

## Assignment 07

**Title:** Installation of Linux Operating System

**Problem Statement:** Installation of Linux Operating System and basic configuration

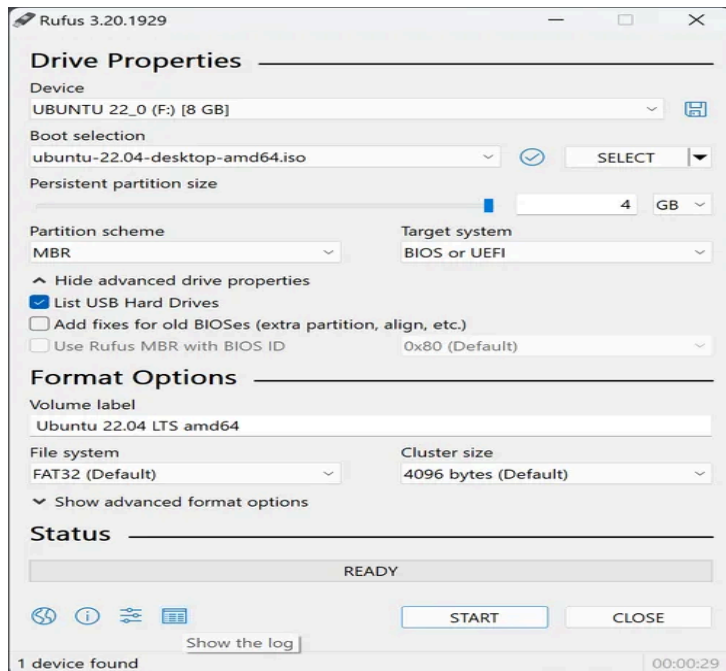
**Linux Installation:**

Step 1: Choose Your Linux Distribution

Before the start of the installation process, you need to choose a Linux distribution that suits your needs such as Ubuntu, Fedora or Debian.

Step 2: Create a Bootable USB or DVD

1. Download Rufus (Windows) or Etcher (macOS/Windows/Linux), these are some free tools for creating bootable USB drives.
2. Insert a USB flash drive (8GB or larger) into your computer.
3. Open Rufus or Etcher.
4. Select the downloaded ISO file as the source.
5. Choose the USB drive as the destination.
6. Click “Start” or “Flash” to create the bootable USB drive.

