

# OPEN DIGITAL LIBRARY

**UBUNTU 22.04.4 + KOHA 24.05 + DSPACE 8.0**

**OPERATING SYSTEM INSTALLATION MANUAL**

**September 24, 2024**



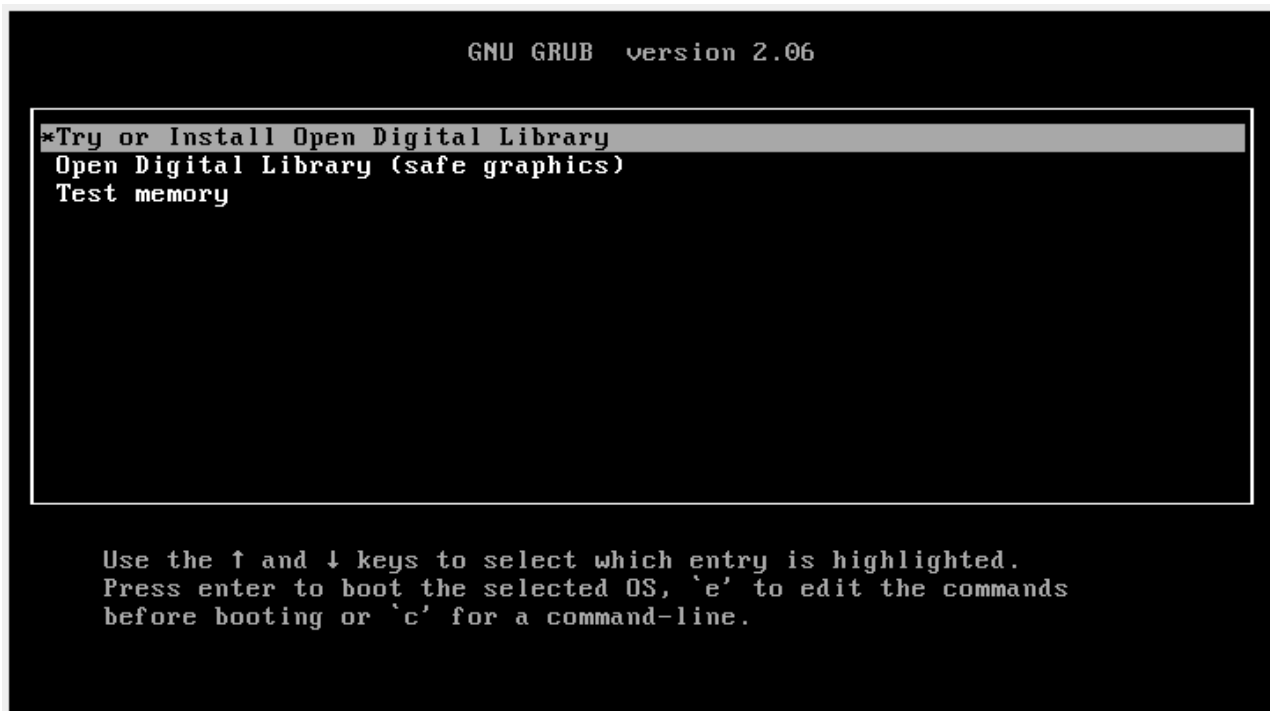
**LinuXpert Systems**

New No.5, Dr. Ambedkar Street, Rathinapuram, Nanganallur, Chennai - 600 061

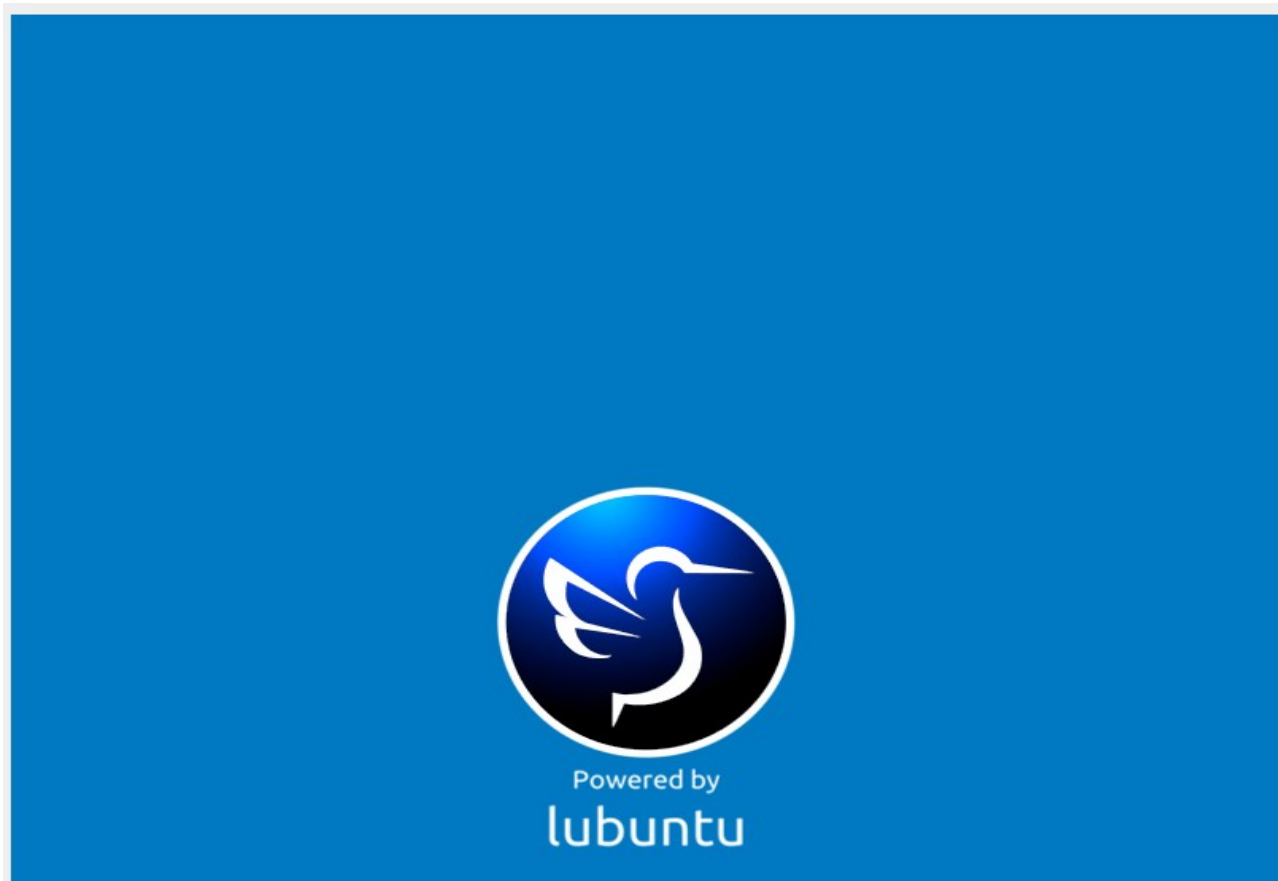
Mobile: +91 98841 65649 | E-mail: [baskar@linuxpert.in](mailto:baskar@linuxpert.in) | Web: [www.linuxpert.in](http://www.linuxpert.in)

# Installation of Ubuntu 22.04.4 Operating System with DSpace 8.0

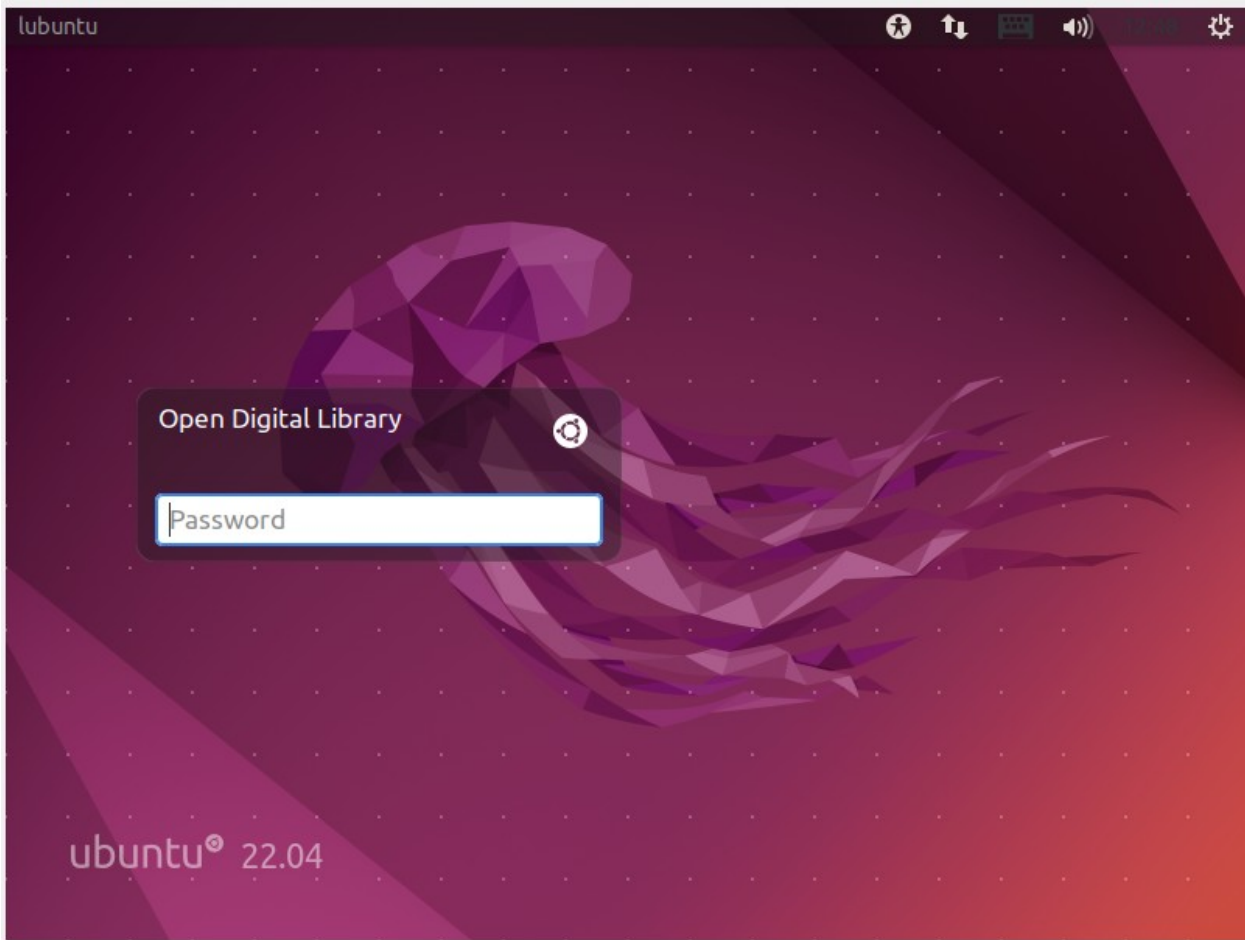
## 1: Boot Menu after booting from the Ubuntu 22.04 ISO Image File



