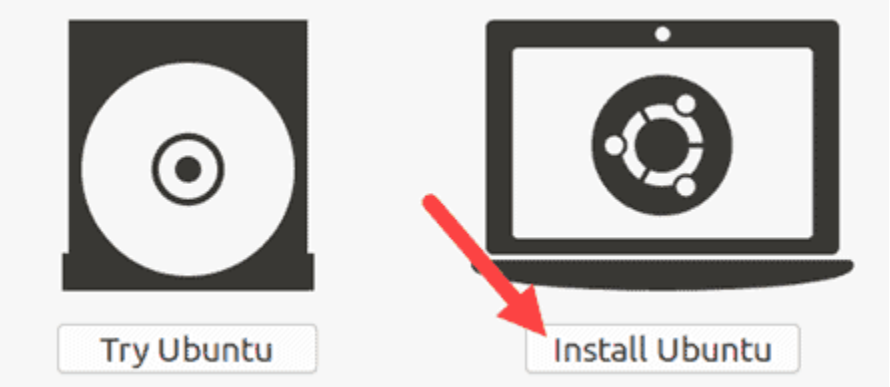
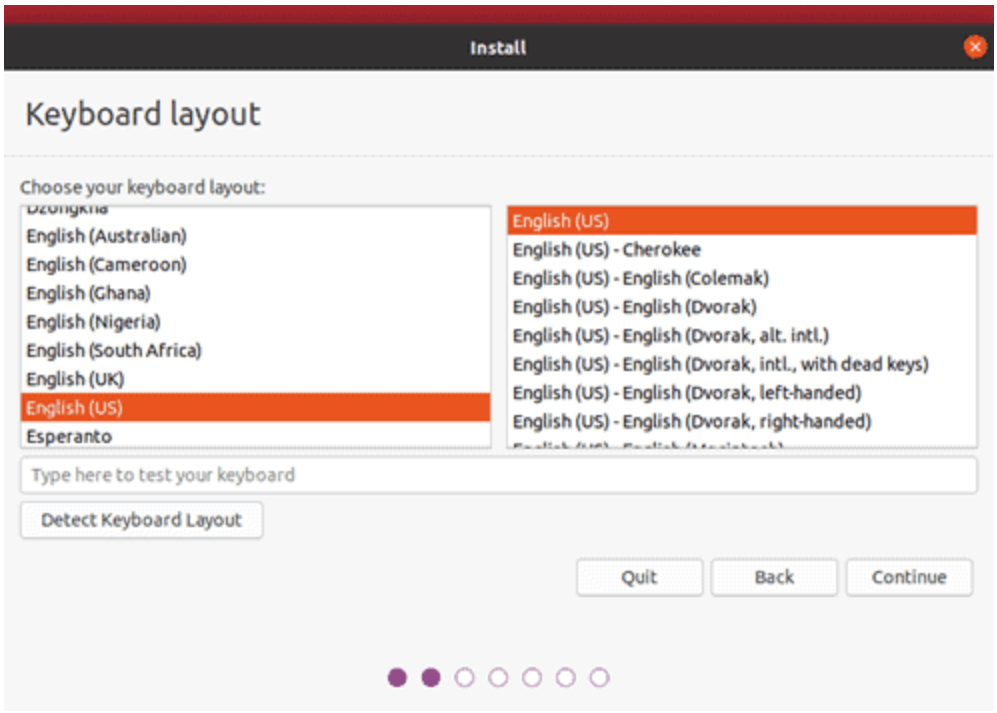
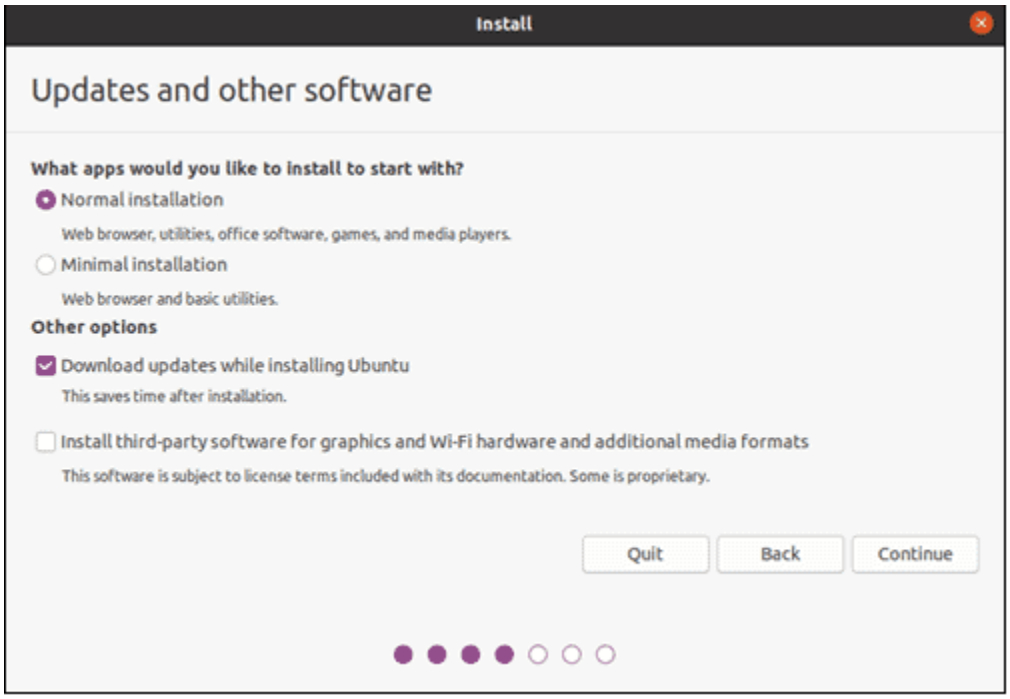
- **Install Ubuntu 20.04**

