot.log.4            dpkg.log.3.gz        syslog
```

#### 2. Track down all the issues



```
lavanya@lavanya-VirtualBox: ~  
lavanya@lavanya-VirtualBox:~$ sudo cat /var/log/syslog  
[sudo] password for lavanya:  
May 25 17:45:58 lavanya-VirtualBox rsyslogd: [origin software="rsyslogd" swVersion="8.2001.0" x-pid="617" x-info="https://www.rsyslog.com"] rsyslogd was HUPed  
May 25 17:45:58 lavanya-VirtualBox thermald[621]: I/O warning : failed to load external entity "/etc/thermald/thermal-conf.xml"  
May 25 17:45:58 lavanya-VirtualBox thermald[621]: [WARN]error: could not parse file /etc/thermald/thermal-conf.xml  
May 25 17:45:58 lavanya-VirtualBox thermald[621]: [WARN]sysfs open failed  
May 25 17:45:58 lavanya-VirtualBox thermald[621]: [WARN]sysfs open failed  
May 25 17:45:58 lavanya-VirtualBox thermald[621]: I/O warning : failed to load external entity "/etc/thermald/thermal-conf.xml"  
May 25 17:45:58 lavanya-VirtualBox thermald[621]: [WARN]error: could not parse file /etc/thermald/thermal-conf.xml  
May 25 17:45:58 lavanya-VirtualBox thermald[621]: [ERR]Thermal DTS or hwmon: No Zones present Need to configure manually  
May 25 17:45:58 lavanya-VirtualBox thermald[621]: I/O warning : failed to load external entity "/etc/thermald/thermal-conf.xml"  
May 25 17:45:58 lavanya-VirtualBox thermald[621]: [WARN]error: could not parse file /etc/thermald/thermal-conf.xml  
May 25 17:45:58 lavanya-VirtualBox thermald[621]: [ERR]No thermal sensors found  
May 25 17:45:58 lavanya-VirtualBox thermald[621]: [ERR]THD engine start failed  
May 25 17:45:58 lavanya-VirtualBox systemd[1]: thermald.service: Succeeded.  
May 25 17:45:59 lavanya-VirtualBox kernel: [ 35.807561] kauditd_printk_skb: 25 callbacks suppressed  
May 25 17:45:59 lavanya-VirtualBox kernel: [ 35.807562] audit: type=1400 audit(1621944959.104:37): apparmor="DENIED" operation="c  
apable" profile="/usr/sbin/cups-browsed" pid=745 comm="cups-browsed" capability=23 capname="sys_nice"  
May 25 17:45:59 lavanya-VirtualBox udisksd[622]: failed to load module mdraid: libbd_mdraid.so.2: cannot open shared object file: N  
o such file or directory  
May 25 17:45:59 lavanya-VirtualBox NetworkManager[605]: <Info> [1621944959.6937] NetworkManager (version 1.22.10) is starting... (for the first time)  
May 25 17:45:59 lavanya-VirtualBox NetworkManager[605]: <Info> [1621944959.6938] Read config: /etc/NetworkManager/NetworkManager.conf (lib: 10-dns-resolved.conf, 20-connectivity-ubuntu.conf, no-mac-addr-change.conf) (run: 10-globally-managed-devices.conf) (etc: default-wifi-powersave-on.conf)  
May 25 17:45:59 lavanya-VirtualBox polkitd[615]: started daemon version 0.105 using authority implementation 'local' version '0.105'  
May 25 17:45:59 lavanya-VirtualBox systemd[1]: Started Authorization Manager.  
May 25 17:45:59 lavanya-VirtualBox systemd[1]: Starting Modem Manager...  
May 25 17:45:59 lavanya-VirtualBox systemd[1]: Started Network Manager.  
May 25 17:45:59 lavanya-VirtualBox NetworkManager[605]: <Info> [1621944959.8410] bus-manager: acquired D-Bus service "org.freedesktop.NetworkManager"  
May 25 17:45:59 lavanya-VirtualBox systemd[1]: Reached target Network.  
May 25 17:45:59 lavanya-VirtualBox systemd[1]: Starting Network Manager Wait Online...  
May 25 17:45:59 lavanya-VirtualBox systemd[1]: Starting OpenVPN service...  