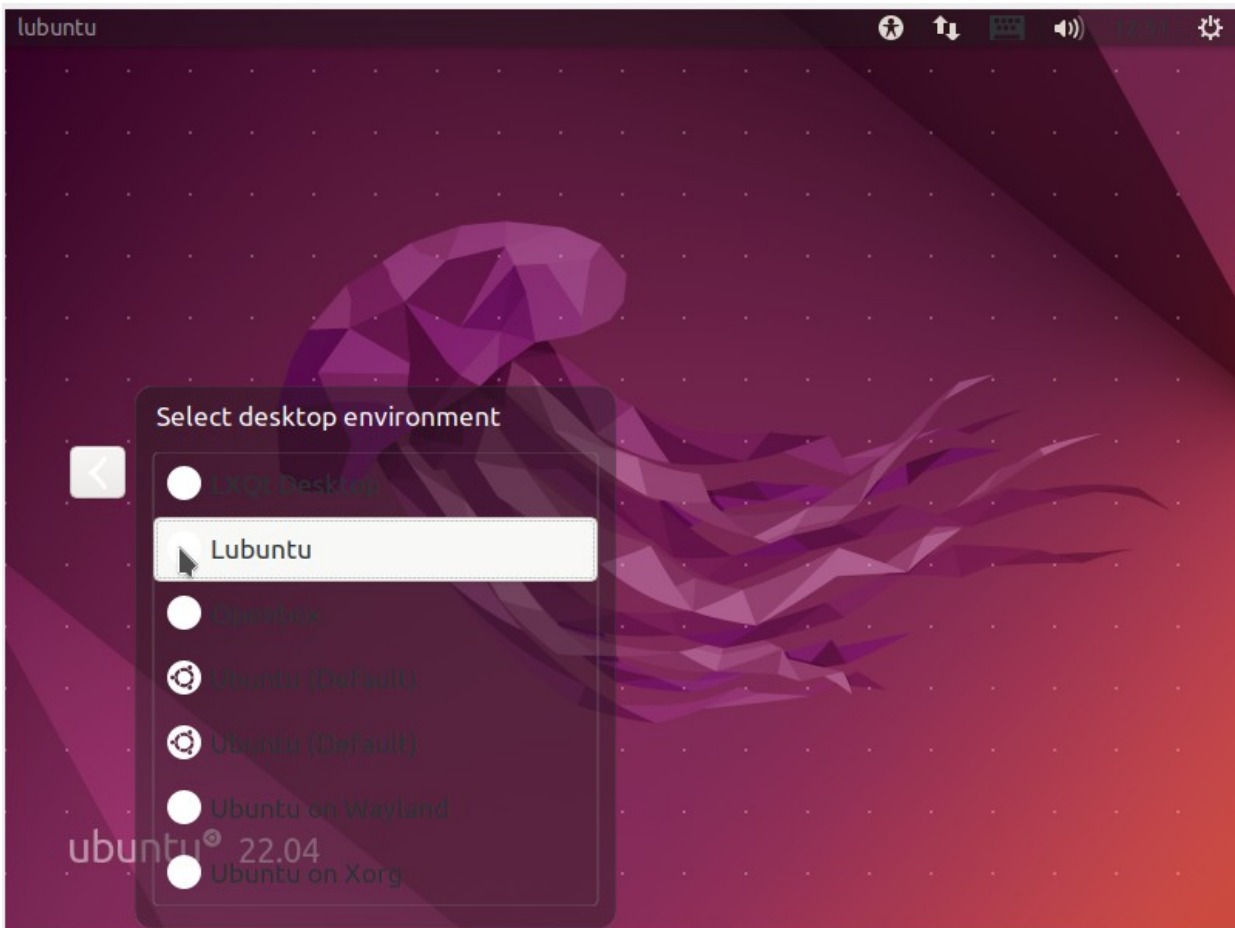
## 2: Graphical Boot Splash Screen



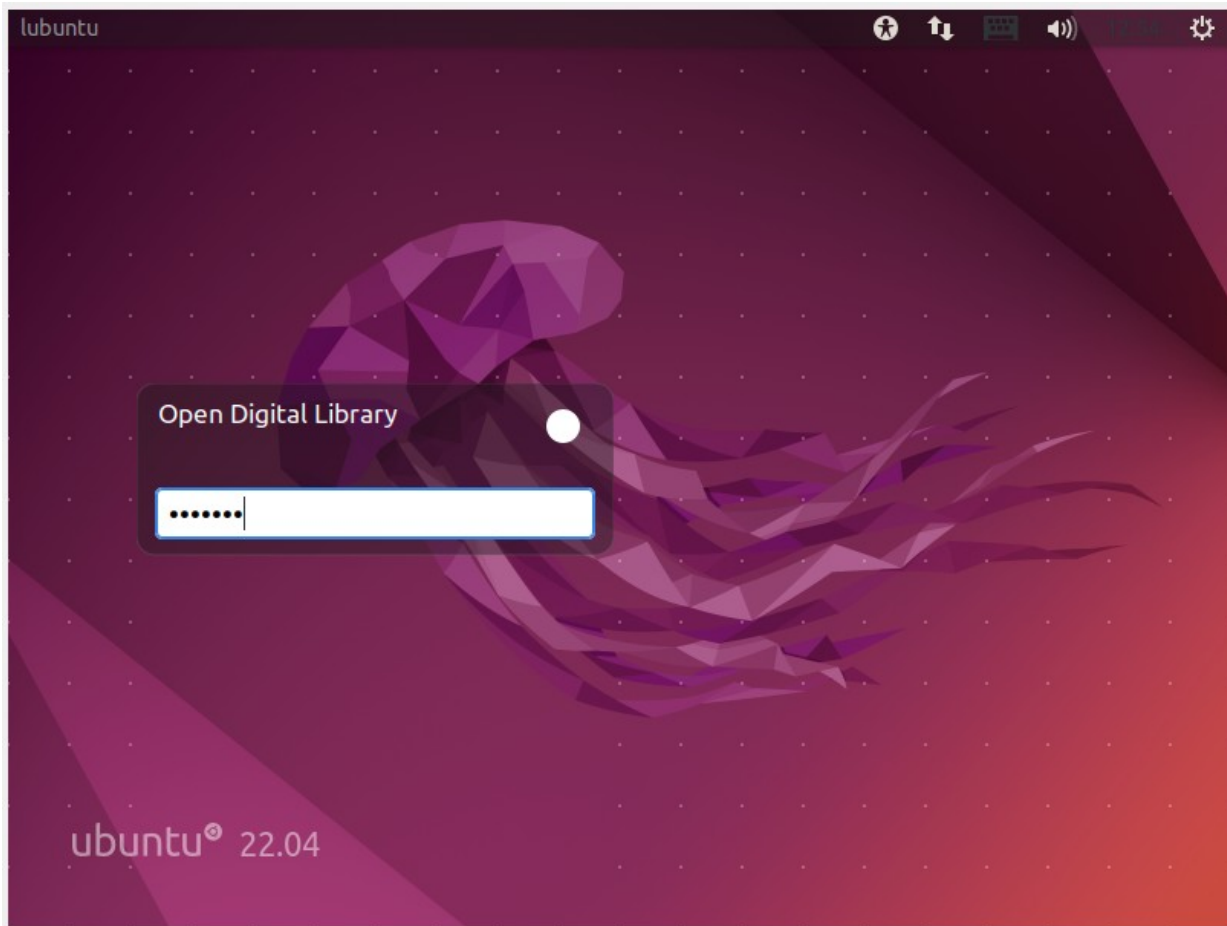
### 3. Ubuntu 22.04.4 OS Login Screen



### 4. Choose 'Lubuntu' as Desktop Environment



## 5. Give the Password as 'library' for Login



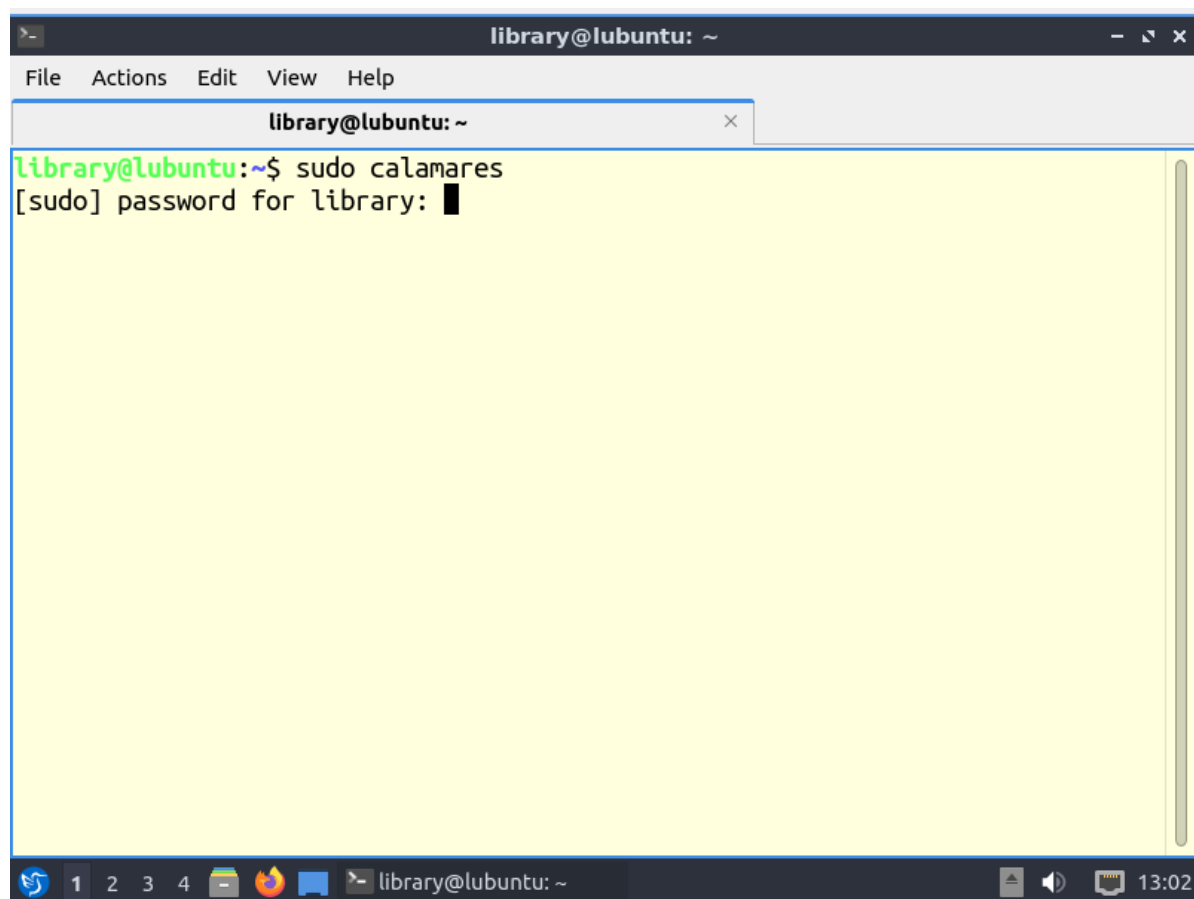
## 6. Ubuntu 22.04.4 Desktop after Logging in



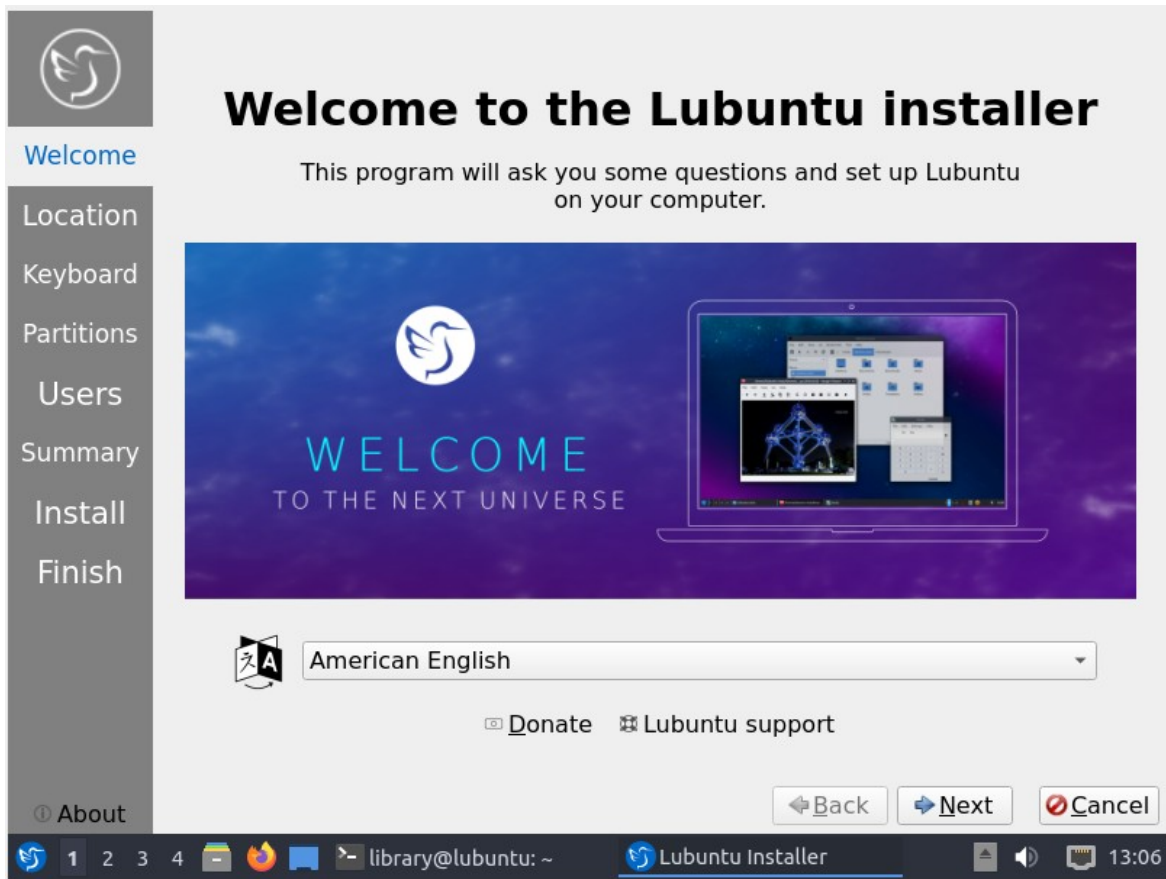
## 7. Open 'QTerminal' (System Tools → QTerminal)



