Installation of kali linux in virtual box

You will now require the following sources to create this masterpiece:

1. A Computer (Minimum Requirements: 20GB Hard Disk space, 2GB RAM, Intel Core i3 or AMD E1 equivalent)
2. A USB stick (6 GB or more)
3. A Kali .iso file

Kali linux Can be installed done on two ways
1.installing it directly on our computer
2.Installing it in virtual box

What is virtualbox ?
VirtualBox is a free and open-source virtualization software that allows users to run multiple operating systems on a single physical machine. It is developed by Oracle Corporation and is available for a variety of platforms including Windows, MacOS, and Linux.

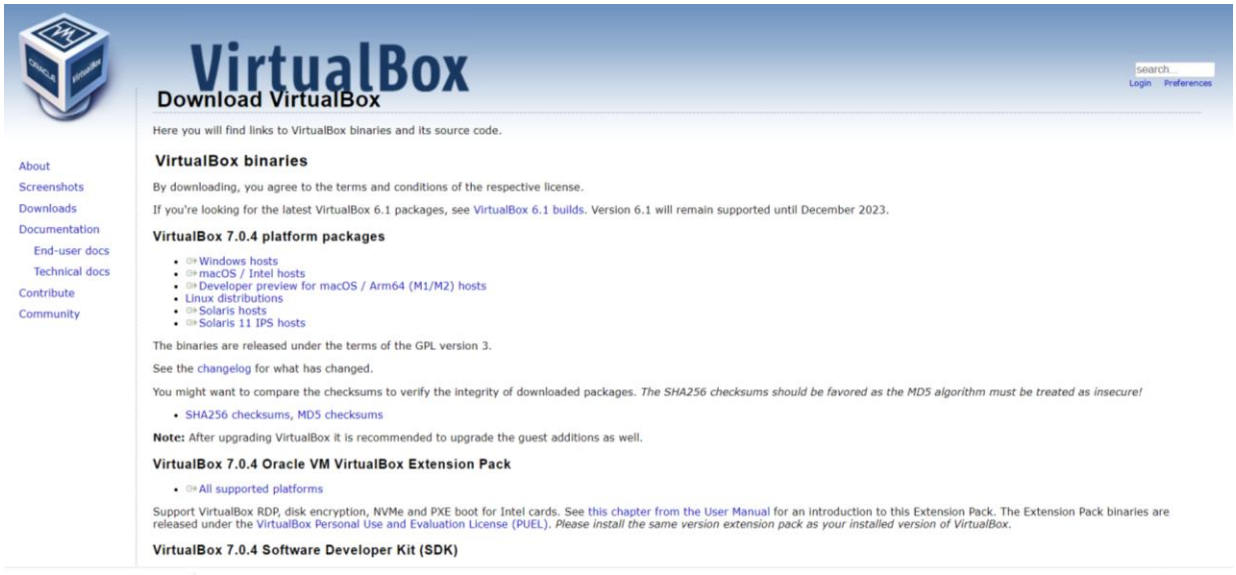
VirtualBox uses a technique called hardware virtualization to create virtual machines (VMs) on a host computer. Each virtual machine runs on its own set of virtual hardware, which includes virtual CPUs, memory, storage, and network interfaces. This allows multiple operating systems to run simultaneously on the same physical hardware, each with its own set of virtual resources.

VirtualBox also supports a variety of features that make it easy to use and manage virtual machines. Some of the key features include:

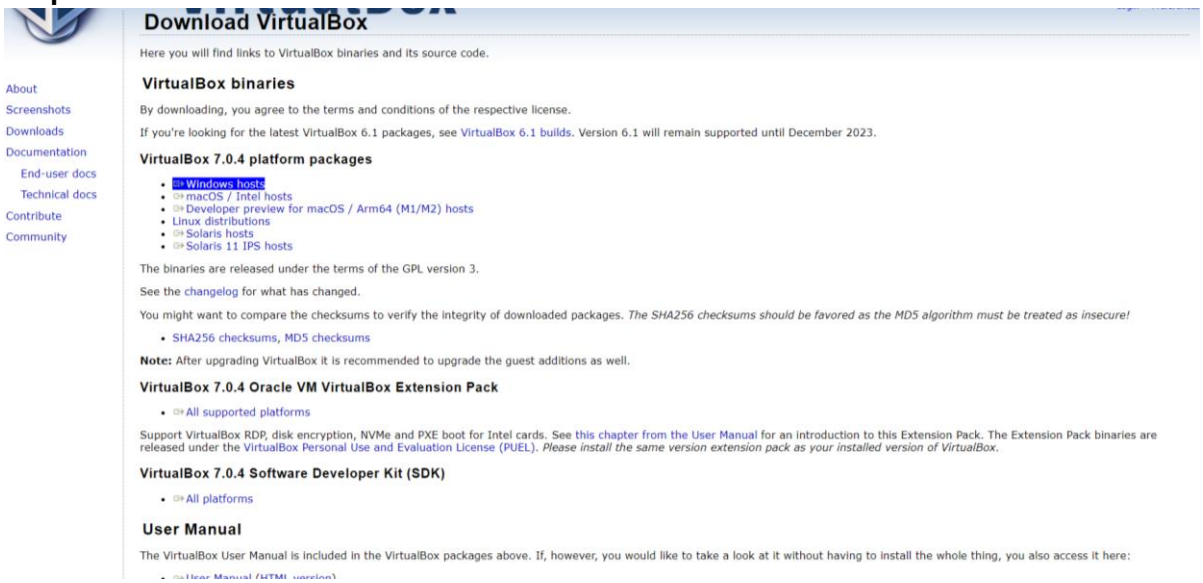
- Snapshotting: Allows users to take a snapshot of the virtual machine's state at any time, and easily roll back to that state if needed.
- Remote display: Allows users to access the virtual machine's display remotely over the network, using the VirtualBox Remote Display Protocol (VRDP).
- Shared folders: Allows users to share files and folders between the host and guest operating systems.
- USB support: Allows users to connect USB devices to the virtual machine and use them as if they were connected directly to the host.
- Multi-language support: VirtualBox is available in multiple languages and provides support for international keyboard layouts.

