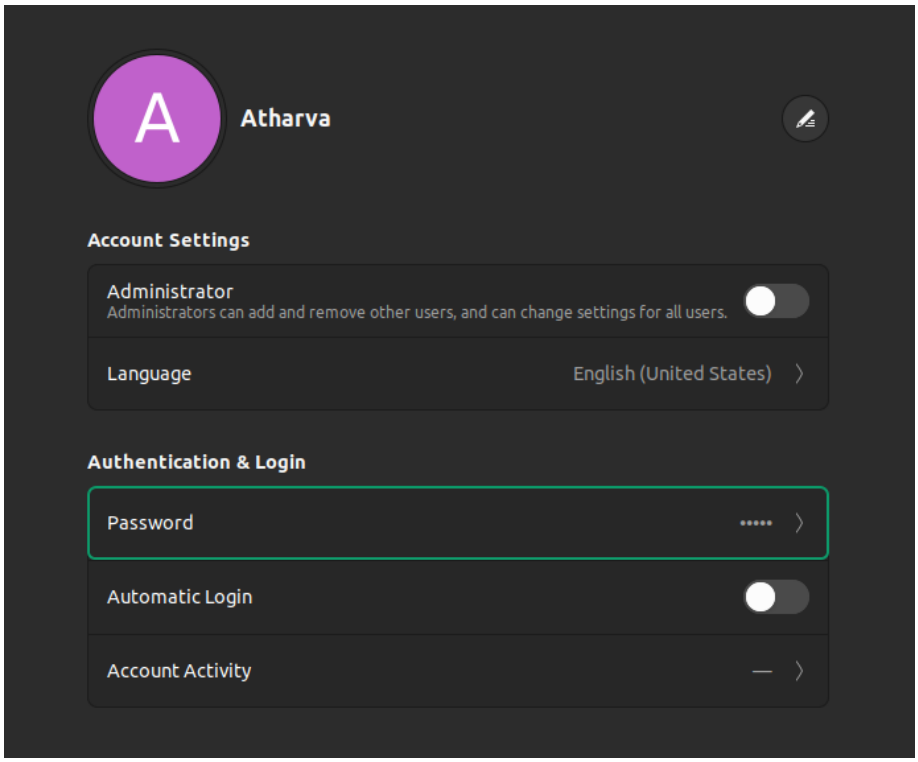
PRACTICAL 3

Initial settings. Add a user. Network Settings, Change to static IP address, Disable IPv6 if not needed, Configure Services, display the list of services which are running, stop and turn OFF auto-start setting for a service if you don't need it, Sudo settings.

Step 1: Add a user.



Step 2: Change to static IP address

To assign a static ip address to a Ubuntu system, you need to edit the etc/network/interfaces file.

```
atharva@Atharva:~$ ifconfig
enp0s3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 192.168.225.102  netmask 255.255.255.0  broadcast 192.168.225.255
        inet6 2409:4040:d0f:d53e:b10c:d605:5810:b761  prefixlen 64  scopeid 0x0<global>
        inet6 2409:4040:d0f:d53e:de69:247c:b9d0:a056  prefixlen 64  scopeid 0x0<global>
        inet6 fe80::3322:f7a3:448a:72b1  prefixlen 64  scopeid 0x20<link>
        ether 08:00:27:ca:a6:36  txqueuelen 1000  (Ethernet)
        RX packets 18758  bytes 25101461 (25.1 MB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 4171  bytes 401487 (401.4 KB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

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 206  bytes 21692 (21.6 KB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 206  bytes 21692 (21.6 KB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0
```

Now copy down the ip address and netmask from the output of ifconfig command into a notepad, to find out the gateway ip address type the following command.

ip r | grep default

```
atharva@Atharva:~$ ip r | grep default
default via 192.168.225.1 dev enp0s3 proto dhcp metric 100
```

Copy them as follows in a notepad.

```
iface enp0s3 inet static
        inet- 192.168.225.102
        netmask- 255.255.255.0
        gateway- 192.168.225.1
dns-nameservers 192.168.225.1
```

Step 3: Now editing the static IP address, for that you'll need the following command.

sudo nano /etc/network/interfaces

```
#interfaces(5) file used by ifup(8) and ifdown(8)
auto lo
iface lo inet loopback

iface enp0s3 inet static

        inet- 192.168.225.102

        netmask- 255.255.255.0

        gateway- 192.168.225.1

dns-nameservers 192.168.225.1
```

Step 4:

Step 5: Now after editing your static IP address you should reboot your machine.