    - Click the Download button once you've found the version you need. Your download should begin after you've been taken to a thank-you page. (For desktops, we'll download and install Ubuntu 20.04.)
    - You'll need a USB disk with at least 4GB of storage. The data on the USB drive will be erased as a result of this procedure. Ensure that any existing data on the USB drive is backed up.
    - Shut down your computer. Remove any additional USB devices, such as printers, memory cards, and so on.
    - Turn on your computer after inserting the Ubuntu USB disk.
    - Use the arrows to select the Ubuntu media to boot from once you've seen your boot menu. The name of the entry for a DVD is usually DVD or Optical. USB is commonly referred to as USB.
    - The Ubuntu live disc menu should begin to load on your PC.
    - To begin the installation, click Install Ubuntu.



    - choose keyboard layout and when you are ready click Continue.

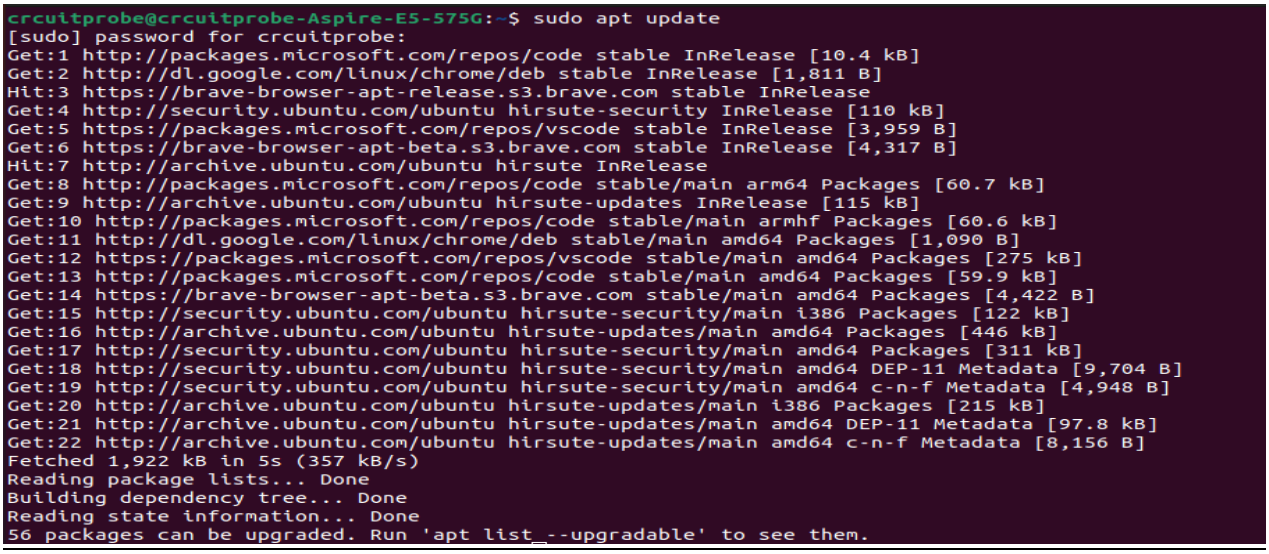

Install
Keyboard layout
Choose your keyboard layout:
English (Australian)
English (Cameroon)
English (Ghana)
English (Nigeria)
English (South Africa)
English (UK)
English (US)
Esperanto
English (US)
English (US) - Cherokee
English (US) - English (Colemak)
English (US) - English (Dvorak)
English (US) - English (Dvorak, alt. intl.)
English (US) - English (Dvorak, intl., with dead keys)
English (US) - English (Dvorak, left-handed)
English (US) - English (Dvorak, right-handed)
Type here to test your keyboard
Detect Keyboard Layout
Quit
Back
Continue


Install
Updates and other software
What apps would you like to install to start with?
Normal installation
Web browser, utilities, office software, games, and media players.
Minimal installation
Web browser and basic utilities.
Other options
Download updates while installing Ubuntu
This saves time after installation.
Install third-party software for graphics and Wi-Fi hardware and additional media formats
This software is subject to license terms included with its documentation. Some is proprietary.
Quit
Back
Continue

- **Update Ubuntu and best practices**

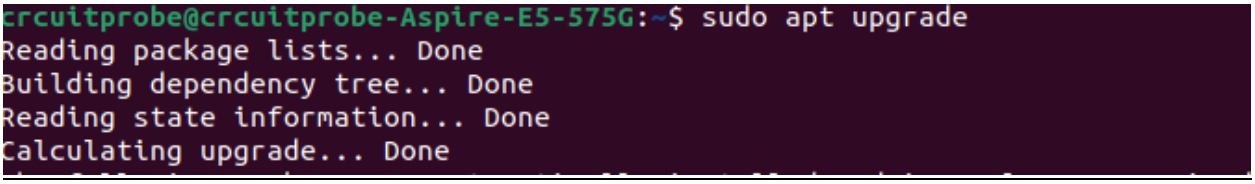
  This command updates the package lists from the enabled repositories.

  - $ sudo apt update



  This command will upgrade all the upgradeable packages.

  - $ sudo apt upgrade



- **Install software via the command line and graphically using the software center**

  a) Via Command line

  - A Package Management System (PMS) is used by all of the main Linux distributions to control the installation of software applications and libraries. The two primary PMS utilities used commonly in the linux world are dpkg and rpm.
  - For debian based distribution such as Ubuntu it utilizes *dpkg* command and this command communicates directly with the Linux system's PMS and is used to install, manage, and remove software packages.
  - For software installation I have taken the GIMP image editor as a reference and will show various methods to install it.

  Installing GIMP 2.10 via PPA in Ubuntu-based Linux distributions

  - $ sudo apt-get gimp

```
crcuitprobe@crcuitprobe-Aspire-E5-575G:~$ sudo apt install gimp
[sudo] password for crcuitprobe:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
```

  Installing GIMP 2.10 via Snap Packages

  - $ sudo snap install gimp

```
crcuitprobe@crcuitprobe-Aspire-E5-575G:~$ sudo snap install gimp
gimp 2.10.28 from Snapcrafters installed
```