Overall, VirtualBox is a popular and powerful virtualization software that allows users to run multiple operating systems on a single physical machine, making it easy to test, develop and run multiple environments on one machine without the need of multiple physical machines**.**

Downloading and Installing VirtualBox
Step1: To download VirtualBox, go to the official site **virtualbox.org** and download the latest version for windows.

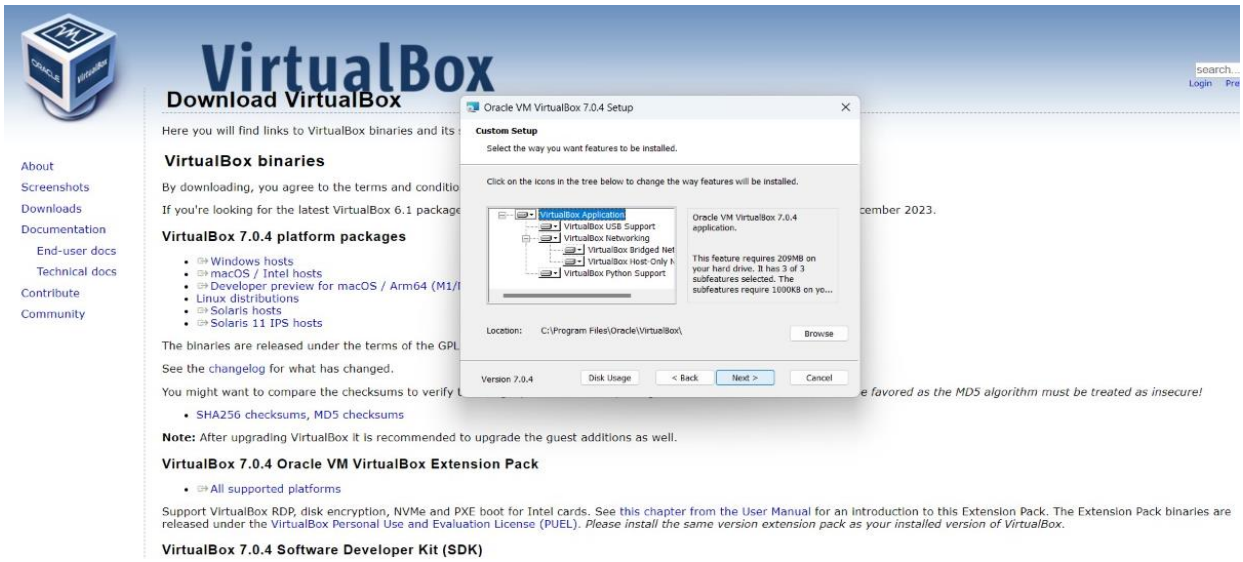


Step2: Click on the windows hosts

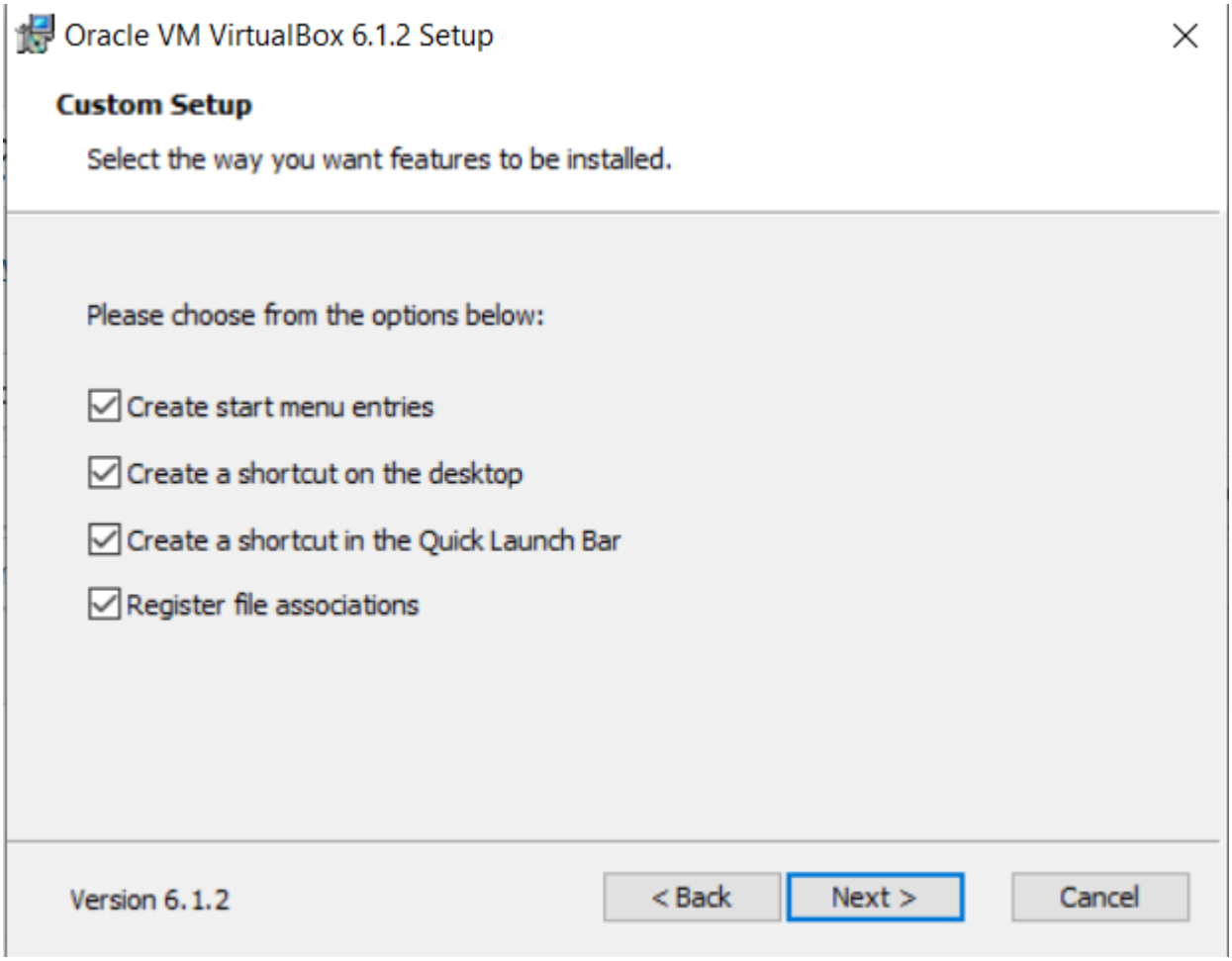


Step3: After download click on that you will see a window pop up.

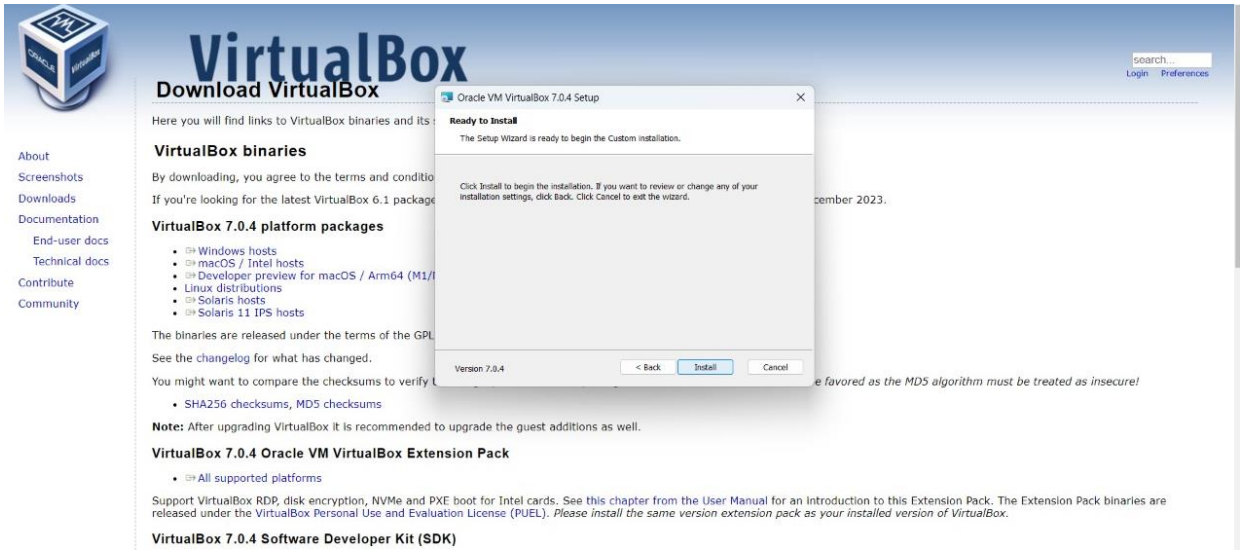
Step4: click next the default if not u can change the location