## 8. In QTerminal, type 'sudo calamares' to start the OS Installation



## 9. Welcome to the Lubuntu Installer



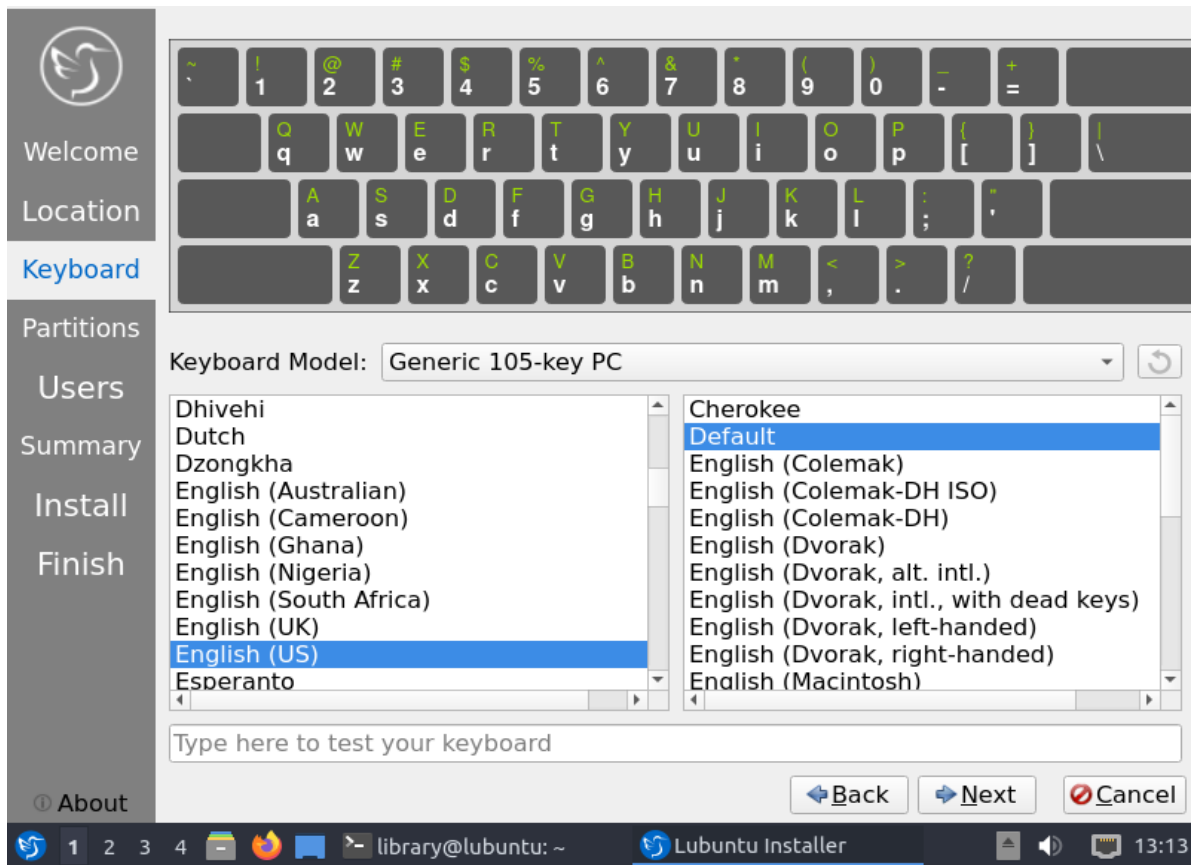
The screenshot shows the 'Welcome' screen of the Lubuntu installer. On the left is a vertical sidebar with the Lubuntu logo at the top and a list of steps: Welcome (highlighted), Location, Keyboard, Partitions, Users, Summary, Install, and Finish. The main area has the title 'Welcome to the Lubuntu installer' and a subtitle 'This program will ask you some questions and set up Lubuntu on your computer.' Below this is a graphic with the Lubuntu logo and the text 'WELCOME TO THE NEXT UNIVERSE' next to a laptop displaying the Lubuntu desktop. A language dropdown menu is set to 'American English'. At the bottom are 'Back', 'Next', and 'Cancel' buttons. The system tray at the very bottom shows the taskbar with icons for the Dash, application windows, and the system tray itself, including the time '13:06'.

## 10. Choose the Time Zone (Asia/Kolkata)

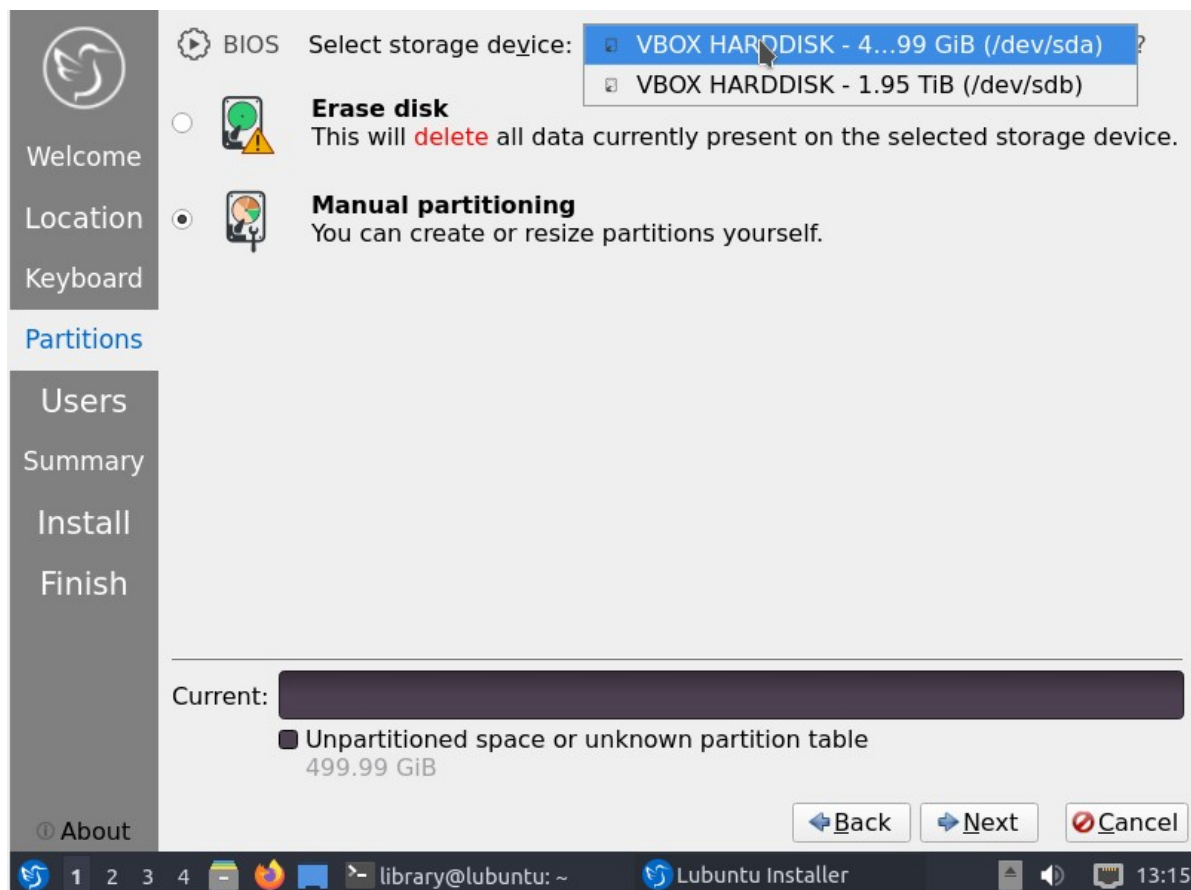


The screenshot shows the 'Location' screen of the Lubuntu installer. The sidebar on the left now highlights 'Location'. The main area features a world map with a red dot and a label 'Kolkata' in India. Below the map are two dropdown menus: 'Region: Asia' and 'Zone: Kolkata'. Below these are two lines of text: 'The system language will be set to English (India).' and 'The numbers and dates locale will be set to English (India).' At the bottom are 'Back', 'Next', and 'Cancel' buttons. The system tray at the bottom shows the taskbar with icons for the Dash, application windows, and the system tray itself, including the time '13:10'.

## 11. Choose the Keyboard Layout



## 12. Choose Partition (Here we choose Manual Partitioning)



## **Instructions to be followed while creating Partition Layout:**

**\* Users are requested to create their own partition layout as per their requirement \***

In this Document, we have used 2 Hard Disks

**SATA-0 : 500 GB (for Operating System)**

**SATA-1 : 2 TB (for DSpace Application and Data, under */home/dspace/*)**

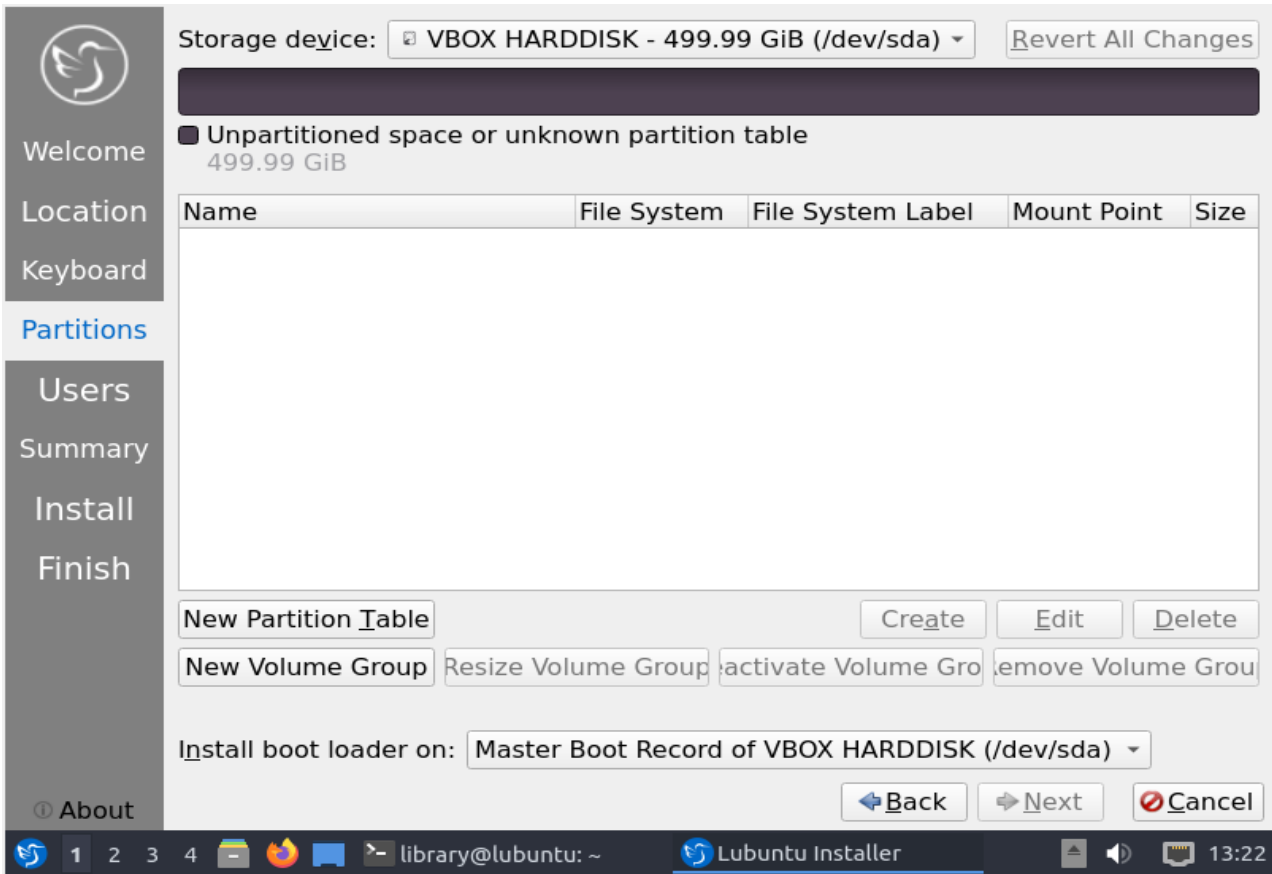
**In SATA-0 (*/dev/sda*), we create the following partitions:**