  Installing from Source Code

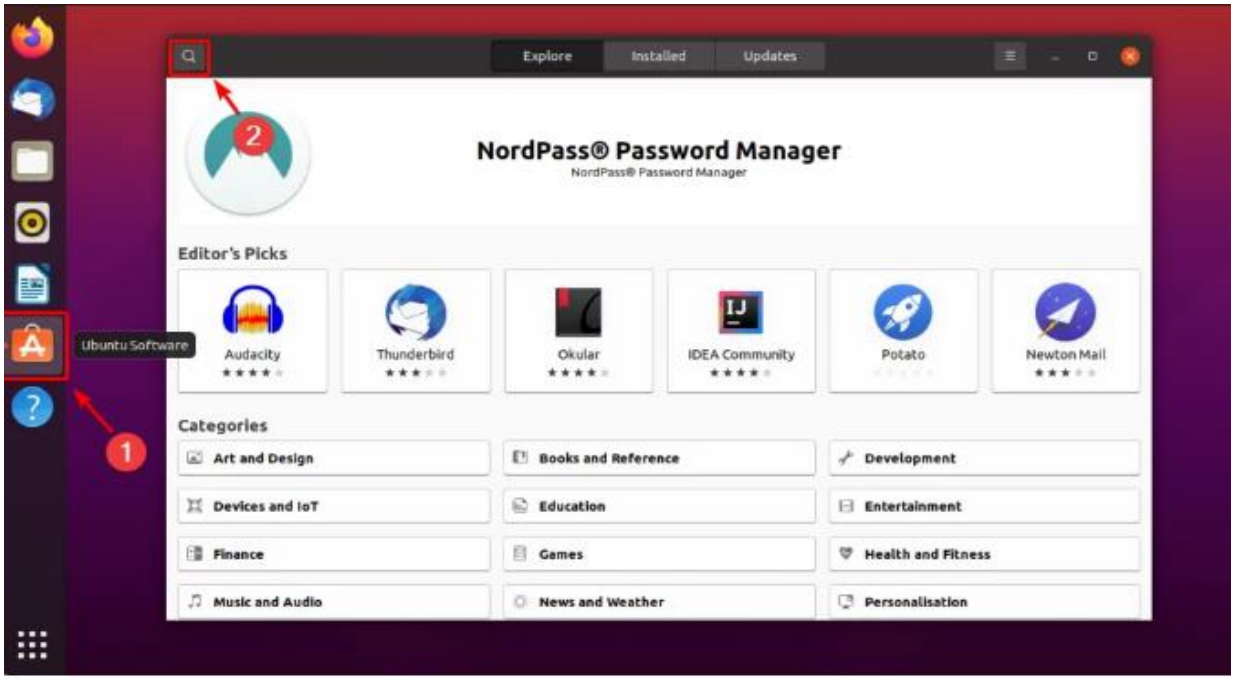
  - If you work with open source software on a regular basis, you're likely to come across software packaged as a tarball. This section will lead you through unpacking and installing tarball software packages.
  - Download the file to your linux system and after you download the file unpack it.
  - To unpack tarball software standard tar command is used:

```
#  tar -zxvf gimp-2.99.8.tar.bz2
# cd gimp-2.99.8.tar.bz2
# ./ configure
# make
```

sudo make install

b) Using software center

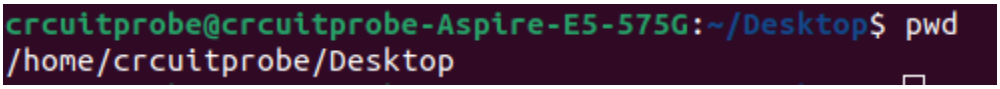
- Browse ubuntu software
- Search the name of required software.
  For example: if we want to install GIMP(GNU Image Manipulation Program) then search GIMP and click on install button.
  Then click launch to open it and use it.



- ## Basic commands

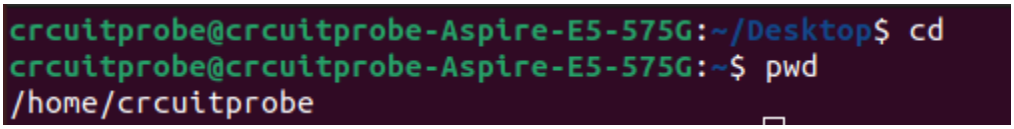
pwd

- this command prints the working directory.