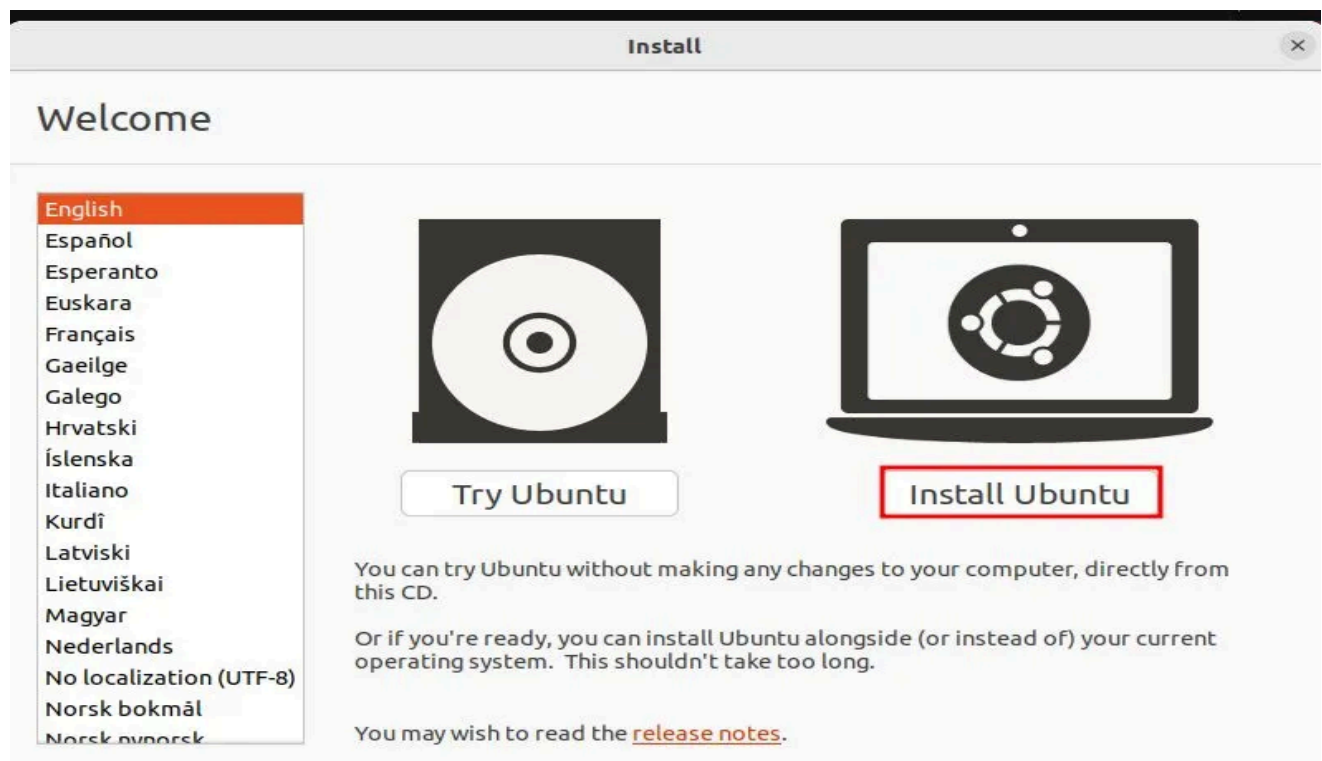


### Step 3: Boot from the USB

1. Restart your computer and enter the BIOS/UEFI settings (usually by pressing F2, F12, or Del during startup).
2. Change the boot order to prioritize the USB drive. You need to make sure you're not having any other USBs or DVDs mounted.
3. Save the changes and exit the BIOS/UEFI settings.

### Step 4: Installing Linux (Ubuntu)

1. Boot from the USB you created. You'll see the Linux distribution's installer.
2. When you boot into Linux for the first time, you'll typically be greeted with an initial setup wizard. This wizard will guide you through various configuration options, including:  
**Language and Region:** Select your preferred language and region settings.  
**Keyboard Layout:** Configure your keyboard layout to match your physical keyboard.  
**Wi-Fi Settings** (if applicable): If you're using a wireless connection, you'll need to set up your Wi-Fi network at this stage.  
**User Account:** Create or sign in with a user account. It's generally recommended to use a non-root user for day-to-day tasks, as this enhances security.



3. Choose “Install Ubuntu” from the boot menu.
4. Follow the on-screen instructions to configure your keyboard layout, Wi-Fi settings (if applicable), and user account.
5. **Partitioning:** Now, you’ll be asked how you want to install Linux. It is recommended to install Linux alongside Windows, if you have Windows installed. This creates a dual-boot setup, allowing you to choose between Linux and Windows during startup. If you want to replace your current OS with Linux, choose ‘Erase disk and install Ubuntu,’ but be cautious as this will delete all existing data.
8. Wait for the installation process to complete.

#### Step 5: Post-Installation Setup

1. Remove the USB and restart your computer.
2. Select the Linux distro you installed from the boot menu (if dual-booting).
3. Complete the initial setup by following the on-screen prompts.
4. Update Your System

#### **Basic Linux Configuration:**

Following tasks need to be performed for basic Linux configurations:

Basic configuration of the environment includes:

- Date and Time
- System Locales
- Keyboard Layout

1. To display the current **date and time**, use one of the following commands:

```
$ date
```

```
$ timedatectl
```

2. Basic tasks to handle the **system locales**:

Listing available system locale settings:

```
$ localectl list-locales
```

Displaying current status of the system locales settings:

```
$ localectl status
```

Setting or changing the default system locale settings:

```
# localectl set-locale LANG=locale
```

3. Basic tasks to handle the **keyboard layout** include:

Listing available keymaps:

```
$ localectl list-keymaps
```

Displaying current status of keymap settings:

```
$ localectl status
```

Setting or changing the default system keymap:

```
# localectl set-keymap
```

4. Configure your **location**

Either select on the map or type your location and click Continue.

5. Configure your **user**

Next, you must create a user for the system. Type your full name, a name for the computer (which can be anything you like, such as UbuntuLinux), a username, and a password.

**Conclusion:**

Hence we have successfully performed Linux installation and its basic configuration.