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radwa@radwa-VirtualBox:~$ sudo adduser itluser2
Adding user 'itluser2' ...
Adding new group 'itluser2' (1002) ...
Adding new user 'itluser2' (1002) with group 'itluser2' ...
Creating home directory '/home/itluser2' ...
Copying files from '/etc/skel' ...
New password:
Retype new password:
passwd: password updated successfully
Changing the user information for itluser2
Enter the new value, or press ENTER for the default
  Full Name []: itluser2
    Room Number []:
    Work Phone []:
    Home Phone []:
    Other []:
Is the information correct? [Y/n] Y
radwa@radwa-VirtualBox:~$ cat /etc/passwd
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/bin/sync
games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
list:x:38:38:Mail list Manager:/var/list:/usr/sbin/nologin
irc:x:39:39:ircd:/run/ircd:/usr/sbin/nologin
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
systemd-networkd:x:100:102:systemd Network Management,,:/run/systemd:/usr/sbin/nologin
systemd-resolve:x:101:103:systemd Resolver,,:/run/systemd:/usr/sbin/nologin
messagebus:x:102:105:/:nonexistent:/usr/sbin/nologin
systemd-timesync:x:103:106:systemd Time Synchronization,,:/run/systemd:/usr/sbin/nologin
syslog:x:104:111:/:home/syslog:/usr/sbin/nologin
_apt:x:105:65534:/:nonexistent:/usr/sbin/nologin
tss:x:106:112:TPM software stack,,:/var/lib/tpm:/bin/false
utld:x:107:115:/:run/utld:/usr/sbin/nologin
systemd-oom:x:108:113:systemd Userspace OOM Killer,,:/run/systemd:/usr/sbin/nologin
tcpdump:x:109:117:/:nonexistent:/usr/sbin/nologin
avahi-autopd:x:110:119:Avahi autopd daemon,,:/var/lib/avahi-autopd:/usr/sbin/nologin
usbmux:x:111:46:usbmux daemon,,:/var/lib/usbmux:/usr/sbin/nologin
daemon:x:112:120:/:nonexistent:/bin/false
radwa@radwa-VirtualBox:~$ sudo adduser itluser1
[sudo] password for radwa:
Adding user 'itluser1' ...
Adding new group 'itluser1' (1001) ...
Adding new user 'itluser1' (1001) with group 'itluser1' ...
Creating home directory '/home/itluser1' ...
Copying files from '/etc/skel' ...
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
Sorry, passwords do not match.
New password:
BAD PASSWORD: The password falls the dictionary check - it is too simplistic/systematic
Retype new password:
Sorry, passwords do not match.
New password:
Retype new password:
passwd: password updated successfully
Changing the user information for itluser1
Enter the new value, or press ENTER for the default
  Full Name []: itluser1
    Room Number []:
    Work Phone []:
    Home Phone []:
    Other []:
Is the information correct? [Y/n] Y
radwa@radwa-VirtualBox:~$ cat /etc/passwd
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/bin/sync
games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
list:x:38:38:Mail list Manager:/var/list:/usr/sbin/nologin
irc:x:39:39:ircd:/run/ircd:/usr/sbin/nologin
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
systemd-networkd:x:100:102:systemd Network Management,,:/run/systemd:/usr/sbin/nologin
systemd-resolve:x:101:103:systemd Resolver,,:/run/systemd:/usr/sbin/nologin
messagebus:x:102:105:/:nonexistent:/usr/sbin/nologin
systemd-timesync:x:103:106:systemd Time Synchronization,,:/run/systemd:/usr/sbin/nologin
syslog:x:104:111:/:home/syslog:/usr/sbin/nologin
_apt:x:105:65534:/:nonexistent:/usr/sbin/nologin
tss:x:106:112:TPM software stack,,:/var/lib/tpm:/bin/false
utld:x:107:115:/:run/utld:/usr/sbin/nologin
systemd-oom:x:108:113:systemd Userspace OOM Killer,,:/run/systemd:/usr/sbin/nologin
tcpdump:x:109:117:/:nonexistent:/usr/sbin/nologin
avahi-autopd:x:110:119:Avahi autopd daemon,,:/var/lib/avahi-autopd:/usr/sbin/nologin
usbmux:x:111:46:usbmux daemon,,:/var/lib/usbmux:/usr/sbin/nologin
daemon:x:112:120:/:nonexistent:/bin/false

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***
itluser1:x:1001:1001:itluser1,,:/home/itluser1:/bin/bash
itluser2:x:1002:1002:itluser2,,:/home/itluser2:/bin/bash
radwa@radwa-VirtualBox:~$