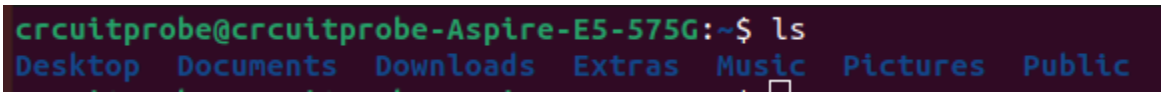
cd

- this command changes your working directory to home directory.



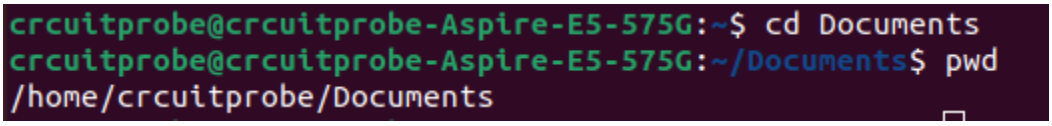
ls

- this command lists files and folders contained within it.



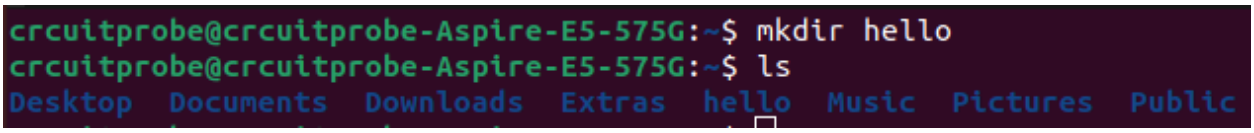
cd + folder_name

- switches to that particular directory. For eg: cd documents switch to Documents directory



mkdir

- It is used to create a new directory.



touch

- It is used to create a blank file.

```
crcuitprobe@crcuitprobe-Aspire-E5-575G:~$ touch new.txt
crcuitprobe@crcuitprobe-Aspire-E5-575G:~$ ls
Desktop  Documents  Downloads  Extras  hello  Music  new.txt
```

echo

- outputs the text to the command line.

```
crcuitprobe@crcuitprobe-Aspire-E5-575G:~$ echo "Hello World"
Hello World
```

mv

- it is used to move file to another directory.

```
crcuitprobe@crcuitprobe-Aspire-E5-575G:~$ mv new.txt Documents
crcuitprobe@crcuitprobe-Aspire-E5-575G:~$ ls
Desktop  Documents  Downloads  Extras  hello  Music  Pictures  Public  server_speechtext  snap  Templates  Videos
```

cp

- it copies a file or folder from one location to another

rm

- it removes the file and requires the path to a file in order to delete it.