<i>/dev/sda1</i>	→	BIOS Grub (unformatted)	→ 200 MB
<i>/dev/sda2</i>	→	<i>/boot</i> (ext4)	→ 2000 MB
<i>/dev/sda3</i>	→	linuxswap (linuxswap)	→ 32768 MB
<i>/dev/sda4</i>	→	<i>/</i> (ext4)	→ Rest of Space

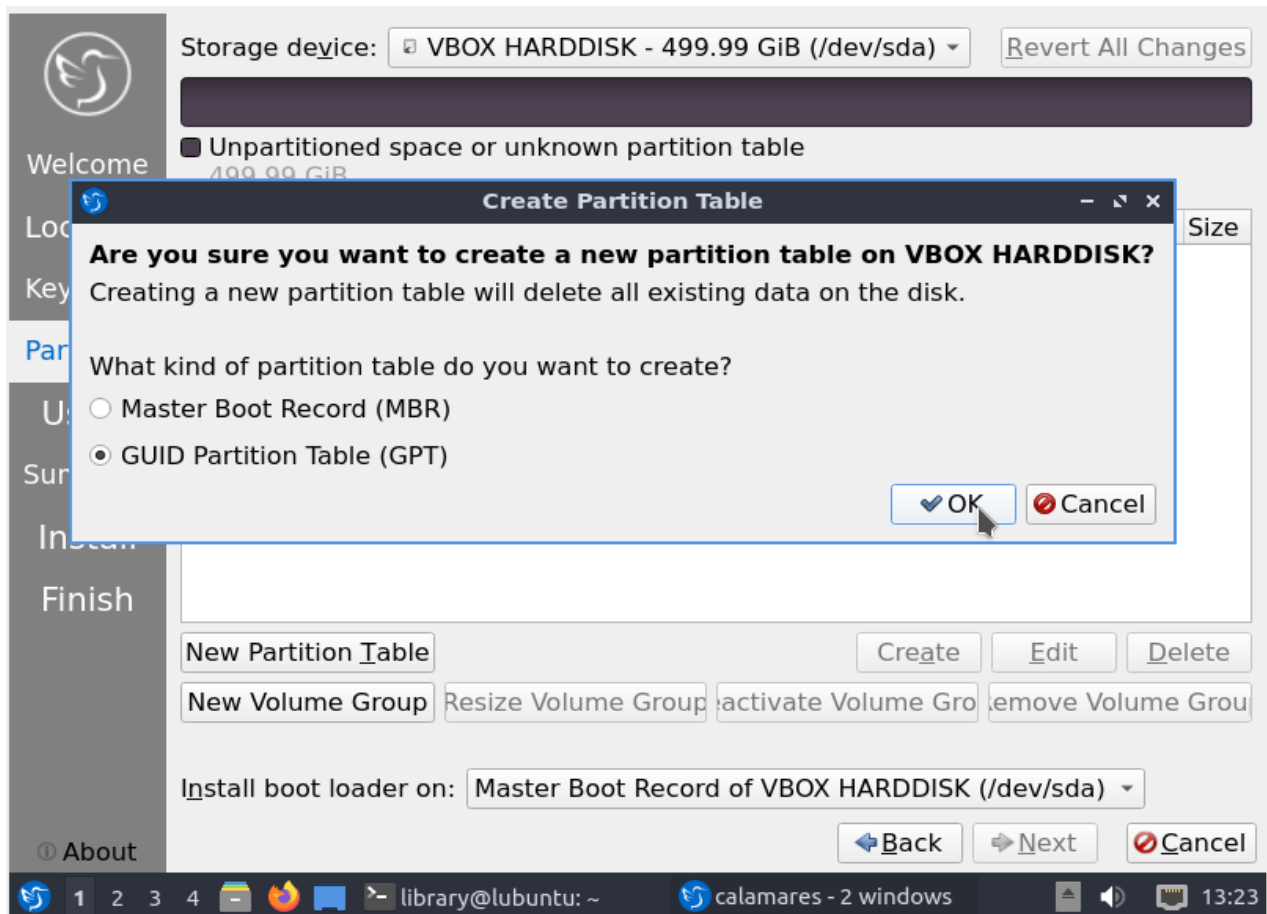
**In SATA-1 (*/dev/sdb*), we create the following partitions:**

<i>/dev/sdb1</i>	→	<i>/home</i> (ext4)	→ 2 TB
------------------	---	---------------------	--------

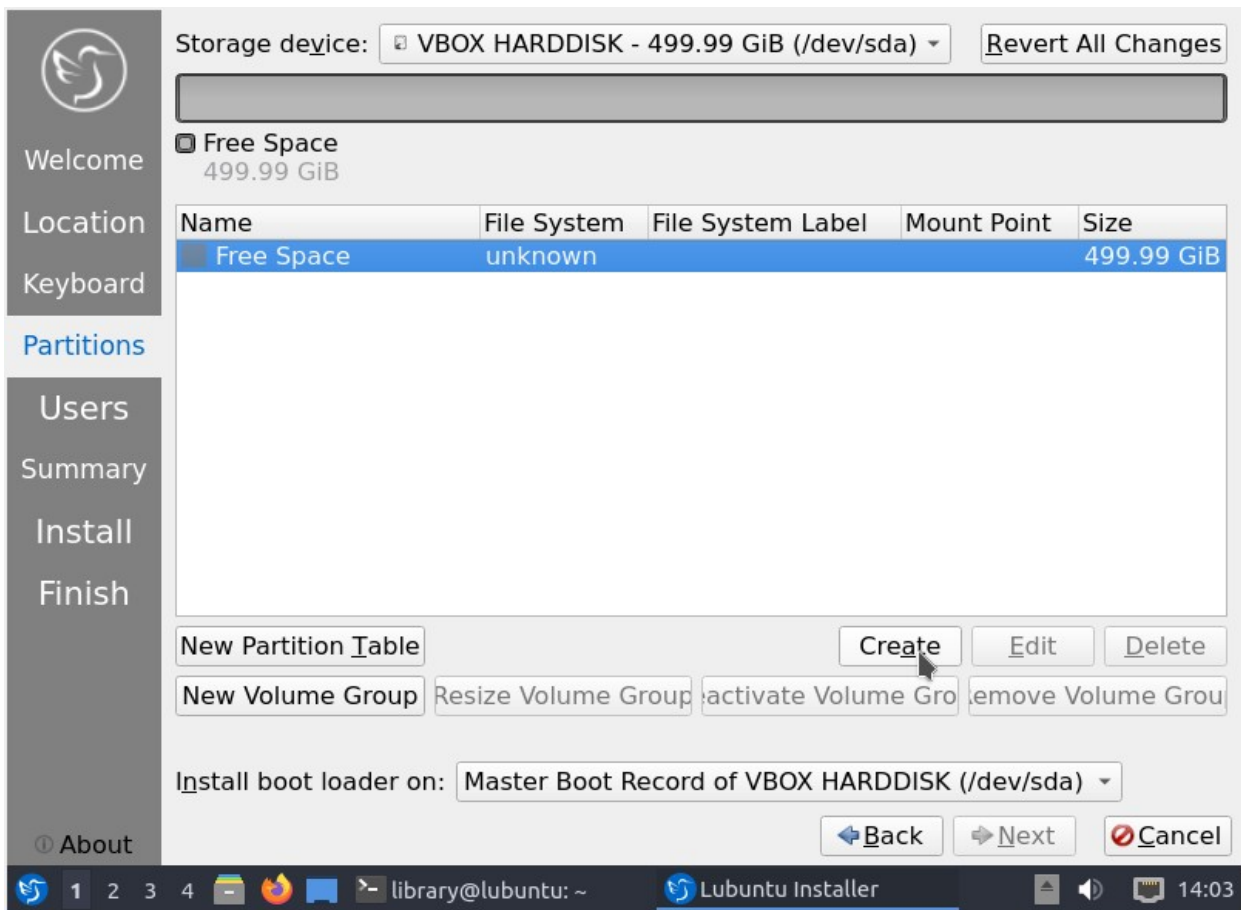
### 13. Creating 'New Partition Table' in SATA-0 HDD



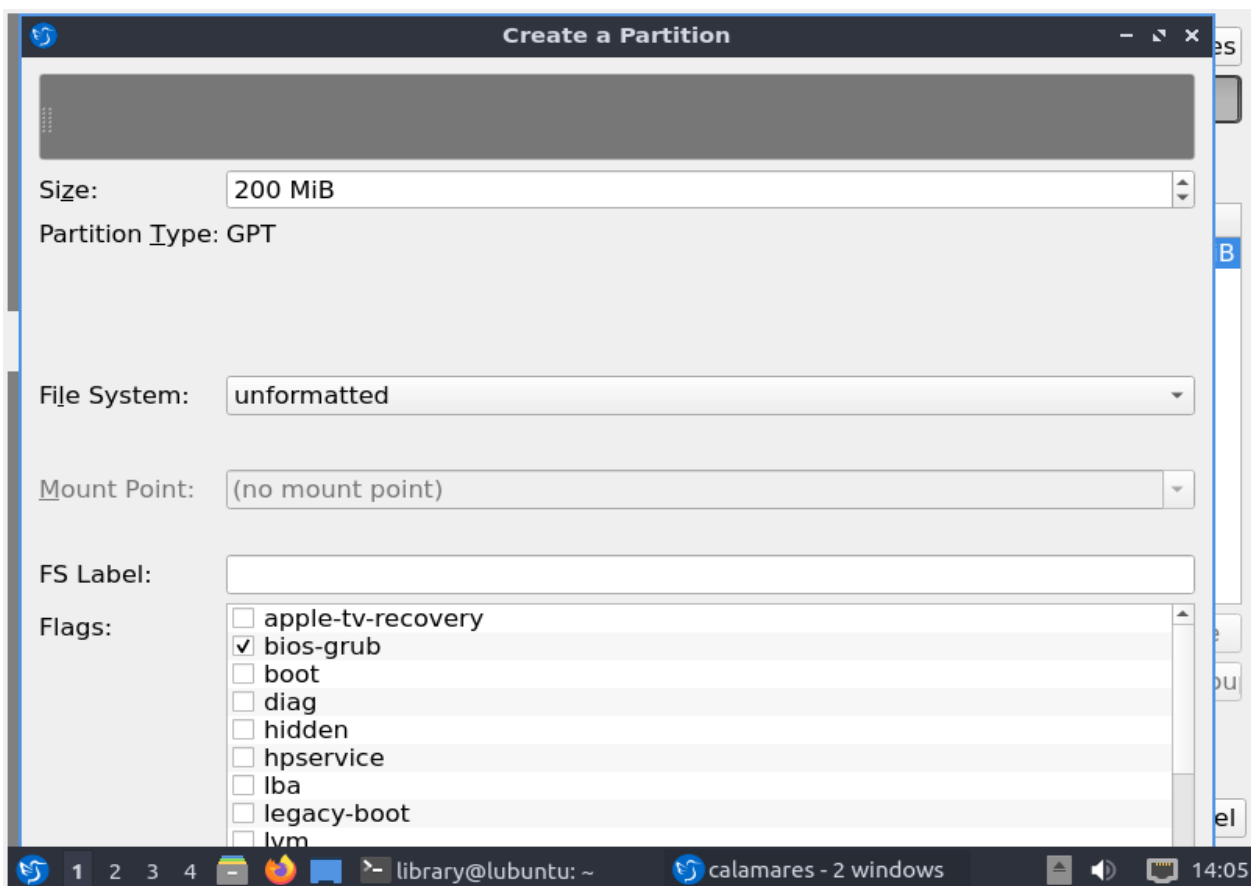
### 14. Create the Partition table as 'GUID' Type (for SATA-0 and SATA-1)