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```
radwa@radwa-VirtualBox:~$ sudo chmod g+es os_team_workspace
radwa@radwa-VirtualBox:~$ ls -lg
total 2097236
lrwxrwxrwx 1 root 7 Feb 11 14:33 bin -> usr/bin
drwxr-xr-x 4 root 4096 Feb 11 15:06 boot
drwxrwxr-x 2 root 4096 Feb 11 14:38 cdrom
drwxr-xr-x 19 root 4140 Feb 12 10:18 dev
drwxr-xr-x 132 root 12288 Feb 15 06:52 etc
drwxr-xr-x 5 root 4096 Feb 15 06:47 home
lrwxrwxrwx 1 root 7 Feb 11 14:33 lib -> usr/lib
lrwxrwxrwx 1 root 9 Feb 11 14:33 lib32 -> usr/lib32
lrwxrwxrwx 1 root 9 Feb 11 14:33 lib64 -> usr/lib64
lrwxrwxrwx 1 root 10 Feb 11 14:33 libx32 -> usr/libx32
drwx----- 2 root 16384 Feb 11 14:33 lost+found
drwxr-xr-x 3 root 4096 Feb 11 15:04 media
drwxr-xr-x 2 root 4096 Aug 9 2022 mnt
drwxr-xr-x 3 root 4096 Feb 11 15:05 opt
drwxr-sr-x 2 os_team 4096 Feb 15 06:54 os_team_workspace
dr-xr-xr-x 286 root 0 Feb 11 15:06 proc
drwx----- 6 root 4096 Feb 12 09:57 root
drwxr-xr-x 35 root 1000 Feb 15 03:12 run
lrwxrwxrwx 1 root 8 Feb 11 14:33/sbin -> usr/sbin
drwxr-xr-x 11 root 4096 Aug 9 2022 snap
drwxr-xr-x 2 root 4096 Aug 9 2022 srv
-rw----- 1 root 2147483648 Feb 11 14:33 swapfile
dr-xr-xr-x 13 root 0 Feb 11 15:06 sys
drwxrwxrwt 22 root 4096 Feb 15 07:25 tmp
drwxr-xr-x 14 root 4096 Aug 9 2022 usr
drwxr-xr-x 15 root 4096 Feb 11 15:07 var
radwa@radwa-VirtualBox:~$
```

```
radwa@radwa-VirtualBox:~$ sudo groupadd os_team
radwa@radwa-VirtualBox:~$ grep os_team /etc/group
os_team:x:1003:
radwa@radwa-VirtualBox:~$ mkdir os_team_workspace
mkdir: cannot create directory 'os_team_workspace': Permission denied
radwa@radwa-VirtualBox:~$ sudo mkdir os_team_workspace
radwa@radwa-VirtualBox:~$ ls
bin boot cdrom dev etc home lib lib32 lib64 libx32 lost+found media mnt opt os_team_workspace proc root run/sbin snap srv swapfile sys tmp usr var
radwa@radwa-VirtualBox:~$
```

```
radwa@radwa-VirtualBox:~$ sudo useradd -G os_team ittuser1
radwa@radwa-VirtualBox:~$ sudo useradd -G os_team ittuser2
radwa@radwa-VirtualBox:~$ getent group os_team
os_team:x:1003:ittuser1,ittuser2
radwa@radwa-VirtualBox:~$
```

```
radwa@radwa-VirtualBox:~$ sudo login
[sudo] password for radwa:
radwa-VirtualBox login: ittuser1
Password:
Welcome to Ubuntu 22.04.1 LTS (GNU/Linux 5.15.0-60-generic x86_64)

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

0 updates can be applied immediately.

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/*copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

ittuser1@radwa-VirtualBox:~$ mkdir mydir1
ittuser1@radwa-VirtualBox:~$ ls -ld
drwxr-xr-x 4 ittuser1 os_team 4096 Feb 15 07:39 .
ittuser1@radwa-VirtualBox:~$ ls -lg
total 4
drwxr-xr-x 2 os_team 4096 Feb 15 07:39 mydir1
ittuser1@radwa-VirtualBox:~$
```

```
radwa@radwa-VirtualBox:~$ sudo login
[sudo] password for radwa:
radwa-VirtualBox login: ittuser2
Password:
Welcome to Ubuntu 22.04.1 LTS (GNU/Linux 5.15.0-60-generic x86_64)

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

0 updates can be applied immediately.