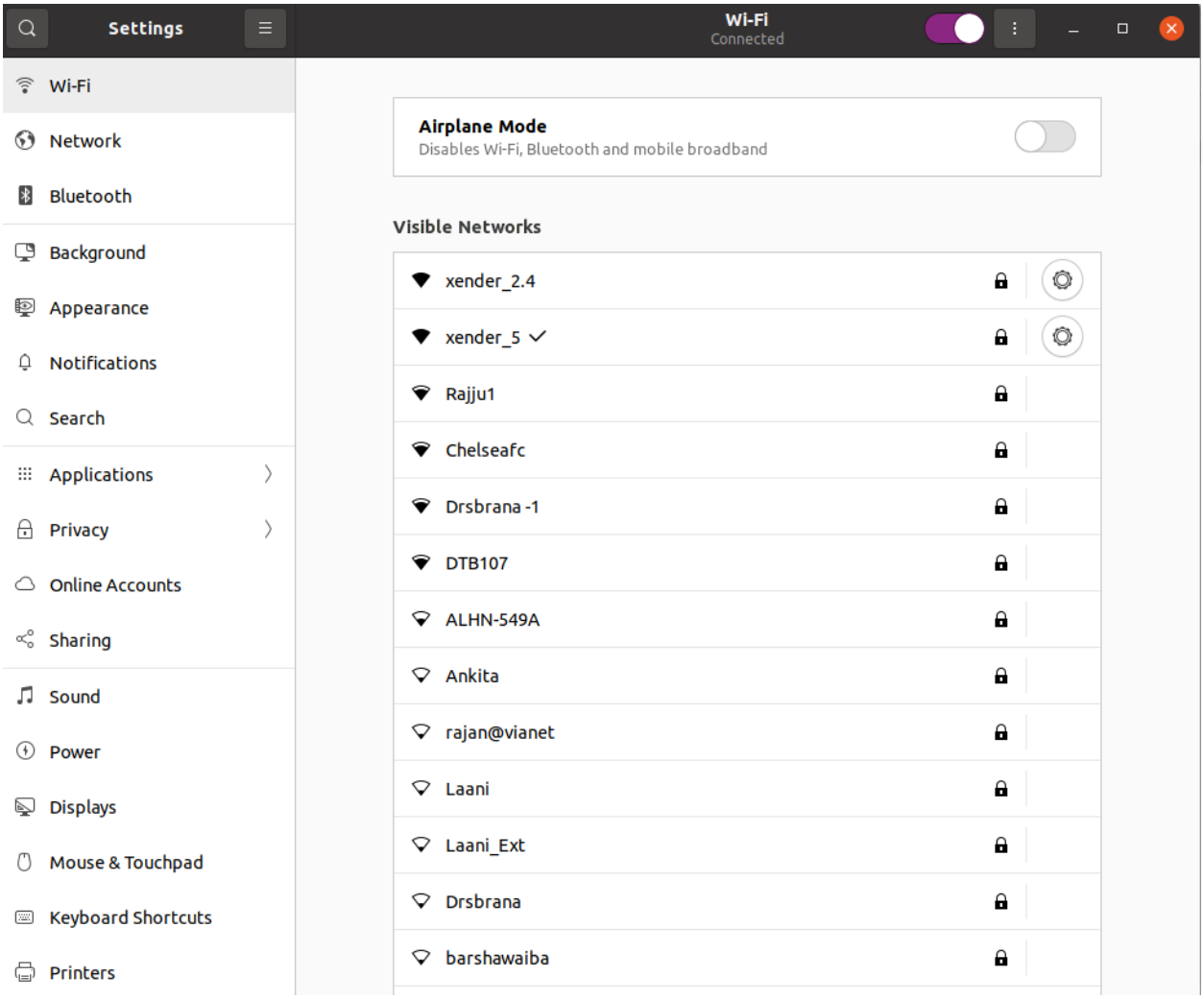
- **How to connect your computer to the internet**

  For Wi-fi connection:

  Tap to the settings.

  Tap wifi network where visible networks will be shown.

  Enter the password and finally Wi-Fi is connected.