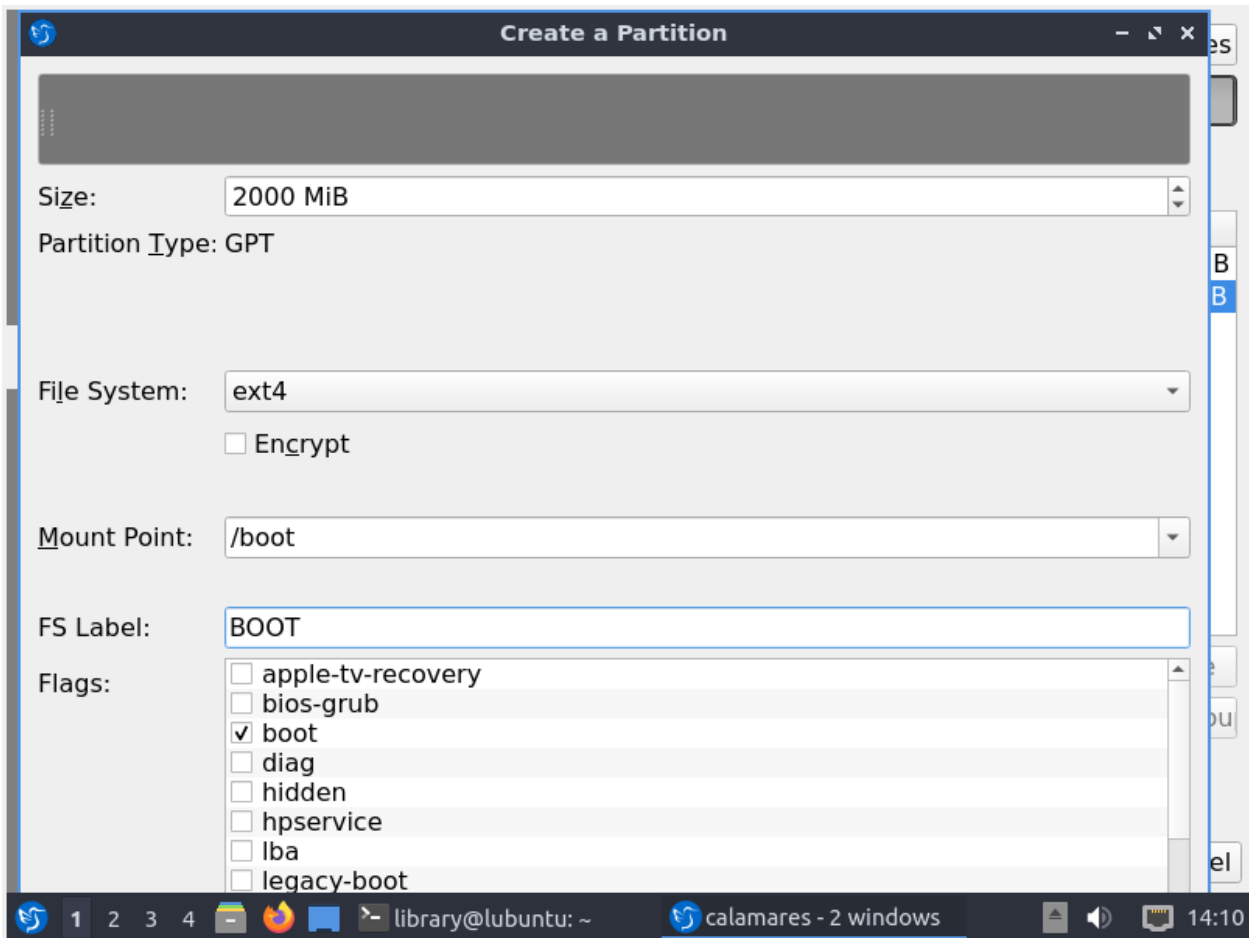
## 15. Click on 'Free Space' and 'Create' Button to create Partitioning



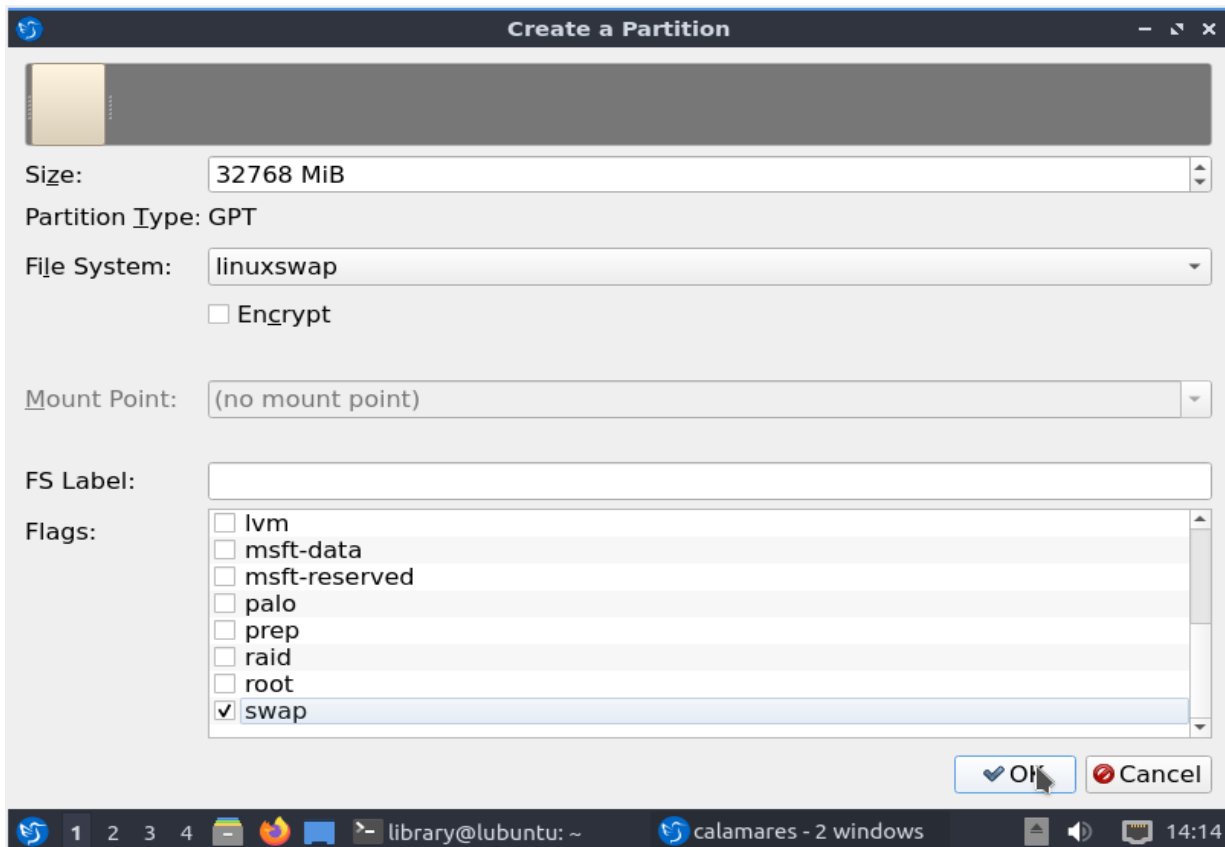
## 16. Create a 'BIOS Grub' Partition (FS Type: Unformatted, Size: 200 MB)



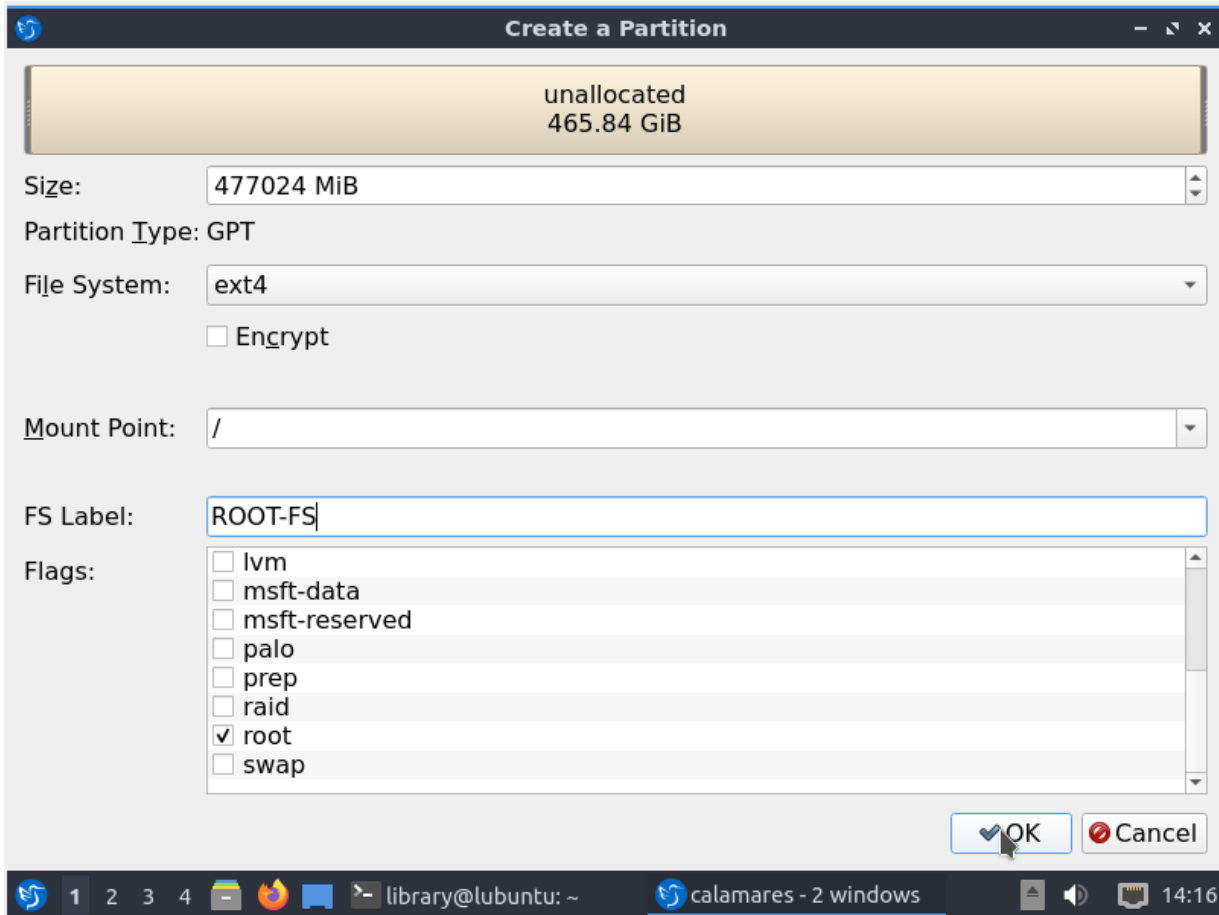
## 17. Create '/boot' Partition (FS Type: ext4, Size: 2000 MB)



