Lab 3

1. create users called itiuser1, itiuser2

```
vboxuser@Ubuntuu:~$ sudo useradd -m itiuser1
[sudo] password for vboxuser:
vboxuser@Ubuntuu:~$ sudo useradd -m itiuser2
vboxuser@Ubuntuu:~$ ls /home
itiuser1  itiuser2  vboxuser
```

2. create group called os_team

```
vboxuser@Ubuntuu:~$ sudo groupadd os_team
```

3. create directory called os_team_workspace

```
vboxuser@Ubuntuu:~$ mkdir /home/vboxuser/Desktop/os_team_workspace
```

4. assign os_team group to the directory os_team_workspaceand change mode to setgid (hint use sudo)

```
vboxuser@Ubuntuu:~$ sudo chgrp os_team /home/vboxuser/Desktop/os_team_workspace
vboxuser@Ubuntuu:~$ ls -ld /home/vboxuser/Desktop/os_team_workspace
drwxrwxr-x 2 vboxuser os_team 4096 Feb 21 20:39 /home/vboxuser/Desktop/os_team_
workspace
vboxuser@Ubuntuu:~$ chmod g+s /home/vboxuser/Desktop/os_team_workspace
```

5. add users itituser1 and itituser2 to os_teamgroup

```
vboxuser@Ubuntuu:~$ chmod g+s /home/vboxuser/Desktop/os_team_workspace
vboxuser@Ubuntuu:~$ sudo usermod -a -G os_team itiuser1
vboxuser@Ubuntuu:~$ sudo usermod -a -G os_team itiuser2
```

```
vboxuser@Ubuntuu:~$ groups itiuser1
itiuser1 : itiuser1 os_team
vboxuser@Ubuntuu:~$ groups itiuser2
itiuser2 : itiuser2 os_team
```

6. create directory mydir1 using itiuser1 and mydir2 using itiuser2

```
$ cd/tmp
sh: 5: cd/tmp: not found
$ cd /tmp
$ mkdir os_team_workspace
$ cd os_team_workspace
$ sudo mkdir mydir1
[sudo] password for itiuser1:
itiuser1 is not in the sudoers file.  This incident will be reported.
$ mkdir mydir1
$ ls
mydir1
```

```
$ mkdir mydir2
$ ls -l
total 8
drwxrwxr-x 2 itiuser1 itiuser1 4096 Feb 21 21:31 mydir1
drwxrwxr-x 2 itiuser2 itiuser2 4096 Feb 21 22:19 mydir2
```

7. list directory permissions and send screenshot.

```
$ ls -l
total 8
drwxrwxr-x 2 itiuser1 itiuser1 4096 Feb 21 21:31 mydir1
drwxrwxr-x 2 itiuser2 itiuser2 4096 Feb 21 22:19 mydir2
$ exit
```

