Ubuntu-Lab3

1. create users called itiuser1, itiuser2

```
sara@sara-VirtualBox:~$ sudo useradd -m itiuser1
sara@sara-VirtualBox:~$ sudo useradd -m itiuser2
sara@sara-VirtualBox:~$ ls /home
itiuser1  itiuser2  sara
```

2. create group called os_team

```
sara@sara-VirtualBox:~$ sudo groupadd os_team
```

3. create directory called os_team_workspace

```
sara@sara-VirtualBox:~$ mkdir /home/sara/Desktop/os_team_workspace
```

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

```
sara@sara-VirtualBox:~$ sudo chgrp os_team  /home/sara/Desktop/os_team_workspac
e
sara@sara-VirtualBox:~$ ls -ld  /home/sara/Desktop/os_team_workspace
drwxrwxr-x 2 sara os_team 4096 07:56 16 فبر /home/sara/Desktop/os_team_workspac
e
sara@sara-VirtualBox:~$ chmod g+s  /home/sara/Desktop/os_team_workspace
```

5. add users itituser1 and itituser2 to os_teamgroup

```
sara@sara-VirtualBox:~$ sudo usermod -a -G os_team itiuser1
[sudo] password for sara:
sara@sara-VirtualBox:~$ sudo usermod -a -G os_team itiuser2
sara@sara-VirtualBox:~$ groups os_team
groups: 'os_team': no such user
sara@sara-VirtualBox:~$ groups itiuser1
itiuser1 : itiuser1 os_team
sara@sara-VirtualBox:~$ groups itiuser2
itiuser2 : itiuser2 os_team
```

6. create directory mydir1 using itiuser1 and mydir2 using itiuser2

```
sara@sara-VirtualBox:/etc$ su itiuser1
Password:
$ cd /var
$ ls
backups  crash  local  log   metrics  os_team_workspace  snap   tmp
cache    lib    lock   mail  opt      run                spool  www
$ cd os_team_workspace
$ mkdir mydir1
mkdir: cannot create directory 'mydir1': Permission denied
$ sudo mkdir mydir1
[sudo] password for itiuser1:
$ ls
mydir1
```

```
$ su itiuser2
Password:
$ cd /var/os_team_workspace
$ sudo mkdir mydir2
[sudo] password for itiuser2:
$ LS
sh: 3: LS: not found
$ ls
mydir1  mydir2
```

7. list directory permissions and send screenshot.

```
$ ls -l
total 8
drwxr-sr-x 2 root os_team 4096 16:03 16 فبر mydir1
drwxr-sr-x 2 root os_team 4096 16:05 16 فبر mydir2
$
```

8. send screenshot of all processes in tree mod

```
$ pstree
systemd─┬─ModemManager───2*[{ModemManager}]
        ├─NetworkManager───2*[{NetworkManager}]
        ├─accounts-daemon───2*[{accounts-daemon}]
        ├─acpid
        ├─avahi-daemon───avahi-daemon
        ├─colord───2*[{colord}]
        ├─cron
        ├─cups-browsed───2*[{cups-browsed}]
        ├─cupsd
        ├─dbus-daemon
        ├─fprintd───4*[{fprintd}]
        ├─gdm3─┬─gdm-session-wor─┬─gdm-session-wor───2*[{gdm-session-wor}]
        │      │                 ├─gdm-wayland-ses─┬─gnome-session-b───2*[{gno+
        │      │                 │                 └─2*[{gdm-wayland-ses}]
        │      │                 └─3*[{gdm-session-wor}]
        │      └─2*[{gdm3}]
        ├─gnome-keyring-d───3*[{gnome-keyring-d}]
        ├─htcacheclean
        ├─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)
        │         ├─/opt/lampp/bin/───7*[/opt/lampp/bin/]
        │         ├─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}]
        │         ├─file-roller───4*[{file-roller}]
        │         ├─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─┬─Xwayland
        │         │             ├─gjs───6*[{gjs}]
        │         │             └─10*[{gnome-shell}]
        │         ├─gnome-shell-cal───5*[{gnome-shell-cal}]
        │         ├─gnome-terminal-─┬─bash───sudo───sudo───login───sh───su───b+
        │         │                 ├─bash───sudo───sudo───login───sh───su───b+
        │         │                 └─3*[{gnome-terminal-}]
```