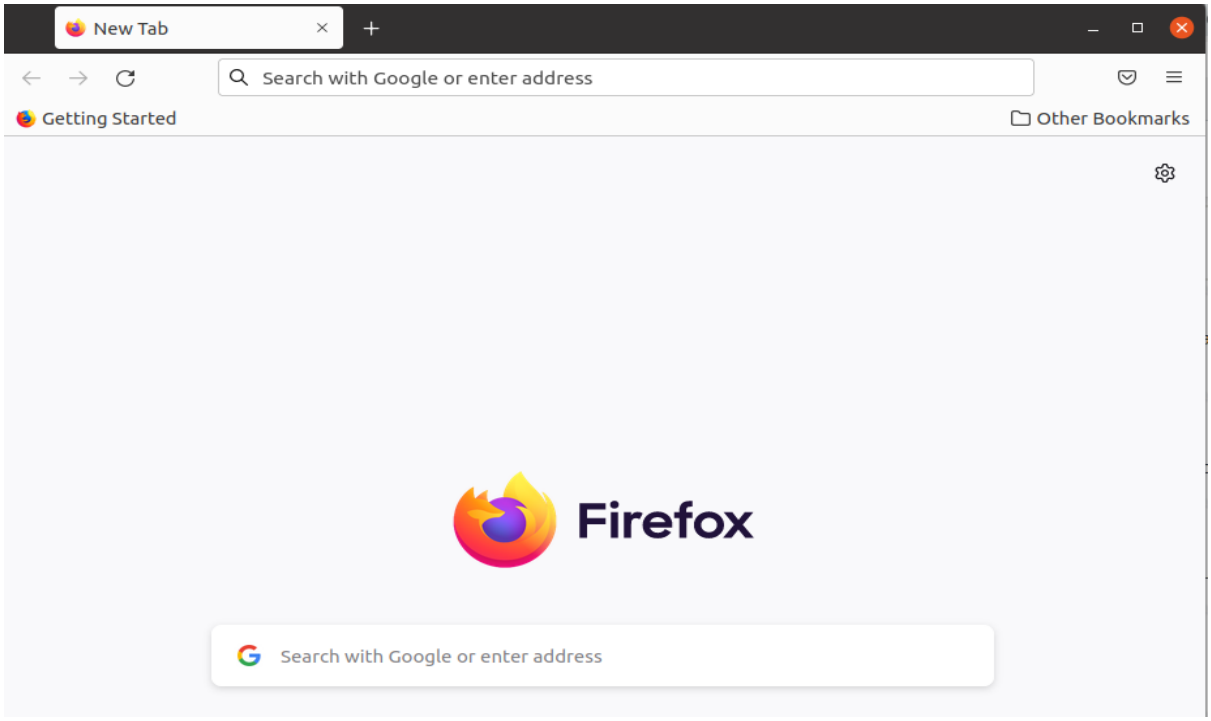


- **Applications to perform everyday tasks**

  - **Internet Browsing**

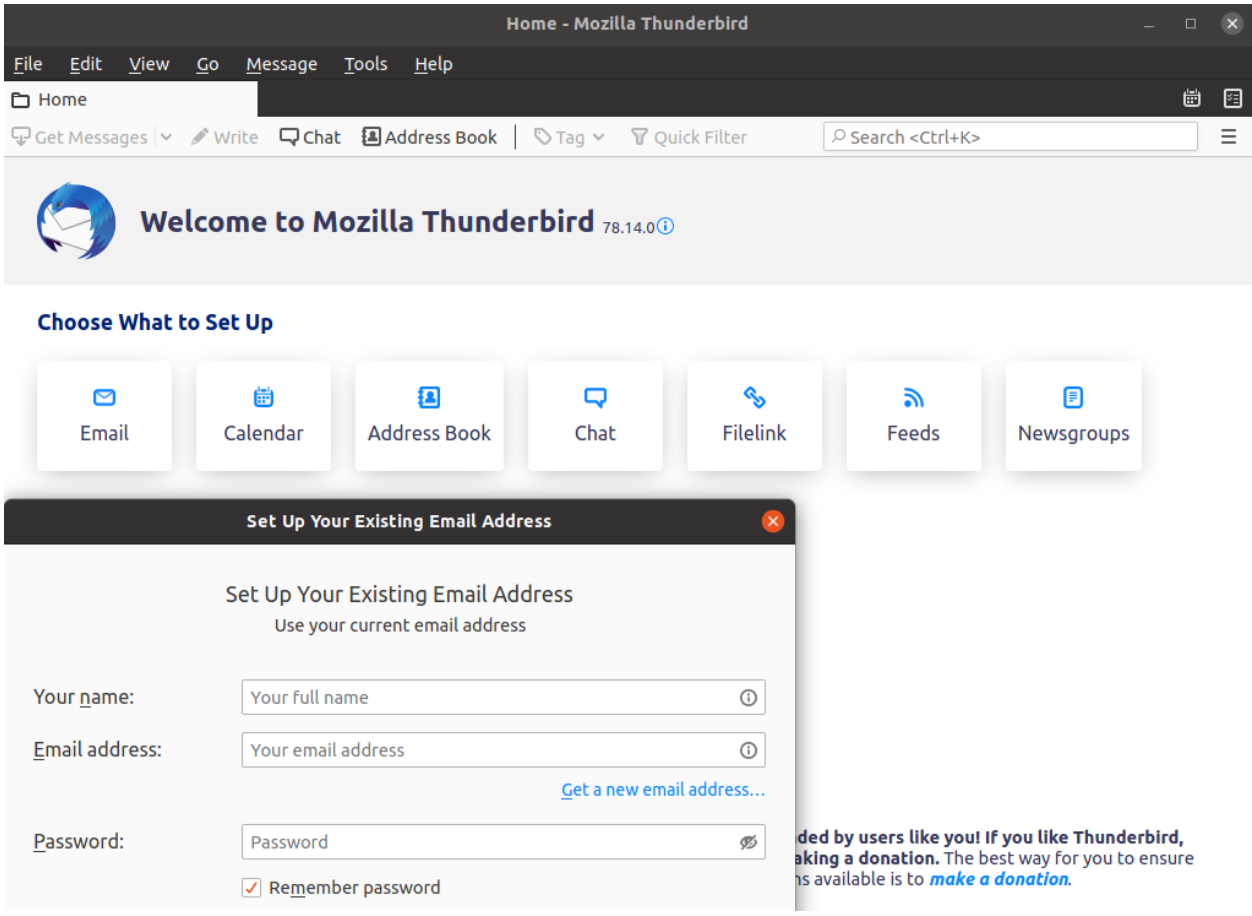
    Previously for internet browsing Lynx program was used which allows you to browse websites directly from the terminal session.