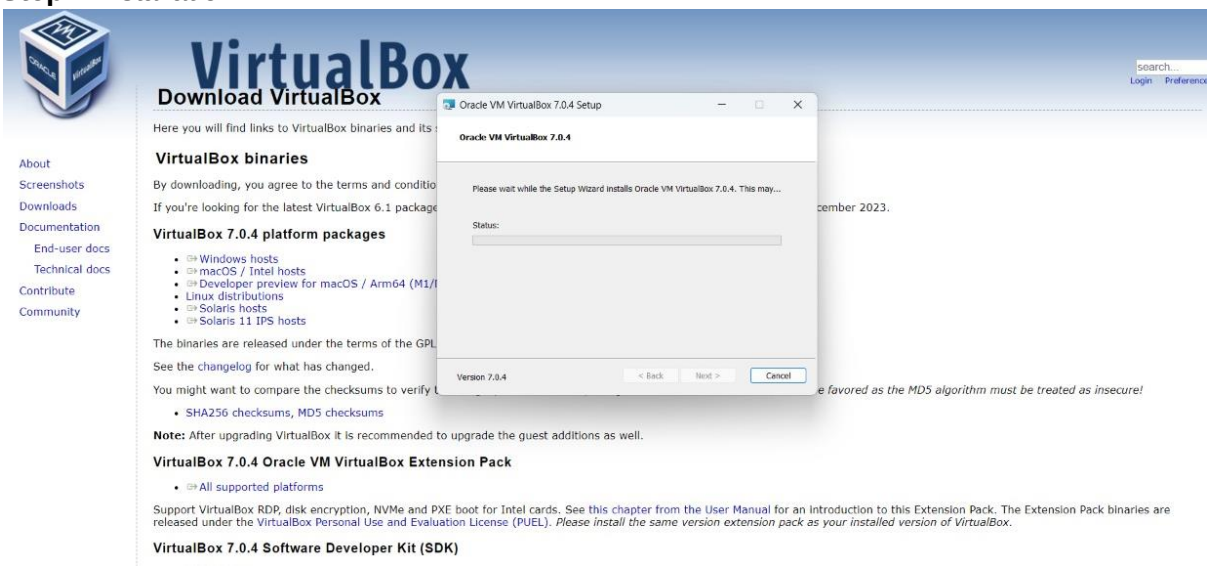
Step5: click next



Step6: click on install

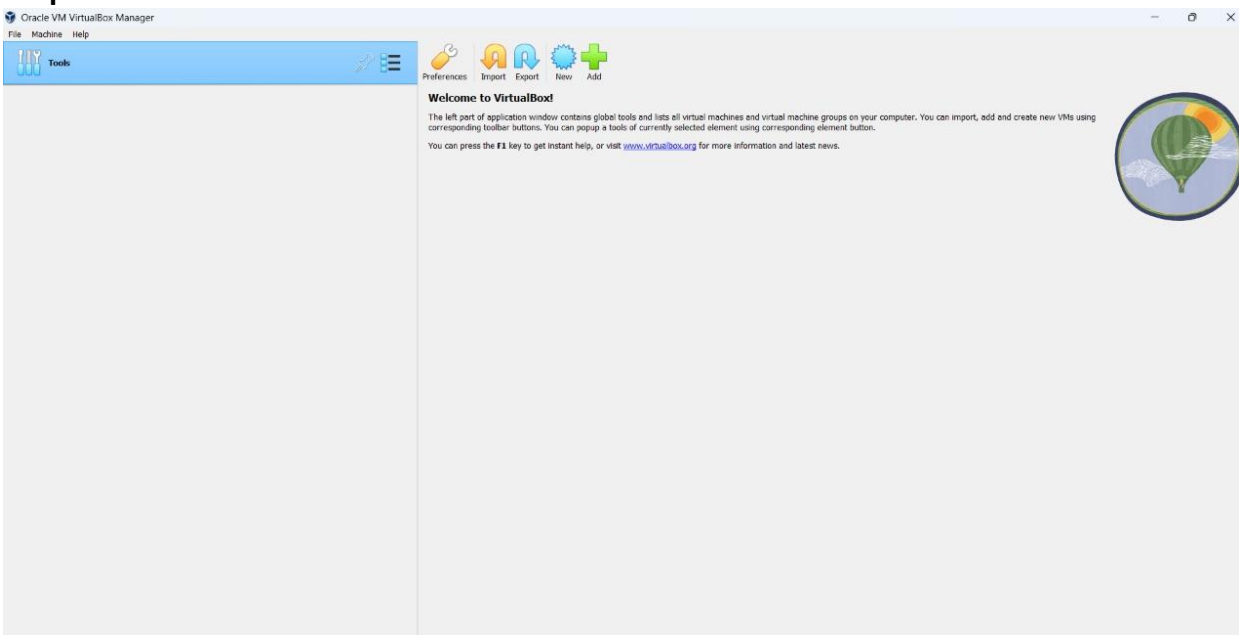


Step7: installation



Step8: installation completed

Step9: virtual box interface



Installation on kali linux in virtual box?

Before installing the kali linux lets us know

What is kali linux?

Kali Linux is a Debian-based Linux distribution that is specifically designed for penetration testing, digital forensics, and security auditing. It is one of the most popular distributions among ethical hackers and security professionals.

Kali Linux comes pre-installed with a wide range of security tools, including network scanners, vulnerability scanners, and exploitation tools. These tools can be used for a

variety of tasks such as discovering open ports on a network, identifying vulnerabilities in a system, and exploiting those vulnerabilities to gain unauthorized access.

