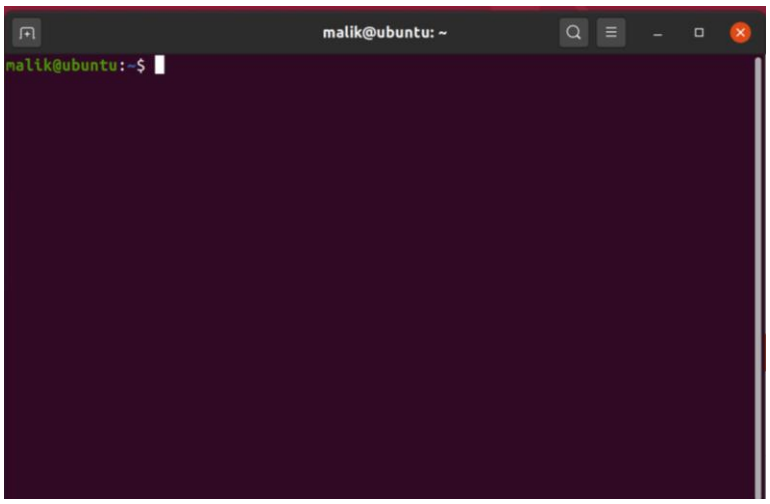
ROS installation steps on Ubuntu 20.4

Robot Operating System is robotics middleware. Although ROS is not an operating system, it provides services designed for a heterogeneous computer cluster such as hardware abstraction, low-level device control, implementation of commonly used functionality

Step 1 : open the terminal you can use the keyboard shortcut “CTRL+ALT+T”

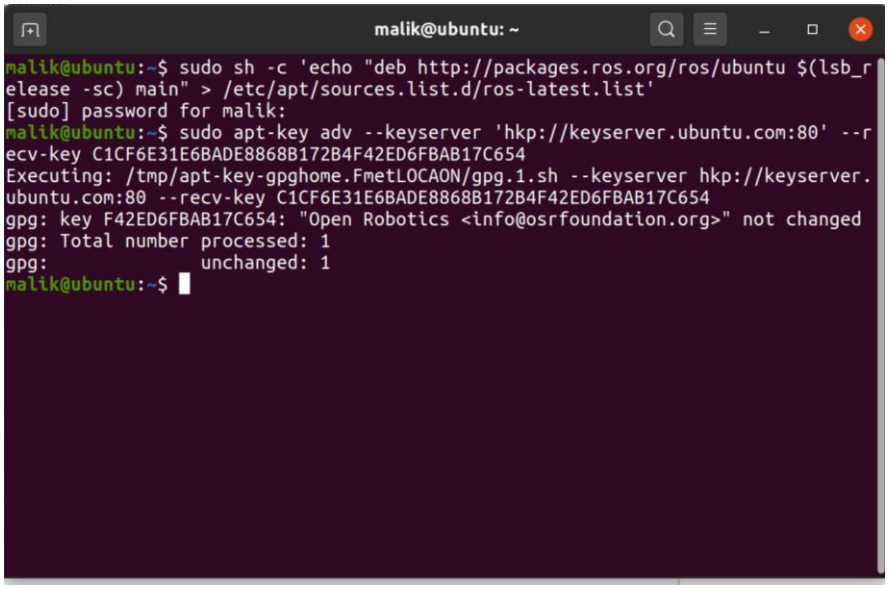


Step 2 : Setup your sources.list Setup your computer to accept software from packages.ros.org.

```
sudo sh -c 'echo "deb http://packages.ros.org/ros/ubuntu $(lsb_release -sc) main" > /etc/apt/sources.list.d/ros-latest.list'
```

Step 3 : Set up your keys

```
sudo apt-key adv --keyserver 'hkp://keyserver.ubuntu.com:80' --recv-key C1CF6E31E6BADE8868B172B4F42ED6FBAB17C654
```



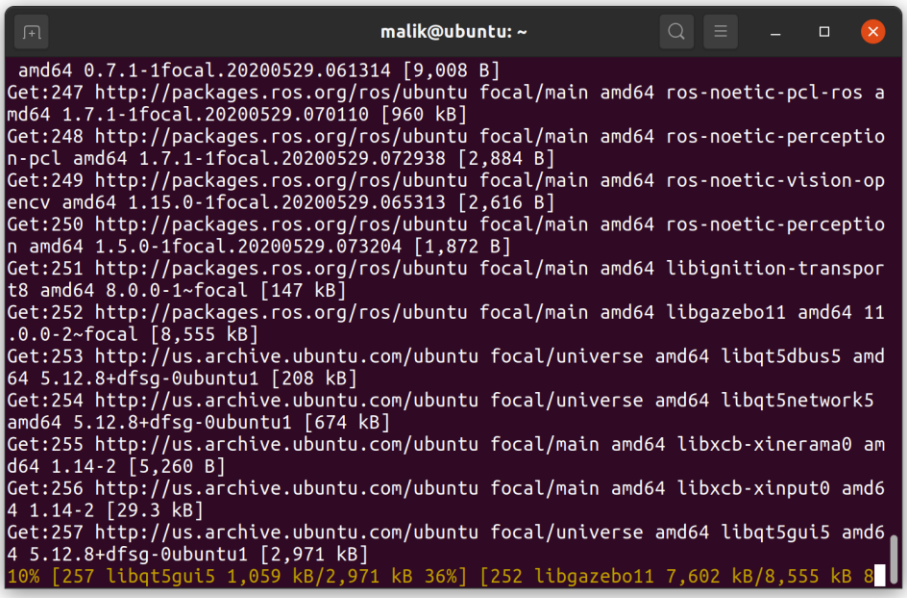
Step 4 : First, make sure your Debian package index is up-to-date by using this command to update

```
sudo apt update
```

Step 5: installing ROS

```
sudo apt install ros-noetic-desktop-full

Y
```



And now for the final step

```
echo "source /opt/ros/noetic/setup.bash" >> ~/.bashrc
source ~/.bashrc
```

To make sure our installation succeeded we can use this command if it show noetic this indicates a successful installation

```
rosversion -d
```