May 25 17:45:59 lavanya-VirtualBox systemd[1]: Condition check resulted in fast remote file copy program daemon being skipped.  
May 25 17:45:59 lavanya-VirtualBox systemd[1]: Starting Permit User Sessions...  
May 25 17:45:59 lavanya-VirtualBox systemd[1]: Started Unattended Upgrades Shutdown.  
May 25 17:45:59 lavanya-VirtualBox systemd[1]: logrotate.service: Succeeded.  
May 25 17:45:59 lavanya-VirtualBox systemd[1]: Finished Rotate log files.  
May 25 17:45:59 lavanya-VirtualBox systemd[1]: Finished Permit User Sessions.  
May 25 17:45:59 lavanya-VirtualBox systemd[1]: Starting Hold until boot process finishes up...  
May 25 17:46:00 lavanya-VirtualBox systemd[1]: Finished OpenVPN service.
```

### 3. Log results that have the word error

```

lavanya@lavanya-VirtualBox ~$ less /var/log/syslog | grep error
May 25 17:45:58 lavanya-VirtualBox thermal[621]: [WARN]error: could not parse file /etc/thermald/thermal-conf.xml
May 25 17:45:58 lavanya-VirtualBox thermal[621]: [WARN]error: could not parse file /etc/thermald/thermal-conf.xml
May 25 17:45:58 lavanya-VirtualBox thermal[621]: [WARN]error: could not parse file /etc/thermald/thermal-conf.xml
May 25 17:46:14 lavanya-VirtualBox systemd-resolved[572]: Server returned error NXDOMAIN, mitigating potential DNS violation DVE-2018-0001, retrying transaction with reduced feature level UDP.
May 25 17:46:15 lavanya-VirtualBox systemd-resolved[572]: Server returned error NXDOMAIN, mitigating potential DNS violation DVE-2018-0001, retrying transaction with reduced feature level UDP.
May 25 17:46:44 lavanya-VirtualBox gnome-session-binary[1348]: WARNING: Falling back to non-systemd startup procedure due to error: GError:own.ChildExited: Process org.freedesktop.systemd1 exited with status 1
May 25 17:46:44 lavanya-VirtualBox gnome-session-binary[1348]: WARNING: Falling back to non-systemd startup procedure due to error: GDBus.Error:org.freedesktop.DBus.Error.Spawn.ChildExited: Process org.freedesktop.systemd1 exited with status 1
May 25 17:47:03 lavanya-VirtualBox org.gnome.shell.desktop[1871]: : Internal error: Could not resolve keysum Invalid
May 25 17:48:29 lavanya-VirtualBox /usr/lib/gdm3/gdm-x-session[2811]: %011(WM) warning, (EE) error, (NI) not implemented, (??) unknown.
May 25 17:48:59 lavanya-VirtualBox systemd-resolved[572]: Server returned error NXDOMAIN, mitigating potential DNS violation DVE-2018-0001, retrying transaction with reduced feature level UDP.
May 25 17:48:59 lavanya-VirtualBox systemd-resolved[572]: Server returned error NXDOMAIN, mitigating potential DNS violation DVE-2018-0001, retrying transaction with reduced feature level UDP.
May 25 17:50:00 lavanya-VirtualBox gnome-software[3534]: not handling error failed for action refresh: E Failed to fetch http://in.archive.ubuntu.com/ubuntu/dists/focal/inRelease #012E: Failed to fetch http://in.archive.ubuntu.com/ubuntu/dists/focal/backports/inRelease #012E: Failed to fetch http://security.ubuntu.com/ubuntu/dists/focal/securityInRelease #012E: Some index files failed to download. They have been ignored, or old ones used instead.