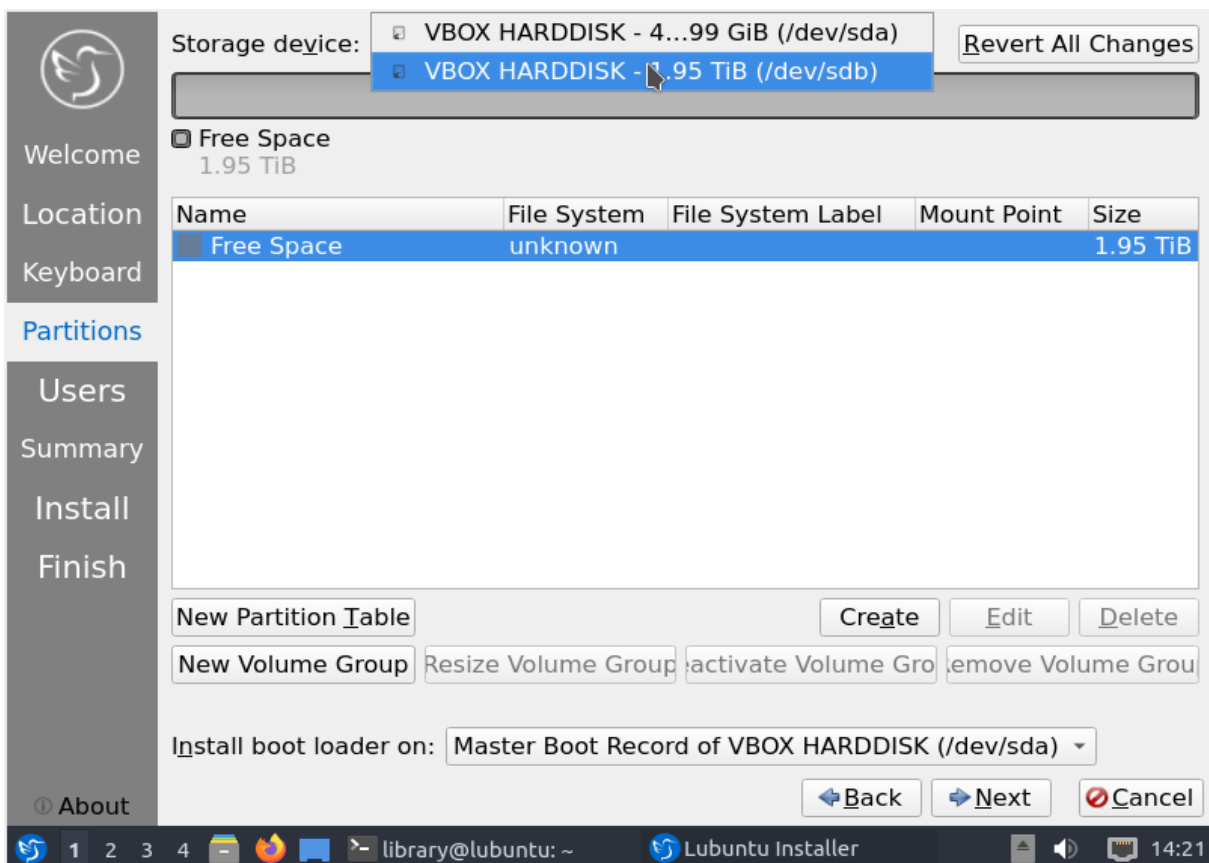
## 18. Create a 'linuxswap' Partition (FS Type: linuxswap, Size: 32768 MB)



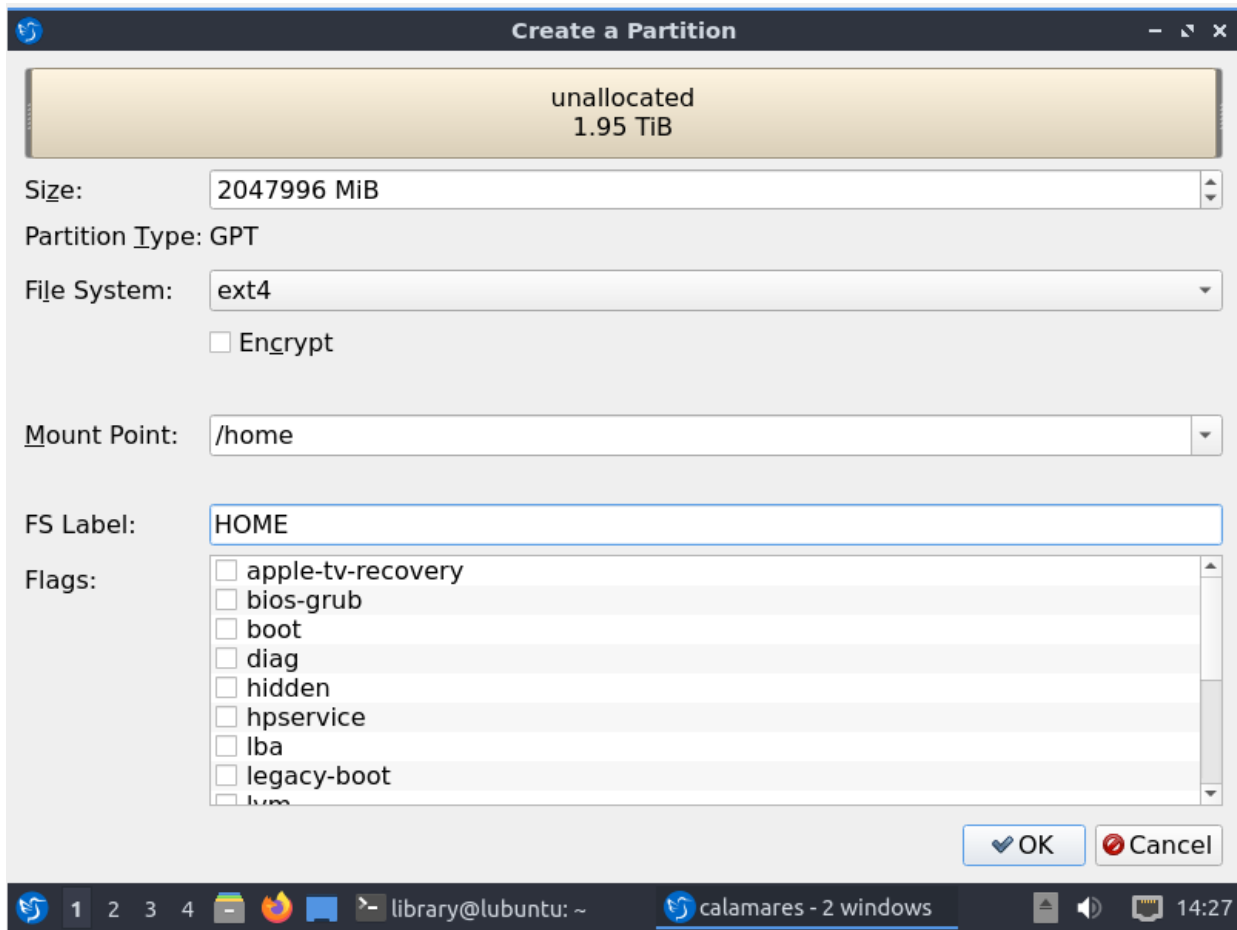
## 19. Create '/' Partition (FS Type: ext4, Size: Rest of Size in SATA-0 HDD)



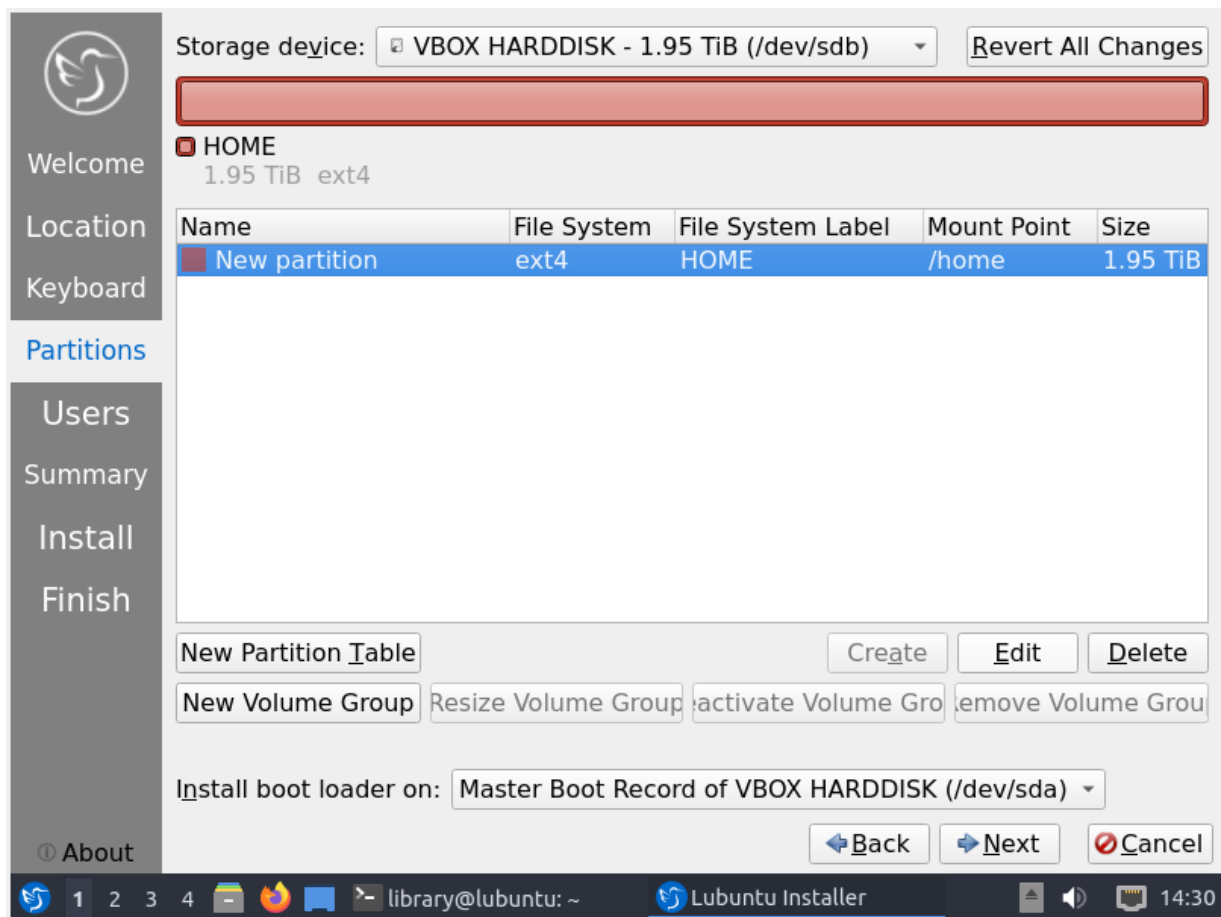
## 20. Create New Partition Table and Partition in SATA-1 HDD (2TB)



## 21. Create '/home' Partition (FS Type: ext4, Size: Full Size in SATA-1 HDD)



## 22. After Creating '/home' Partion in SATA-1 HDD (2 TB)



## 23. After Creating /boot, /, linuxswap Partions in SATA-0 HDD (500 GB)

Storage device:

New partition 200.00 MiB unformatted  BOOT 1.95 GiB ext4  Swap 32.00 GiB swap

ROOT-FS 465.84 GiB ext4

Name	File System	File System Label	Mount Point	Size
<input type="checkbox"/> New partition	unformatted			200.00 MiB
<input type="checkbox"/> New partition	ext4	BOOT	/boot	1.95 GiB
<input type="checkbox"/> New partition	swap			32.00 GiB
<input type="checkbox"/> New partition	ext4	ROOT-FS	/	465.84 GiB

Install boot loader on:

- Master Boot Record of VBOX HARDDISK (/dev/sda)
- Master Boot Record of VBOX HARDDISK (/dev/sdb)
- Boot Partition (/boot)
- Do not install a boot loader

library@lubuntu: ~ Lubuntu Installer 14:33

## 24. Creating Username, Password and providing Computer Name

What is your name?  ✓

What name do you want to use to log in?  ✓

What is the name of this computer?  ✓

Choose a password to keep your account safe.   ✓

Log in automatically without asking for the password.

library@lubuntu: ~ Lubuntu Installer 14:35

## 25. Overview Screen-1 (Before Installation)

This is an overview of what will happen once you start the install procedure.

### Location


Set timezone to Asia/Kolkata.  
The system language will be set to English (India).  
The numbers and dates locale will be set to English (India).

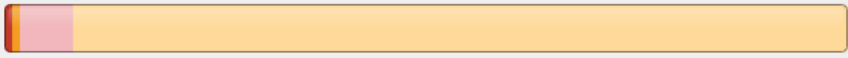
### Keyboard

Set keyboard model to Generic 105-key PC.  
Set keyboard layout to English (US)/Default.

### Partitions

**Manual** partitioning.  
Disk **/dev/sda** (VBOX HARDDISK)

Current:   
■ Unpartitioned space or unknown partition table  
499.99 GiB

After:   
■ New partition      ■ BOOT      ■ Swap

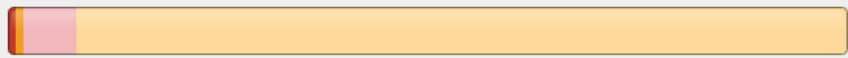
① About      [Back](#)      [Install](#)      [Cancel](#)

library@ubuntu: ~      Ubuntu Installer      14:40

## 26. Overview Screen-2 (Before Installation)


This is an overview of what will happen once you start the install procedure.