    Nowadays, various browsers are present which helps for internet browsing. Mozilla Firefox is the default browser you get in Ubuntu. But various browsers like brave and Google Chrome can be installed and used as per the choice of user.



➢ **Reading email**

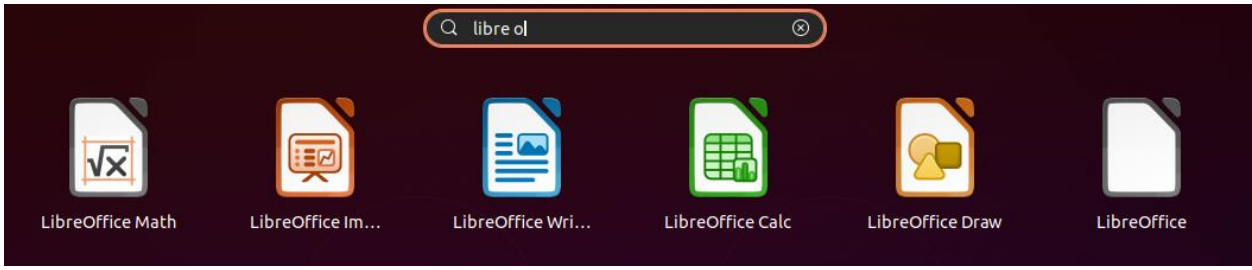
The main application available for sending and receiving email is mozilla thunderbird.



➢ **Office Suite (Writing documents, creating presentations, using spreadsheets)**

Libreoffice

The LibreOffice suite includes apps for word processing, spreadsheet creation and editing, slideshow creation and editing, diagram and drawing creation, database management, and more.



➢ **Entertainment**

The entertainment applications in linux are:

- Firefox
- Spotify
- Buka
- Musescore
- Darktable
- Shotcut

➢ **Steaming media**

The media streaming tools for linux are:

- VLC media player
- Kodi
- Plex

➢ **Playing games**

The applications for playing games are:

- Cs Go Player Profiles
- Team Fortress 2
- Dota 2

➢ **Chat**

- Wire
- Skype
- Telegram

➢ **School work**

- Libre Office

- **Programing**
  - Visual studio code
  - Vim
  - Eclipse

- **Educational Applications**
  - KDE Edu Suite
  - GeoGebra
  - GCompris
  - SaGeMath
  - Scratch
  - Tux4Kids

- **Video Calling applications (Example: Zoom)**
  - Wire

- **Getting help with Ubuntu and troubleshooting tips**
  - Glogg
  - System monitor