Step 6: Now we will disable the IPv6 if not needed. That can be done using the following command:

sudo /bin/su -c ”echo ‘net.ipv6.conf.all.disable_ipv6-1’>>/etc/sysctl.conf”

```
atharva@Atharva:~$ sudo /bin/su -c ”echo ‘net.ipv6.conf.all.disable_ipv6-1’ >> /etc/sysctl.conf"
>
```

Step 7: Now to show the list of multicast address we will use the following command.

ipmaddr

```
atharva@Atharva:~$ ipmaddr
1:      lo
        inet  224.0.0.251
        inet  224.0.0.1
        inet6 ff02::fb
        inet6 ff02::1
        inet6 ff01::1
2:      enp0s3
        link  33:33:00:00:00:01
        inet6 ff02::1
        inet6 ff01::1
```

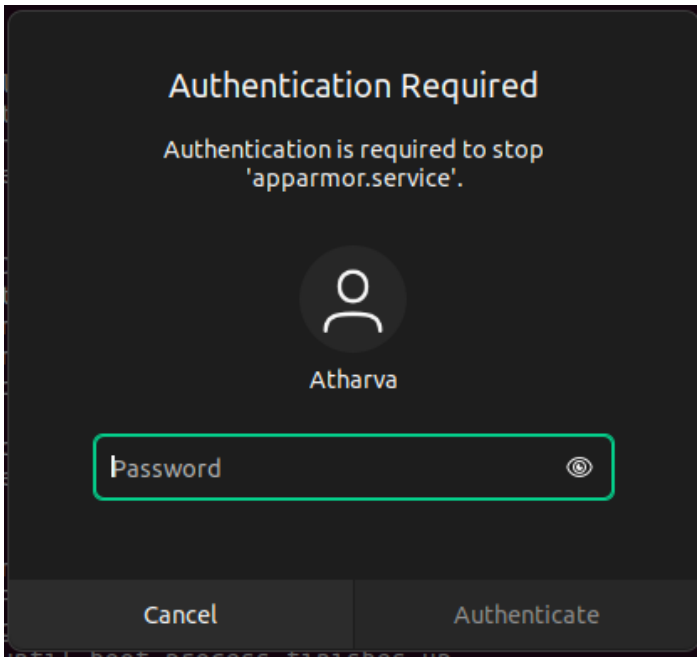
Step 8: Now we will display the list of services which are running and have been stopped. Which will be done using the following command.

systemctl -t service

```
atharva@Atharva:~$ systemctl -t service
  UNIT                                      LOAD   ACTIVE SUB     DESCRIPTION
  accounts-daemon.service                   loaded active running Accounts Service
  acpid.service                             loaded active running ACPI event daemon
  alsa-restore.service                      loaded active exited  Save/Restore Sound Card State
  apache2.service                           loaded active running The Apache HTTP Server
  apparmor.service                          loaded active exited  Load AppArmor profiles
  apport.service                            loaded active exited  LSB: automatic crash report generation
  autofs.service                            loaded active running Automounts filesystems on demand
  avahi-daemon.service                      loaded active running Avahi mDNS/DNS-SD Stack
  colord.service                            loaded active running Manage, Install and Generate Color Profiles
  console-setup.service                     loaded active exited  Set console font and keymap
  cron.service                              loaded active running Regular background program processing daemon
  cups-browsed.service                      loaded active running Make remote CUPS printers available locally
  cups.service                              loaded active running CUPS Scheduler
  dbus.service                              loaded active running D-Bus System Message Bus
  gdm.service                               loaded active running GNOME Display Manager
  irqbalance.service                        loaded active running irqbalance daemon
  kerneloops.service                        loaded active running Tool to automatically collect and submit kernel crash signatures
  keyboard-setup.service                    loaded active exited  Set the console keyboard layout
  kmod-static-nodes.service                 loaded active exited  Create List of Static Device Nodes
  ModemManager.service                      loaded active running Modem Manager
  mysql.service                             loaded active running MySQL Community Server
  named.service                             loaded active running BIND Domain Name Server
  networkd-dispatcher.service               loaded active running Dispatcher daemon for systemd-networkd
  NetworkManager-wait-online.service        loaded active exited  Network Manager Wait Online
  NetworkManager.service                    loaded active running Network Manager
  nfs-blkmap.service                        loaded active running pNFS block layout mapping daemon
  nfs-idmapd.service                        loaded active running NFSv4 ID-name mapping service
  nfs-mountd.service                        loaded active running NFS Mount Daemon
  nfs-server.service                        loaded active exited  NFS server and services
  nfsdcld.service                           loaded active running NFSv4 Client Tracking Daemon
● nmbd.service                              loaded failed failed  Samba NMB Daemon
  ntp.service                               loaded active running Network Time Service
  openvpn.service                           loaded active exited  OpenVPN service
  packagekit.service                        loaded active running PackageKit Daemon
  plymouth-quit-wait.service                loaded active exited  Hold until boot process finishes up
  plymouth-read-write.service               loaded active exited  Tell Plymouth To Write Out Runtime Data
  plymouth-start.service                    loaded active exited  Show Plymouth Boot Screen
  polkit.service                            loaded active running Authorization Manager
  power-profiles-daemon.service             loaded active running Power Profiles daemon
  rpc-statd-notify.service                  loaded active exited  Notify NFS peers of a restart
  rpc-statd.service                         loaded active running NFS status monitor for NFSv2/3 locking.
  rpcbind.service                           loaded active running RPC bind portmap service
  rsyslog.service                           loaded active running System Logging Service
```

Step 9: Now we will stop the apparmor service from the list of services which can be done by using following command.

Systemctl stop apparmor



Step 10: After stopping the apparmor service will be disable it using the following command.

Systemctl disable apparmor