499.99 GiB

After:   
■ New partition      ■ BOOT      ■ Swap  
200.00 MiB unformatted      1.95 GiB ext4      32.00 GiB swap

■ ROOT-FS  
465.84 GiB ext4

Disk **/dev/sdb** (VBOX HARDDISK)

Current:   
■ Unpartitioned space or unknown partition table  
1.95 TiB

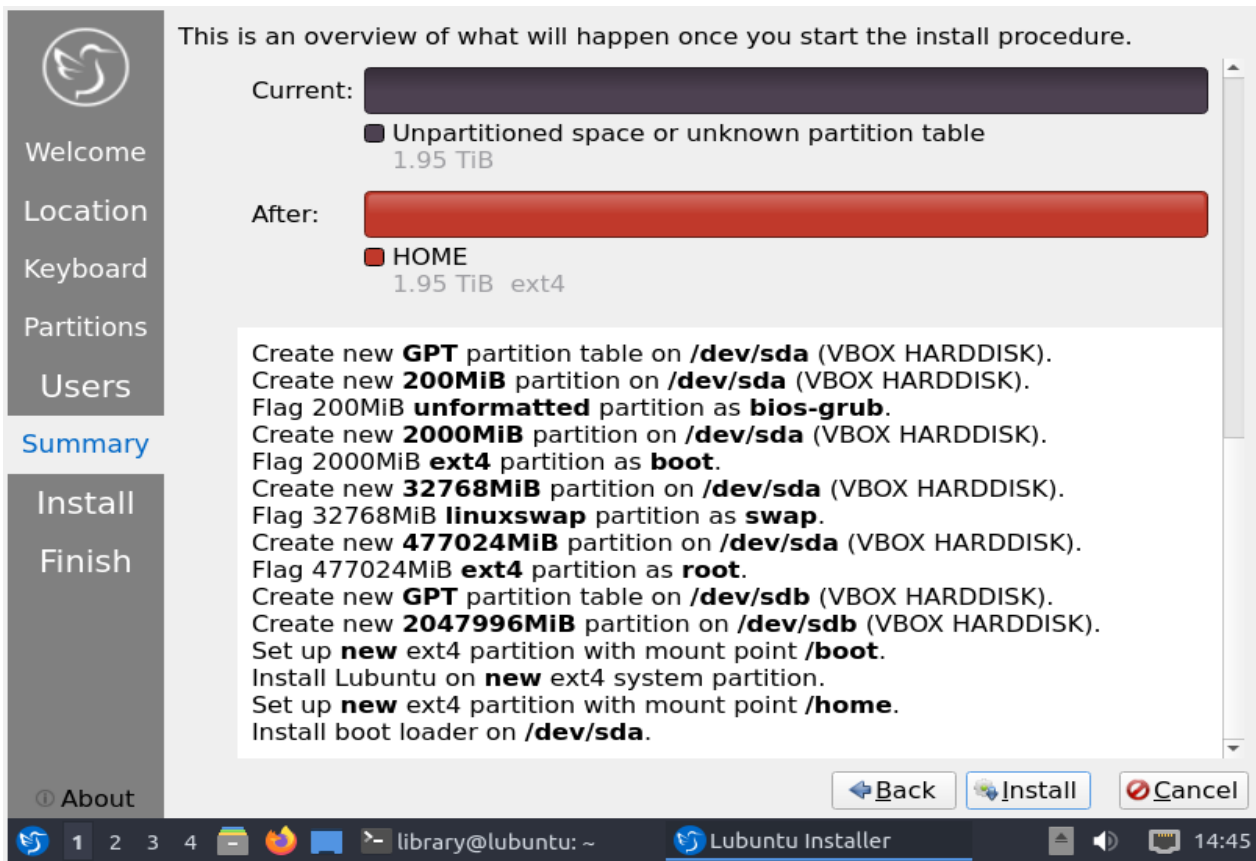
After:   
■ HOME  
1.95 TiB ext4

Create new **GPT** partition table on **/dev/sda** (VBOX HARDDISK).  
Create new **200MiB** partition on **/dev/sda** (VBOX HARDDISK).  
Flag 200MiB **unformatted** partition as **bios-grub**.  
Create new **2000MiB** partition on **/dev/sda** (VBOX HARDDISK).  
Flag 2000MiB **ext4** partition as **boot**.  
Create new **32768MiB** partition on **/dev/sda** (VBOX HARDDISK).

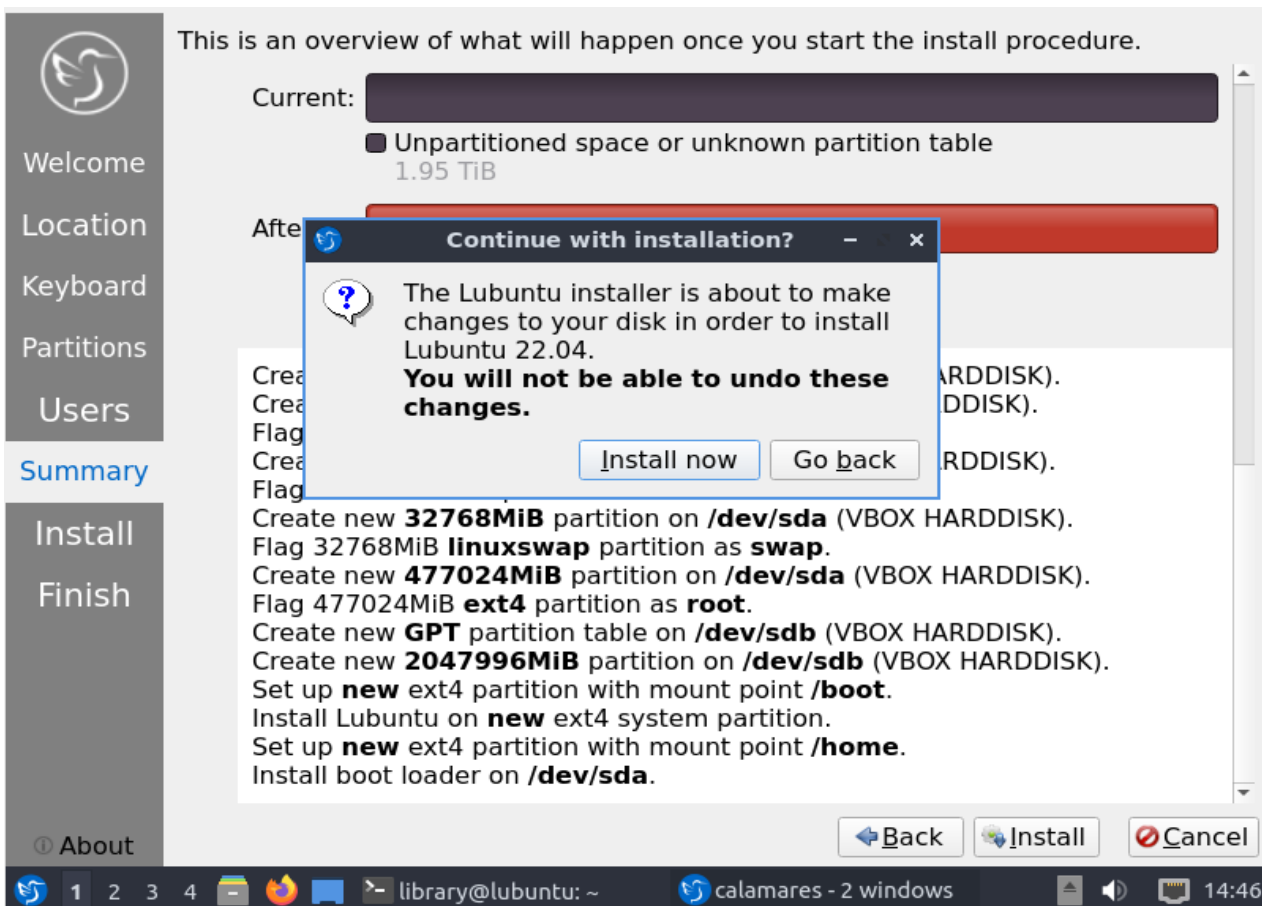
① About      [Back](#)      [Install](#)      [Cancel](#)

library@ubuntu: ~      Ubuntu Installer      14:42

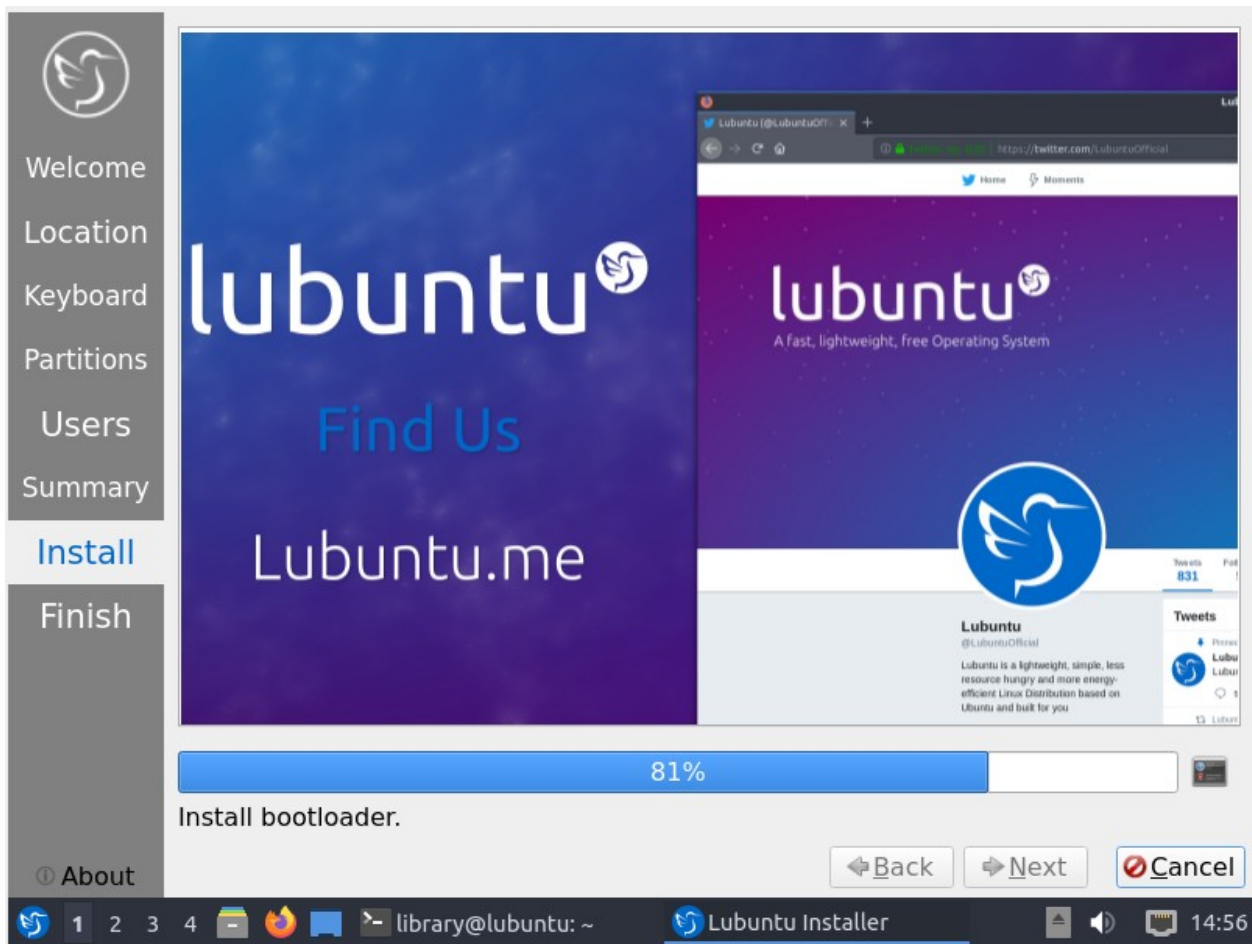
## 27. Overview Screen-3 (Before Installation)