May 25 17:51:07 lavanya-VirtualBox gnome-software[3534]: not GSPlugin error snapd-error-quark1: Failed to write to snapd: Operation was cancelled
May 25 17:51:07 lavanya-VirtualBox gnome-software[3534]: not GSPlugin error snapd-error-quark1: Failed to write to snapd: Operation was cancelled
May 25 17:51:07 lavanya-VirtualBox gnome-software[3534]: not handling error failed for action refine: Failed to write to snapd: Operation was cancelled
May 25 17:51:07 lavanya-VirtualBox gnome-software[3534]: not GSPlugin error snapd-error-quark1: Failed to write to snapd: Operation was cancelled
May 25 17:51:07 lavanya-VirtualBox gnome-software[3534]: not handling error failed for action refine: Failed to write to snapd: Operation was cancelled
May 25 17:51:07 lavanya-VirtualBox gnome-software[3534]: not GSPlugin error snapd-error-quark1: Failed to write to snapd: Operation was cancelled
May 25 17:51:07 lavanya-VirtualBox gnome-software[3534]: not handling error failed for action refine: Failed to write to snapd: Operation was cancelled
May 25 17:51:07 lavanya-VirtualBox gnome-software[3534]: not GSPlugin error snapd-error-quark1: Failed to write to snapd: Operation was cancelled
May 25 17:51:07 lavanya-VirtualBox gnome-software[3534]: not handling error failed for action refine: Failed to write to snapd: Operation was cancelled
May 25 17:51:07 lavanya-VirtualBox gnome-software[3534]: not GSPlugin error snapd-error-quark1: Failed to write to snapd: Operation was cancelled
May 25 17:51:07 lavanya-VirtualBox gnome-software[3534]: not handling error failed for action refine: Failed to write to snapd: Operation was cancelled

```

#### 4. Tail -f the syslog file and keep it in an open window

```
lavanya@lavanya-VirtualBox:~$ tail -f /var/log/syslog
May 25 18:00:02 lavanya-VirtualBox dbus-daemon[2745]: [session uid=1000 pid=2745] Successfully activated service 'org.gnome.Characters.BackgroundService'
May 25 18:00:03 lavanya-VirtualBox dbus-daemon[2745]: [session uid=1000 pid=2745] Successfully activated service 'org.gnome.Nautilus'
May 25 18:00:03 lavanya-VirtualBox dbus-daemon[2745]: [session uid=1000 pid=2745] Successfully activated service 'org.gnome.Calculator.SearchProvider'
May 25 18:00:03 lavanya-VirtualBox gnome-calculator[5262]: search-provider.vala:140: Failed to spawn Calculator: Child process killed by signal 9
May 25 18:00:03 lavanya-VirtualBox dbus-daemon[2745]: [session uid=1000 pid=2745] Successfully activated service 'org.gnome.Terminal'
May 25 18:00:03 lavanya-VirtualBox systemd[2724]: Started GNOME Terminal Server.
May 25 18:00:03 lavanya-VirtualBox systemd[2724]: Started Application launched by gnome-shell.
May 25 18:00:04 lavanya-VirtualBox systemd[2724]: Started VTE child process 5316 launched by gnome-terminal-server process 5265.
May 25 18:00:04 lavanya-VirtualBox systemd[2724]: gnome-launched-org.gnome.Terminal.desktop-5301.scope: Succeeded.
May 25 18:00:08 lavanya-VirtualBox snapd[1349]: 2021/05/25 18:00:08 Unsolicited response received on idle HTTP channel starting with "HTTP/1.0 408 Request Time-out\r\nCache-Control: no-cache\r\nConnection: close\r\nContent-Type: text/html\r\n\r\n<html><body><h1>408 Request Time-out</h1>\nYour browser didn't send a complete request in time.\n</body></html>\n"; err=<nil>
May 25 18:00:33 lavanya-VirtualBox systemd[1]: Starting Cleanup of Temporary Directories...
May 25 18:00:33 lavanya-VirtualBox systemd[1]: systemd-tmpfiles-clean.service: Succeeded.
May 25 18:00:33 lavanya-VirtualBox systemd[1]: Finished Cleanup of Temporary Directories.
May 25 18:00:50 lavanya-VirtualBox anacron[599]: Job 'cron.monthly' started
May 25 18:00:50 lavanya-VirtualBox anacron[5353]: Updated timestamp for job 'cron.monthly' to 2021-05-25
May 25 18:00:50 lavanya-VirtualBox anacron[599]: Job 'cron.monthly' terminated
May 25 18:00:50 lavanya-VirtualBox anacron[599]: Normal exit (3 jobs run)
May 25 18:00:50 lavanya-VirtualBox systemd[1]: anacron.service: Succeeded.
```