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/*copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

ittuser2@radwa-VirtualBox:~$ mkdir mydir2
ittuser2@radwa-VirtualBox:~$ ls -ld
drwxr-xr-x 4 ittuser2 os_team 4096 Feb 15 07:44 .
ittuser2@radwa-VirtualBox:~$ ls -lg
total 4
drwxr-xr-x 2 os_team 4096 Feb 15 07:44 mydir2
ittuser2@radwa-VirtualBox:~$
```

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radwa@radwa-VirtualBox:~$ pstree
systemd├─ModemManager─2*[{ModemManager}]
      │NetworkManager─2*[{NetworkManager}]
      │VBoxService─4*[{VBoxService}]
      │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*[{gnome-session-b}]
      │      │      │      │      │      │
      │      │      │      │      │      └─2*[{gdm-session-wor}]
      │      │      │      └─2*[{gdm3}]
      │      └─gnome-keyring-d─3*[{gnome-keyring-d}]
      │htcacheclean
      │irqbalance─{irqbalance}
      │2*[{kerneloops}]
      │networkd-dispatcher
      │packagekitd─2*[{packagekitd}]
      │polkitd─2*[{polkitd}]
      │power-profiles─2*[{power-profiles-}]
      │rsyslogd─3*[{rsyslogd}]
      │rtkit-daemon─2*[{rtkit-daemon}]
      │snapd─10*[{snapd}]
      │switcheroo-cont─2*[{switcheroo-cont}]
      └─systemd─(sd-pan)
            │2*[{VBoxClient}─VBoxClient─3*[{VBoxClient}]]
            │VBoxClient─VBoxClient─4*[{VBoxClient}]
            │VBoxClient─VBoxClient─2*[{VBoxClient}]
            │at-spi2-registr─2*[{at-spi2-registr}]
            │dbus-daemon
            │dconf-service─2*[{dconf-service}]
            │evolution-address─5*[{evolution-address}]
            │evolution-calendar─8*[{evolution-calendar}]
            │evolution-source─3*[{evolution-source}]
            │firefox─3*[{isolated Web Co─13*[{isolated Web Co}]
            │      │      │      │      │      │
            │      │      │      │      │      └─privileged cont─13*[{privileged cont}]
            │      │      │      │      │      │
            │      │      │      │      │      └─Socket Process─4*[{Socket Process}]
            │      │      │      │      │      │
            │      │      │      │      │      └─3*[{Web Content}─9*[{Web Content}]]
            │      │      │      │      │      │
            │      │      │      │      │      └─WebExtensions─13*[{WebExtensions}]
            │      │      │      │      │      │
            │      │      │      │      │      └─do*[{firefox}]

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radwa@radwa-VirtualBox:~$ ps -aux
USER          PID %CPU %MEM    VSZ   RSS TTY      STAT START   TIME COMMAND
root             1  0.0  0.1 16892 13240 ?        Ss   Feb14 0:15 /sbin/init splash
root             2  0.0  0.0      0     0 ?        Ss   Feb14 0:00 [kthreadd]
root             3  0.0  0.0      0     0 ?        I<   Feb14 0:00 [rcu_gp]
root             4  0.0  0.0      0     0 ?        I<   Feb14 0:00 [rcu_par_gp]
root             5  0.0  0.0      0     0 ?        I<   Feb14 0:00 [slub_flushq]
root             6  0.0  0.0      0     0 ?        I<   Feb14 0:00 [netns]
root             8  0.0  0.0      0     0 ?        I<   Feb14 0:00 [kworker/0:0H-events_highpri]
root            10  0.0  0.0      0     0 ?        I<   Feb14 0:00 [nm_percpu_wq]
root            11  0.0  0.0      0     0 ?        Ss   Feb14 0:00 [rcu_tasks_rude_]
root            12  0.0  0.0      0     0 ?        Ss   Feb14 0:00 [rcu_tasks_trace]
root            13  0.0  0.0      0     0 ?        Ss   Feb14 0:00 [ksoftirqd/0]
root            14  0.0  0.0      0     0 ?        I   Feb14 0:14 [rcu_sched]
root            15  0.0  0.0      0     0 ?        Ss   Feb14 0:00 [migration/0]
root            16  0.0  0.0      0     0 ?        Ss   Feb14 0:00 [idle_inject/0]
root            18  0.0  0.0      0     0 ?        Ss   Feb14 0:00 [cpuhp/0]