8. send screenshot of all processes in tree mod

```
vboxuser@Ubuntuu:/$ pstree
systemd─┬─ModemManager───2*[{ModemManager}]
        ├─NetworkManager───2*[{NetworkManager}]
        ├─accounts-daemon───2*[{accounts-daemon}]
        ├─acpid
        ├─apache2───2*[apache2───26*[{apache2}]]
        ├─avahi-daemon───avahi-daemon
        ├─colord───2*[{colord}]
        ├─cron
        ├─cups-browsed───2*[{cups-browsed}]
        ├─cupsd
        ├─dbus-daemon
        ├─gdm3─┬─gdm-session-wor─┬─gdm-wayland-ses─┬─gnome-session-b───2*[{gno+
        │      │                 │                 └─2*[{gdm-wayland-ses}]
        │      │                 └─2*[{gdm-session-wor}]
        │      └─2*[{gdm3}]
        ├─gnome-keyring-d───3*[{gnome-keyring-d}]
        ├─2*[kerneloops]
        ├─networkd-dispat
        ├─packagekitd───2*[{packagekitd}]
        ├─polkitd───2*[{polkitd}]
        ├─power-profiles-───2*[{power-profiles-}]
        ├─rsyslogd───3*[{rsyslogd}]
        ├─rtkit-daemon───2*[{rtkit-daemon}]
        ├─snapd───9*[{snapd}]
        ├─switcheroo-cont───2*[{switcheroo-cont}]
        ├─systemd─┬─(sd-pam)
        │         ├─at-spi2-registr───2*[{at-spi2-registr}]
```

```
        ├─at-spi2-registr──2*[{at-spi2-registr}]
        ├─dbus-daemon
        ├─dconf-service──2*[{dconf-service}]
        ├─evolution-addre──5*[{evolution-addre}]
        ├─evolution-calen──8*[{evolution-calen}]
        ├─evolution-sourc──3*[{evolution-sourc}]
        ├─2*[gjs──4*[{gjs}]]
        ├─gnome-calendar──5*[{gnome-calendar}]
        ├─gnome-session-b──┬─at-spi-bus-laun──┬─dbus-daemon
        │                  │                  └─3*[{at-spi-bus-laun}]
        │                  ├─evolution-alarm──5*[{evolution-alarm}]
        │                  ├─gsd-disk-utilit──2*[{gsd-disk-utilit}]
        │                  ├─update-notifier──3*[{update-notifier}]
        │                  └─3*[{gnome-session-b}]
        ├─gnome-session-c──{gnome-session-c}
        ├─gnome-shell──┬─gjs──5*[{gjs}]
        │              └─8*[{gnome-shell}]
        ├─gnome-shell-cal──5*[{gnome-shell-cal}]
        ├─gnome-terminal-──┬─bash──su──sh──su──bash──pstree
        │                  └─3*[{gnome-terminal-}]
        ├─goa-daemon──3*[{goa-daemon}]
        ├─goa-identity-se──2*[{goa-identity-se}]
        ├─gsd-a11y-settin──3*[{gsd-a11y-settin}]
        ├─gsd-color──3*[{gsd-color}]
        ├─gsd-datetime──3*[{gsd-datetime}]
        ├─gsd-housekeepin──3*[{gsd-housekeepin}]
        ├─gsd-keyboard──3*[{gsd-keyboard}]
        ├─gsd-media-keys──3*[{gsd-media-keys}]
        ├─gsd-power──3*[{gsd-power}]
```

```
        ├─gsd-power──3*[{gsd-power}]
        ├─gsd-print-notif──2*[{gsd-print-notif}]
        ├─gsd-printer──2*[{gsd-printer}]
        ├─gsd-rfkill──2*[{gsd-rfkill}]
        ├─gsd-screensaver──2*[{gsd-screensaver}]
        ├─gsd-sharing──3*[{gsd-sharing}]
        ├─gsd-smartcard──3*[{gsd-smartcard}]
        ├─gsd-sound──3*[{gsd-sound}]
        ├─gsd-wacom──3*[{gsd-wacom}]
        ├─gvfs-afc-volume──3*[{gvfs-afc-volume}]
        ├─gvfs-goa-volume──2*[{gvfs-goa-volume}]
        ├─gvfs-gphoto2-vo──2*[{gvfs-gphoto2-vo}]
        ├─gvfs-mtp-volume──2*[{gvfs-mtp-volume}]
        ├─gvfs-udisks2-vo──3*[{gvfs-udisks2-vo}]
        ├─gvfsd──┬─gvfsd-trash──2*[{gvfsd-trash}]
        │        └─2*[{gvfsd}]
        ├─gvfsd-fuse──5*[{gvfsd-fuse}]
        ├─gvfsd-metadata──2*[{gvfsd-metadata}]
        ├─ibus-portal──2*[{ibus-portal}]
        ├─pipewire──{pipewire}
        ├─pipewire-media-──{pipewire-media-}
        ├─pulseaudio──3*[{pulseaudio}]
        ├─seahorse──3*[{seahorse}]
        ├─sh──ibus-daemon──┬─ibus-dconf──3*[{ibus-dconf}]
        │                  ├─ibus-engine-sim──2*[{ibus-engine-sim}]
        │                  ├─ibus-extension-──3*[{ibus-extension-}]
        │                  └─2*[{ibus-daemon}]
        ├─snapd-desktop-i──snapd-desktop-i──3*[{snapd-desktop-i}]
        ├─tracker-miner-f──5*[{tracker-miner-f}]
```

```
                 ├snapd-desktop-i──snapd-desktop-i──3*[{snapd-desktop-i}]
                 ├tracker-miner-f──5*[{tracker-miner-f}]
                 ├xdg-desktop-por──5*[{xdg-desktop-por}]
                 ├2*[xdg-desktop-por──3*[{xdg-desktop-por}]]
                 ├xdg-document-po──┬fusermount3
                 │                 └5*[{xdg-document-po}]
                 └xdg-permission-──2*[{xdg-permission-}]
        ├systemd-journal
        ├systemd-logind
        ├systemd-oomd
        ├systemd-resolve
        ├systemd-timesyn──{systemd-timesyn}
        ├systemd-udevd
        ├udisksd──4*[{udisksd}]
        ├unattended-upgr──{unattended-upgr}
        ├upowerd──2*[{upowerd}]
        └wpa_supplicant
oxuser@Ubuntuu:/$ █
```

9. execute command tail -f /var/log/syslog

```
vboxuser@Ubuntuu:/$ sudo tail -f /var/log/syslog
[sudo] password for vboxuser:
Feb 21 22:27:42 Ubuntuu gnome-shell[1823]: DING: Detected async api for thumbna
ils
Feb 21 22:27:43 Ubuntuu gnome-shell[1823]: Window manager warning: last_user_ti
me (8645306) is greater than comparison timestamp (8644991).  This most likely
represents a buggy client sending inaccurate timestamps in messages such as _NE
T_ACTIVE_WINDOW.  Trying to work around...
Feb 21 22:27:43 Ubuntuu gnome-shell[1823]: Window manager warning: W1 appears t
o be one of the offending windows with a timestamp of 8645306.  Working around.
..
Feb 21 22:27:46 Ubuntuu gnome-shell[1823]: DING: GNOME nautilus 42.2
Feb 21 22:28:00 Ubuntuu systemd[1]: fprintd.service: Deactivated successfully.
Feb 21 22:30:01 Ubuntuu CRON[3334]: (root) CMD ([ -x /etc/init.d/anacron ] && i
f [ ! -d /run/systemd/system ]; then /usr/sbin/invoke-rc.d anacron start >/dev/
null; fi)
Feb 21 22:34:17 Ubuntuu systemd[1]: Started Run anacron jobs.
Feb 21 22:34:17 Ubuntuu systemd[1]: anacron.service: Deactivated successfully.
Feb 21 22:34:17 Ubuntuu anacron[3340]: Anacron 2.3 started on 2023-02-21
Feb 21 22:34:17 Ubuntuu anacron[3340]: Normal exit (0 jobs run)
█
```

10. find the process id PID of tail process then kill it using kill command

```
vboxuser@Ubuntuu:~$ ps -aux | grep tail
vboxuser    3473  9.0  0.1  18056  2400 pts/0    S+    23:00   0:00 grep --color
=auto tail
```