In addition to the security tools, Kali Linux also includes many standard Linux utilities and software packages, such as the GNOME and KDE desktop environments, web browsers, and office software. This makes it a versatile distribution that can be used for both security testing and general purpose computing.

Kali Linux is also highly customizable, allowing users to add or remove software packages as needed and to configure the system to meet their specific needs. It is also possible to run Kali Linux on a live CD or USB drive, allowing users to test and analyze systems without installing anything on the hard drive.

Overall, Kali Linux is a powerful and versatile security-focused distribution that is widely used by security professionals and ethical hackers.

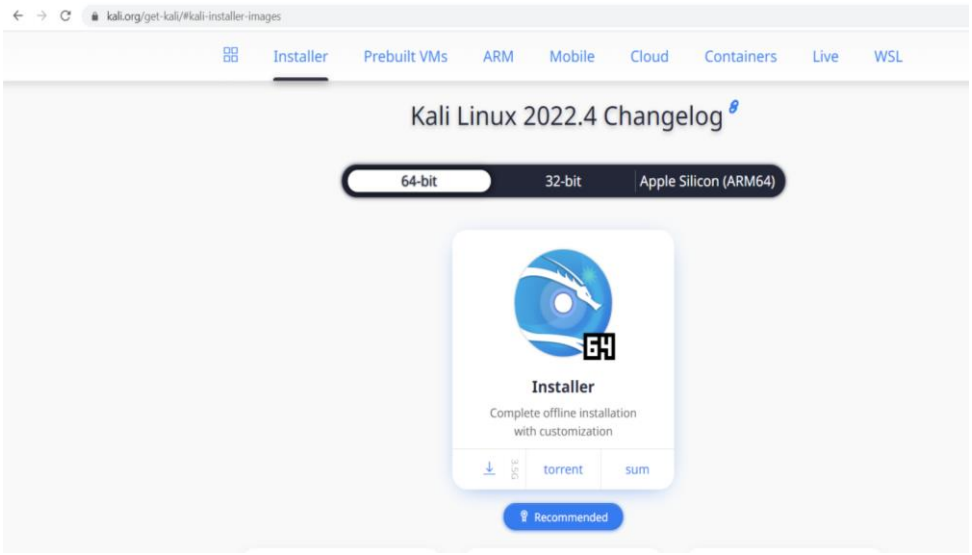
Advantages of installing kali linux in virtual box

here are several advantages to installing Kali Linux in a virtual box:

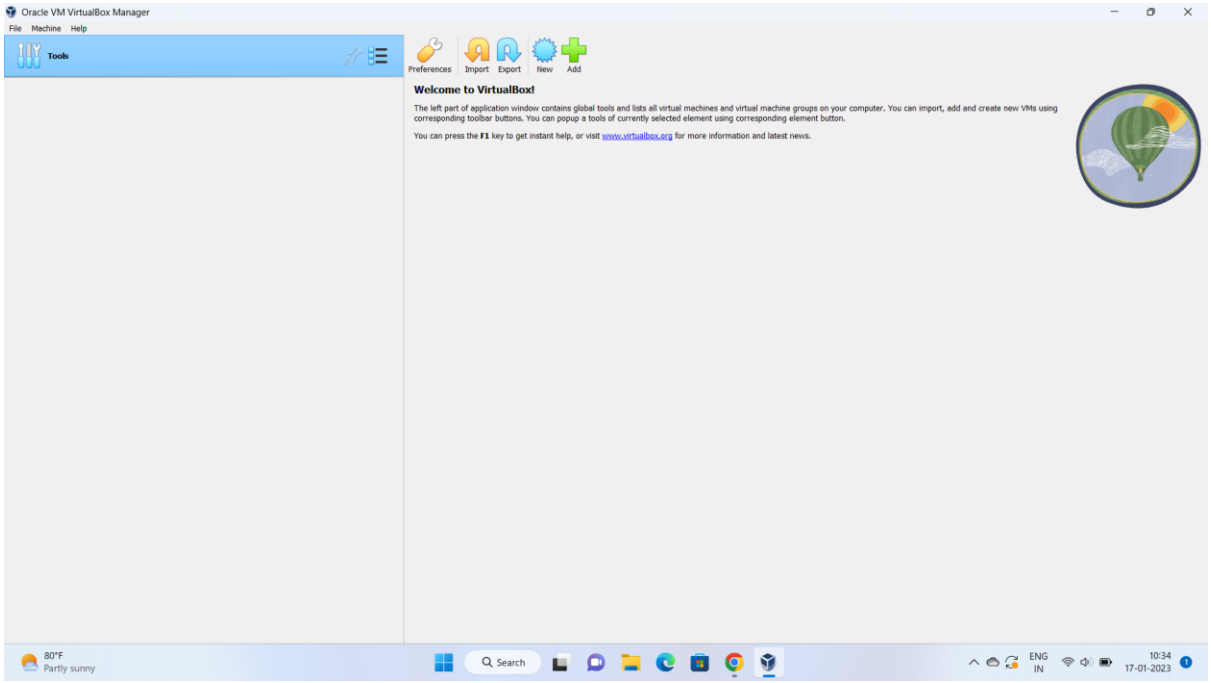
1. Isolation: Running Kali Linux in a virtual machine isolates it from the host operating system and any other applications running on the host. This helps to prevent accidental damage to the host system and also keeps any potentially harmful activities contained within the virtual environment.
2. Portability: With virtualization, you can run Kali Linux on any platform that supports the virtualization software. This means that you can run Kali Linux on a Windows or Mac OS host, and easily move the virtual machine to another host if necessary.
3. Easy to snapshot: Virtualization software like VirtualBox allows you to take snapshots of the virtual machine's state at any time. This means you can easily roll back to a known good state if something goes wrong.
4. Easy to replicate: With virtualization, you can easily replicate the same virtual machine on multiple hosts, which makes it very useful for testing and training purposes.
5. Cost-effective: Running Kali Linux in a virtual machine is a cost-effective solution, as it allows you to use your existing hardware rather than having to purchase new hardware specifically for running Kali Linux.
6. Safe: running Kali Linux in a virtual environment is a safe way to learn and experiment with ethical hacking and penetration testing tools without risking damage to your host operating system or other machines in your network.