root            19  0.0  0.0      0     0 ?        Ss   Feb14 0:00 [cpuhp/1]
root            20  0.0  0.0      0     0 ?        Ss   Feb14 0:00 [idle_inject/1]
root            21  0.0  0.0      0     0 ?        Ss   Feb14 0:00 [migration/1]
root            22  0.0  0.0      0     0 ?        Ss   Feb14 0:00 [ksoftirqd/1]
root            24  0.0  0.0      0     0 ?        I<   Feb14 0:00 [kworker/1:0H-events_highpri]
root            25  0.0  0.0      0     0 ?        Ss   Feb14 0:00 [kdevtmpfs]
root            26  0.0  0.0      0     0 ?        I<   Feb14 0:00 [knet_frag_wq]
root            27  0.0  0.0      0     0 ?        Ss   Feb14 0:00 [kauditd]
root            28  0.0  0.0      0     0 ?        Ss   Feb14 0:00 [khungtaskd]
root            29  0.0  0.0      0     0 ?        Ss   Feb14 0:00 [oom_reaper]
root            30  0.0  0.0      0     0 ?        I<   Feb14 0:00 [writeback]
root            31  0.0  0.0      0     0 ?        Ss   Feb14 0:02 [kcompactd0]
root            32  0.0  0.0      0     0 ?        SN   Feb14 0:00 [ksmd]
root            33  0.0  0.0      0     0 ?        SN   Feb14 0:00 [khugepaged]
root            80  0.0  0.0      0     0 ?        I<   Feb14 0:00 [kintegrityd]
root            81  0.0  0.0      0     0 ?        I<   Feb14 0:00 [kblockd]
root            82  0.0  0.0      0     0 ?        I<   Feb14 0:00 [blkcg_punt_bio]
root            83  0.0  0.0      0     0 ?        I<   Feb14 0:00 [tpm_dev_wq]
root            84  0.0  0.0      0     0 ?        I<   Feb14 0:00 [ata_sff]
root            85  0.0  0.0      0     0 ?        I<   Feb14 0:00 [md]
root            86  0.0  0.0      0     0 ?        I<   Feb14 0:00 [edac-poller]
root            87  0.0  0.0      0     0 ?        I<   Feb14 0:00 [devfreq_wq]
root            88  0.0  0.0      0     0 ?        Ss   Feb14 0:00 [watchdogd]
root            90  0.0  0.0      0     0 ?        I<   Feb14 0:01 [kworker/0:1H-kblockd]
root            92  0.0  0.0      0     0 ?        Ss   Feb14 0:00 [kswapd0]

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radwa 20452 0.0 0.0 17056 1004 pts/5  S+  08:01 0:00 tail -f /var/log/syslog
radwa 20453 0.1 0.0 19788 5124 pts/1  Ss   08:01 0:00 bash
radwa 20461 0.0 0.0 21588 3624 pts/1   R+   08:01 0:00 ps -aux
radwa@radwa-VirtualBox:~$ sudo kill -9 20452
[sudo] password for radwa:
radwa@radwa-VirtualBox:~$

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radwa@radwa-VirtualBox:~$ tail -f /var/log/syslog
Feb 15 07:39:27 radwa-VirtualBox systemd[1]: Started Snap Daemon.
Feb 15 07:39:27 radwa-VirtualBox dbus-daemon[619]: [system] Activating via systemd: service name='org.freedesktop.timedate1' unit='dbus-org.freedesktop.timedate1.service' requested by ':1.311' (uid=0 pld=20189 comm="/usr/lib/snapd/snapd" label="unconfined")
Feb 15 07:39:27 radwa-VirtualBox systemd[1]: Starting Time & Date Service...
Feb 15 07:39:28 radwa-VirtualBox dbus-daemon[619]: [system] Successfully activated service 'org.freedesktop.timedate1'
Feb 15 07:39:28 radwa-VirtualBox systemd[1]: Started Time & Date Service.
Feb 15 07:39:29 radwa-VirtualBox snapd[20189]: storehelpers.go:769: cannot refresh snap "snapd": snap has no updates available
Feb 15 07:39:58 radwa-VirtualBox systemd[1]: systemd-timedated.service: Deactivated successfully.
Feb 15 07:44:06 radwa-VirtualBox systemd[1551]: Started VTE child process 20351 launched by gnome-terminal-server process 2312.
Feb 15 07:49:04 radwa-VirtualBox systemd[1551]: Started VTE child process 20417 launched by gnome-terminal-server process 2312.
Feb 15 07:57:53 radwa-VirtualBox systemd[1551]: vte-spawn-1991f40b-edbf-4b00-9954-4bf1b12bc548.scope: consumed 3.702s CPU time.
Feb 15 08:01:38 radwa-VirtualBox systemd[1551]: Started VTE child process 20453 launched by gnome-terminal-server process 2312.
Killed
radwa@radwa-VirtualBox:~$

```