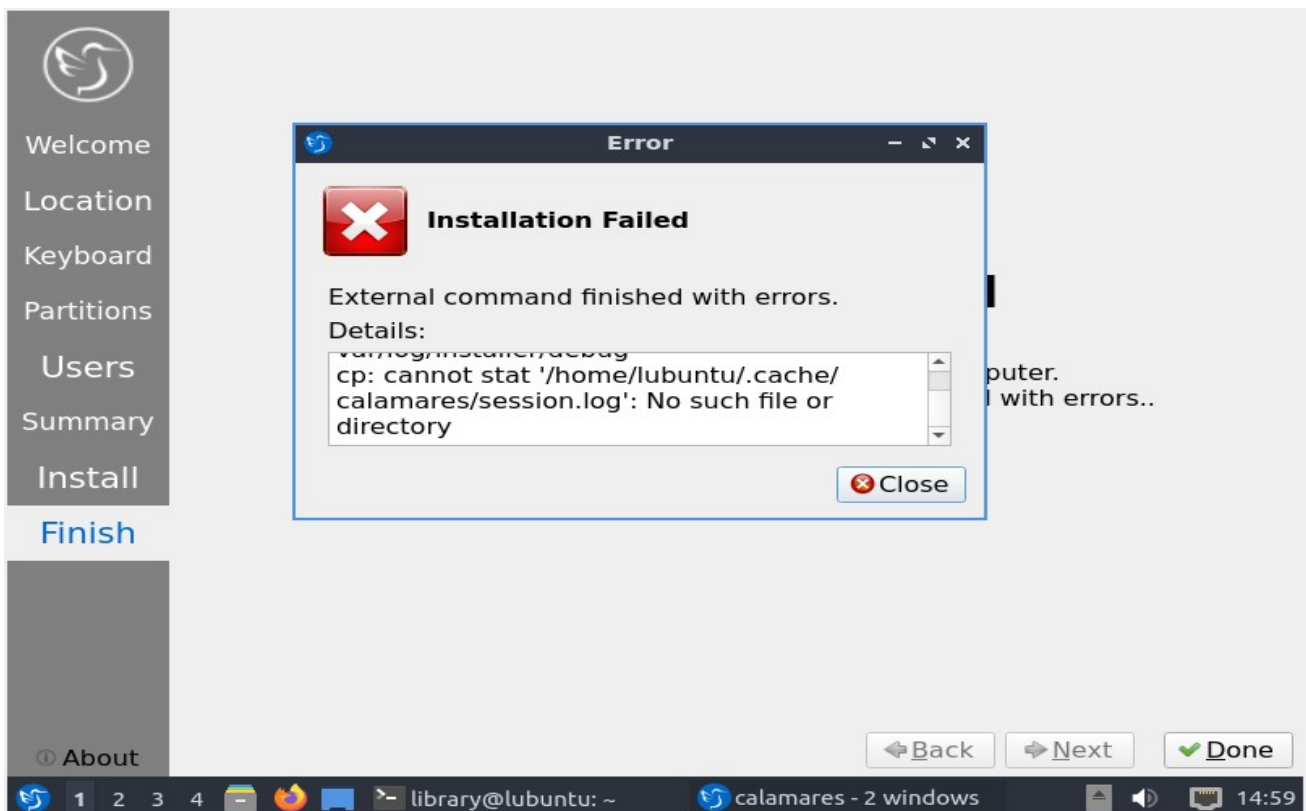
## 28. Warning Message before Continuing with Installation



## 29. Ubuntu 22.04.4 OS Installation in Progress



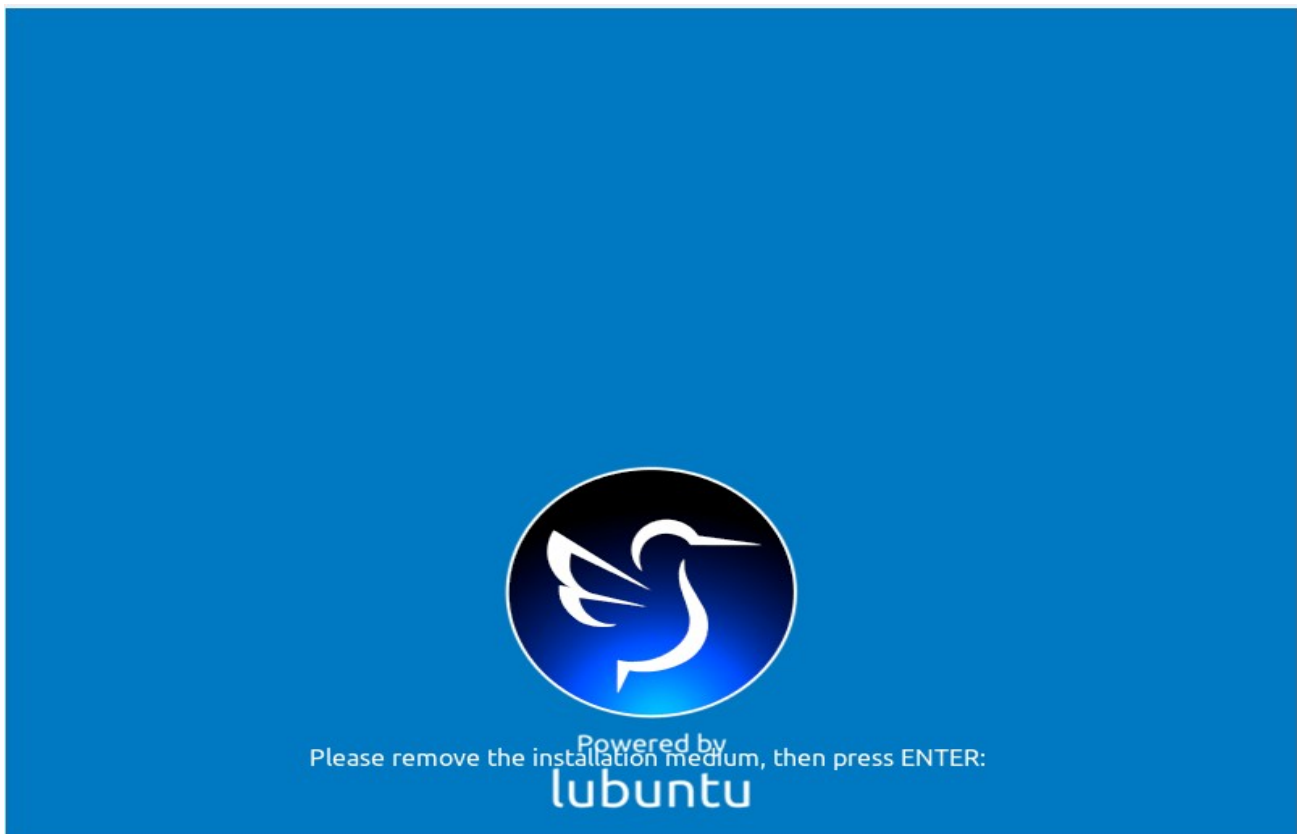
## 30. Installation Failed Error (This error can be simply ignored)



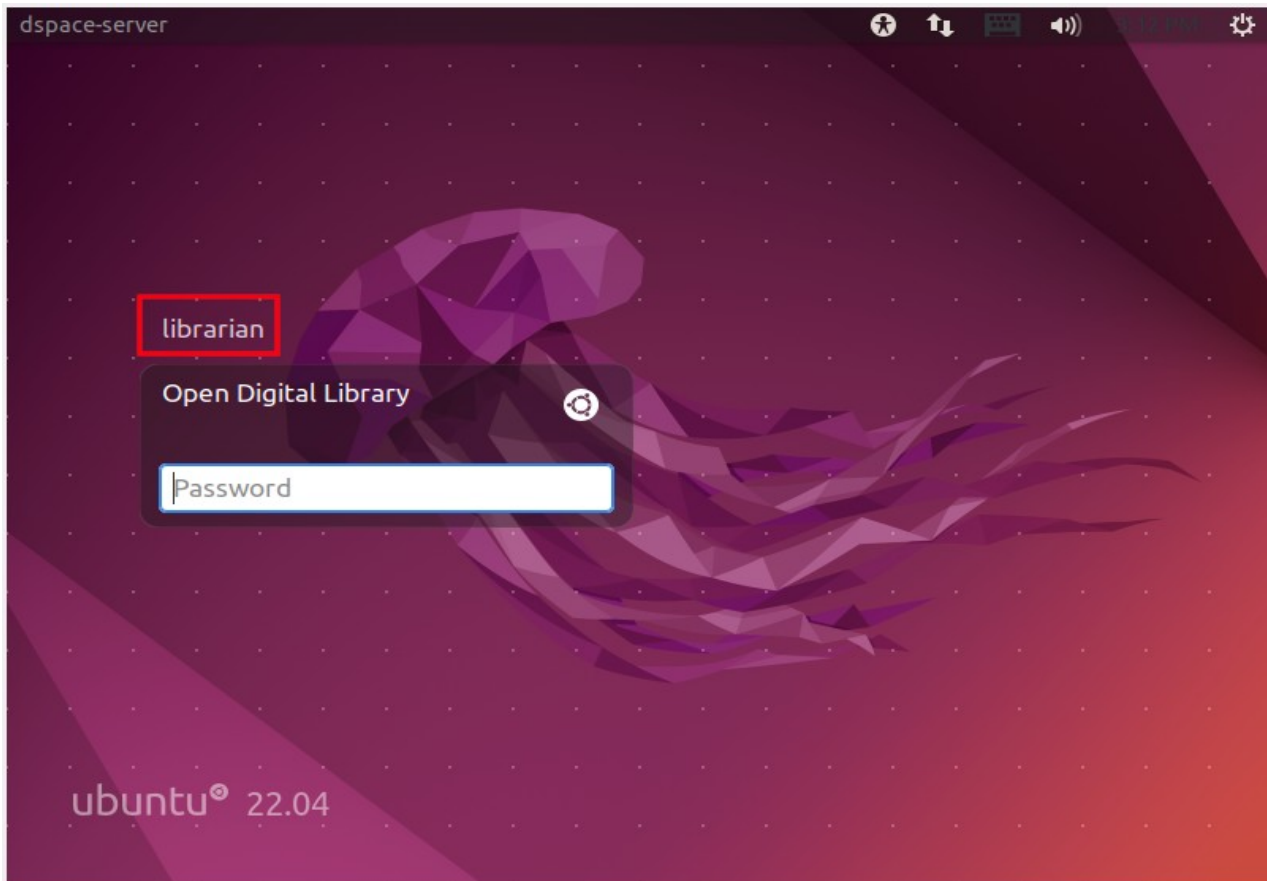
## 31. Reboot the 'Installed System' to boot from the Local Hard Disk

```
library@ubuntu: ~  
File Actions Edit View Help  
library@ubuntu: ~  
library@ubuntu:~$ sudo calamares  
[sudo] password for library:  
QStandardPaths: XDG_RUNTIME_DIR not set, defaulting to '/tmp/runtime-root'  
chcon: failed to get security context of '/': No data available  
chcon: failed to get security context of '/boot': No data available  
chcon: failed to get security context of '/dev': No data available  
chcon: failed to get security context of '/home': No data available  
chcon: failed to get security context of '/proc': Operation not supported  
chcon: failed to get security context of '/run': No data available  
chcon: failed to get security context of '/run/systemd/resolve': No data available  
chcon: failed to get security context of '/run/udev': No data available  
chcon: failed to get security context of '/sys': No data available  
14:59:16 [1]: void Calamares::ViewManager::onInstallationFailed(const QString  
&, const QString&)  
ERROR: Installation failed: "External command finished with errors."  
library@ubuntu:~$ reboot
```

## 32. Remove the Installation Medium and press 'Enter' to boot from HDD



### 33. After Booting from the Local Hard Disk Drive (HDD)



### 34. Partition Information after booting from Hard Disk Drive

```
library@dspace-server: ~  
File Actions Edit View Help  
library@dspace-server: ~  
library@dspace-server:~$ df -h  
Filesystem      Size  Used Avail Use% Mounted on  
tmpfs           393M  1.3M  392M   1% /run  
/dev/sda4       458G  13G  446G   3% /  
tmpfs           2.0G   28K  2.0G   1% /dev/shm  
tmpfs           5.0M   4.0K  5.0M   1% /run/lock  
/dev/sda2       1.9G  145M  1.8G   8% /boot  
/dev/sdb1       2.0T  452M  2.0T   1% /home  
tmpfs           393M   72K  393M   1% /run/user/131  
tmpfs           393M   80K  393M   1% /run/user/1001  
library@dspace-server:~$
```

## 35. Ubuntu 22.04.4 - DSpace Digital Library Main Page