Installation of kali linux

Step1: First, go to the official web site and download the ISO image of Kali Linux. There are multiple 32-bit and 64-bit images that have different graphical user interfaces (Gnome, KDE, XFCE, LXDE etc.). Let’s download Kali Linux 64-bit v.2019.2 – this distribution has Gnome as a graphical user interface (GUI). You can download images via HTTP and Torrent protocols. Save the ISO file to a custom folder, for example, *C:\VirtualBox\kali-linux-2019.2-amd64.iso*. You can also verify the SHA256 check sum to make sure that your image is consistent after finishing downloading.



step1:



Once you have downloaded the installation image, you can create a new VM. Open VirtualBox and create a new VM (Machine > New or Ctrl+N) on which Kali Linux will be installed.

Step2:
Set the following VM parameters:
Name: Kali

Machine Folder: C:\Virtual\VirtualBox (This path is used only for demo purpose. Try not to use a system partition to store VMs).

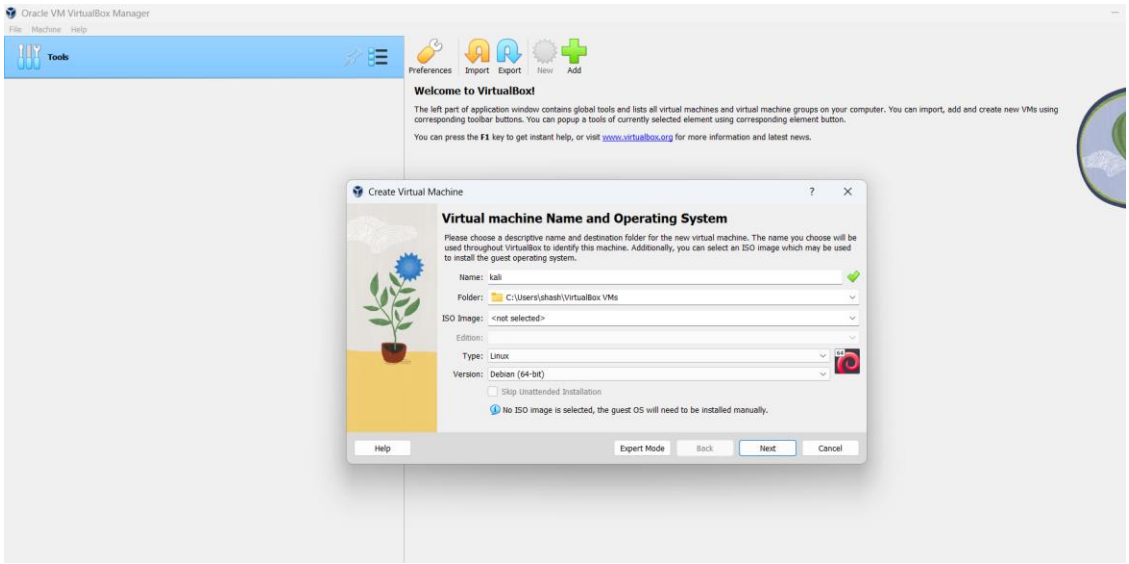
Type: Linux

Version: Debian (64-bit)