Terminal

```
                                              ├─bash──sudo──sudo──login──sh──su──b+
                                              └─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────4*[{gsd-media-keys}]
                    ├─gsd-power────3*[{gsd-power}]
                    ├─gsd-print-notif────2*[{gsd-print-notif}]
                    ├─gsd-printer────3*[{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}]
                    ├─gsd-xsettings────3*[{gsd-xsettings}]
                    ├─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-dnssd────2*[{gvfsd-dnssd}]
                            └─gvfsd-http────2*[{gvfsd-http}]
```

```
                            ├─gvfsd-network────3*[{gvfsd-network}]
                            ├─gvfsd-recent────2*[{gvfsd-recent}]
                            ├─gvfsd-trash────3*[{gvfsd-trash}]
                            └─2*[{gvfsd}]
                    ├─gvfsd-fuse────5*[{gvfsd-fuse}]
                    ├─gvfsd-metadata────2*[{gvfsd-metadata}]
                    ├─ibus-portal────2*[{ibus-portal}]
                    ├─ibus-x11────2*[{ibus-x11}]
                    ├─mysqld_safe────mysqld────29*[{mysqld}]
                    ├─nautilus────4*[{nautilus}]
                    ├─pipewire────{pipewire}
                    ├─pipewire-media-────{pipewire-media-}
                    ├─proftpd
                    ├─pulseaudio────3*[{pulseaudio}]
                    ├─seahorse────3*[{seahorse}]
                    ├─sh──manager-linux-x
                    ├─sh──ibus-daemon─┬─ibus-engine-sim────2*[{ibus-engine-sim}]
                                      ├─ibus-extension-────3*[{ibus-extension-}]
                                      ├─ibus-memconf────2*[{ibus-memconf}]
                                      └─2*[{ibus-daemon}]
                    ├─snap────6*[{snap}]
                    ├─snapd-desktop-i────snapd-desktop-i────3*[{snapd-desktop-i}]
                    ├─tracker-miner-f────5*[{tracker-miner-f}]
                    ├─xdg-desktop-por────6*[{xdg-desktop-por}]
                    ├─2*[xdg-desktop-por────3*[{xdg-desktop-por}]]
                    ├─xdg-document-po─┬─fusermount3
                                      └─6*[{xdg-document-po}]
```

```
                    ├─pulseaudio───3*[{pulseaudio}]
                    ├─seahorse───3*[{seahorse}]
                    ├─sh──manager-linux-x
                    ├─sh──ibus-daemon──ibus-engine-sim───2*[{ibus-engine-sim}]
                    │                  ├─ibus-extension-───3*[{ibus-extension-}]
                    │                  ├─ibus-memconf───2*[{ibus-memconf}]
                    │                  └─2*[{ibus-daemon}]
                    ├─snap───6*[{snap}]
                    ├─snapd-desktop-i───snapd-desktop-i───3*[{snapd-desktop-i}]
                    ├─tracker-miner-f───5*[{tracker-miner-f}]
                    ├─xdg-desktop-por───6*[{xdg-desktop-por}]
                    ├─2*[xdg-desktop-por───3*[{xdg-desktop-por}]]
                    ├─xdg-document-po──fusermount3
                    │                  └─6*[{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
$
```

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

```
sara@sara-VirtualBox:/var/os_team_workspace$ tail -f /var/log/syslog
Feb 16 16:20:44 sara-VirtualBox gnome-shell[1072]: Window manager warning: Over
writing existing binding of keysym 36 with keysym 36 (keycode f).
Feb 16 16:20:44 sara-VirtualBox gnome-shell[1072]: Window manager warning: Over
writing existing binding of keysym 37 with keysym 37 (keycode 10).
Feb 16 16:20:44 sara-VirtualBox gnome-shell[1072]: Window manager warning: Over
writing existing binding of keysym 39 with keysym 39 (keycode 12).
Feb 16 16:20:44 sara-VirtualBox gnome-shell[1072]: Window manager warning: Over
writing existing binding of keysym 38 with keysym 38 (keycode 11).
Feb 16 16:20:44 sara-VirtualBox dbus-daemon[950]: [session uid=1000 pid=950] Ac
tivating service name='org.gnome.ArchiveManager1' requested by ':1.513' (uid=10
00 pid=177055 comm="gjs /usr/share/gnome-shell/extensions/ding@rasters" label="
unconfined")
Feb 16 16:20:45 sara-VirtualBox dbus-daemon[950]: [session uid=1000 pid=950] Su
ccessfully activated service 'org.gnome.ArchiveManager1'
Feb 16 16:20:45 sara-VirtualBox gnome-shell[1072]: DING: Detected async api for
 thumbnails
Feb 16 16:20:45 sara-VirtualBox gnome-shell[1072]: DING: GNOME nautilus 42.2
Feb 16 16:21:07 sara-VirtualBox systemd[1]: fprintd.service: Deactivated succes
sfully.
Feb 16 16:30:01 sara-VirtualBox CRON[177741]: (root) CMD ([ -x /etc/init.d/anac
ron ] && if [ ! -d /run/systemd/system ]; then /usr/sbin/invoke-rc.d anacron st
art >/dev/null; fi)
```

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

```
177351 root       20   0      0       0      0 I    0.0   0.0   0:00.31 kworke+
177718 root       20   0  22104    5100   4224 S    0.0   0.3   0:00.03 su
177719 sara       20   0  19792    5168   3696 S    0.0   0.3   0:00.01 bash
177758 sara       20   0  17060    1040    952 T    0.0   0.1   0:00.00 tail
178287 sara       20   0 930252 137448 101076 S    0.0   6.8   0:04.84 gnome-+
178553 sara       20   0  21880    3960   3356 R    0.0   0.2   0:03.04 top
178598 root       20   0      0       0      0 I    0.0   0.0   0:00.15 kworke+



[2]+  Stopped                 top
sara@sara-VirtualBox:/var/os_team_workspace$ kill -9 177758
sara@sara-VirtualBox:/var/os_team_workspace$ jobs
[1]-  Killed                  tail -f /var/log/syslog
[2]+  Stopped                 top
sara@sara-VirtualBox:/var/os_team_workspace$ kill -9 178553
sara@sara-VirtualBox:/var/os_team_workspace$ jobs
[2]+  Killed                  top
```