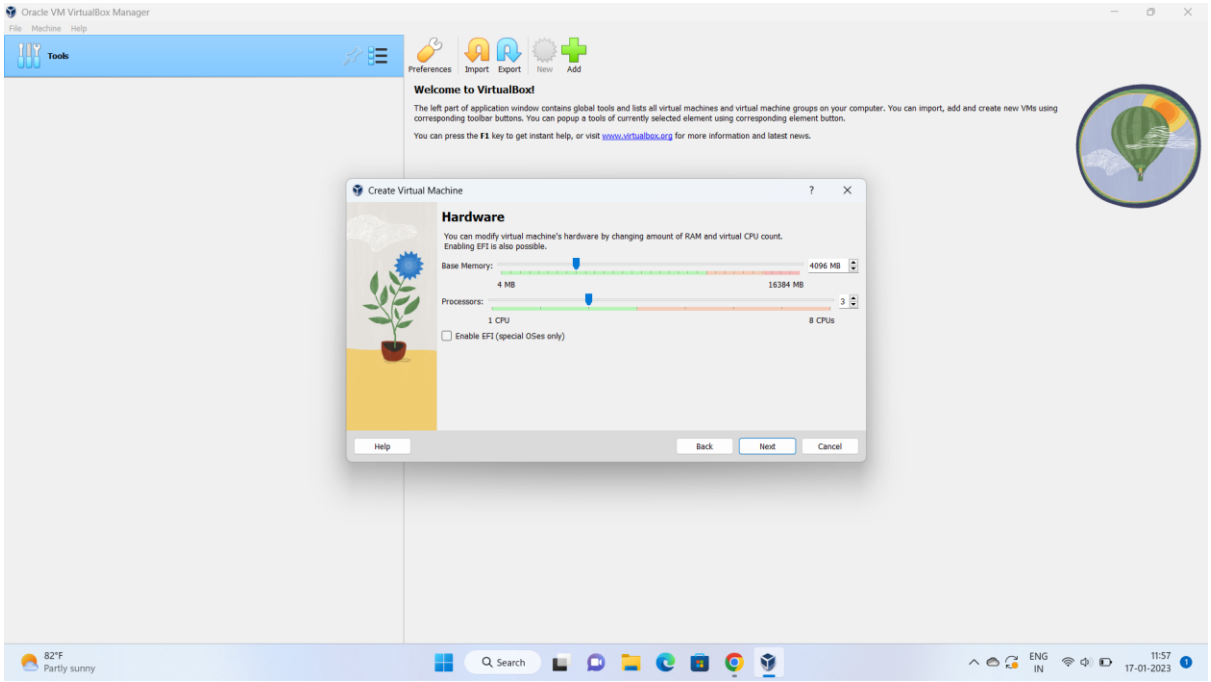
Memory size: 4096 MB. The VM memory size must be large enough to run a guest OS, though you should leave enough unallocated memory to run your host OS. In the current example, a host machine with 16 GB of RAM is used, which provides enough memory left for a host OS.

Hard disk: Create a virtual hard disk now.

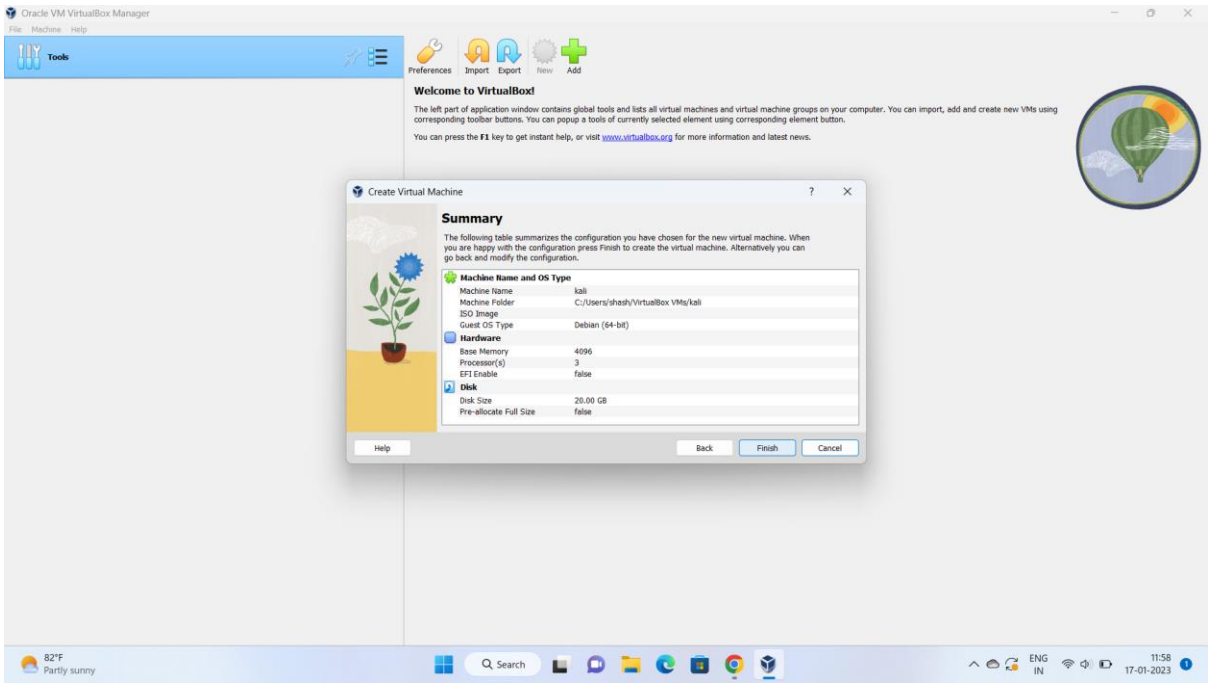
Hit Create to continue and configure a new virtual hard disk.



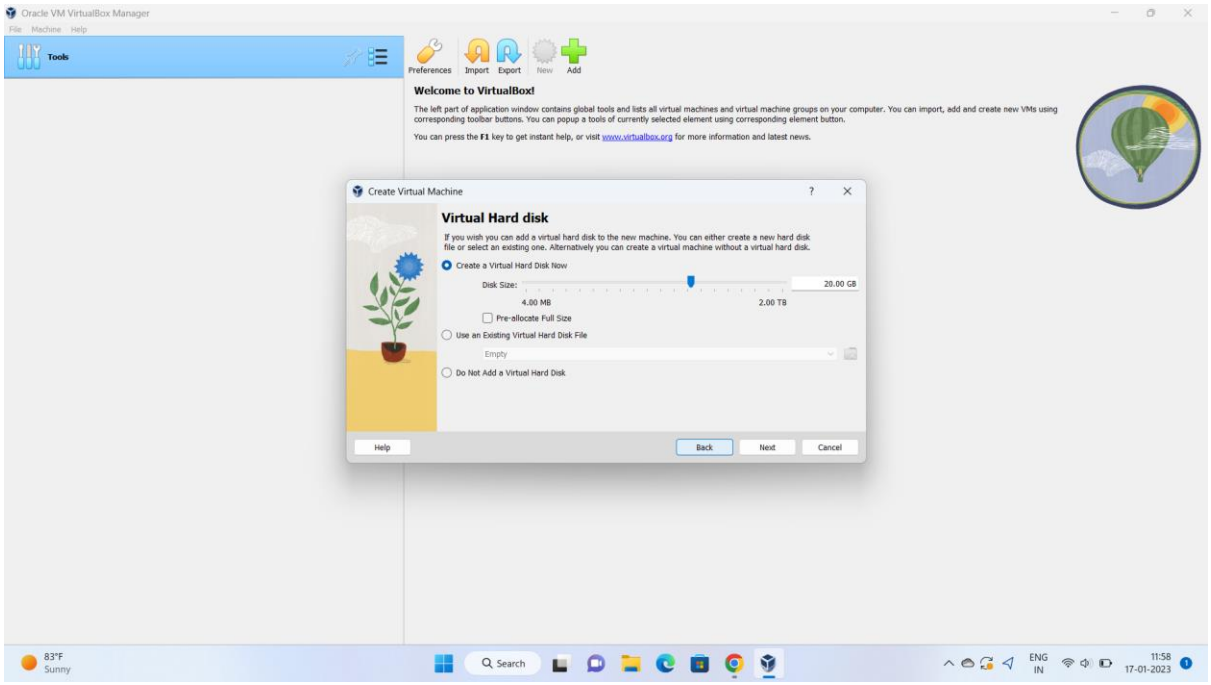
Step3: increase the base memory up to green line



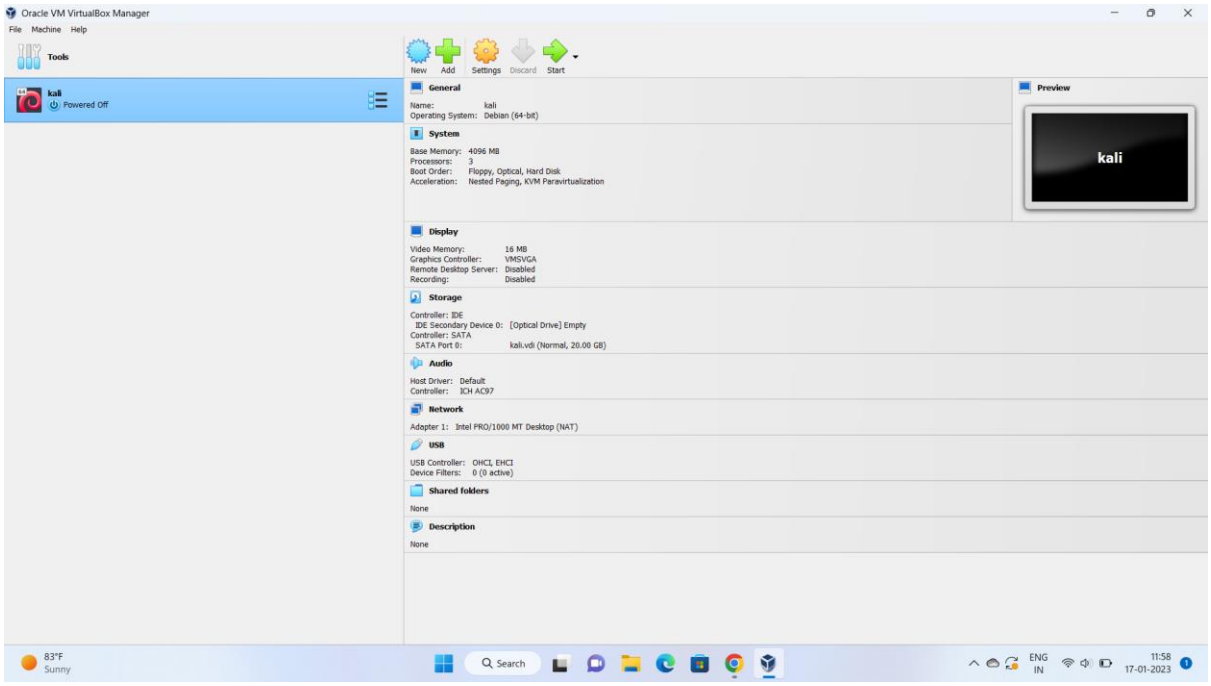
Step4:Click on finish



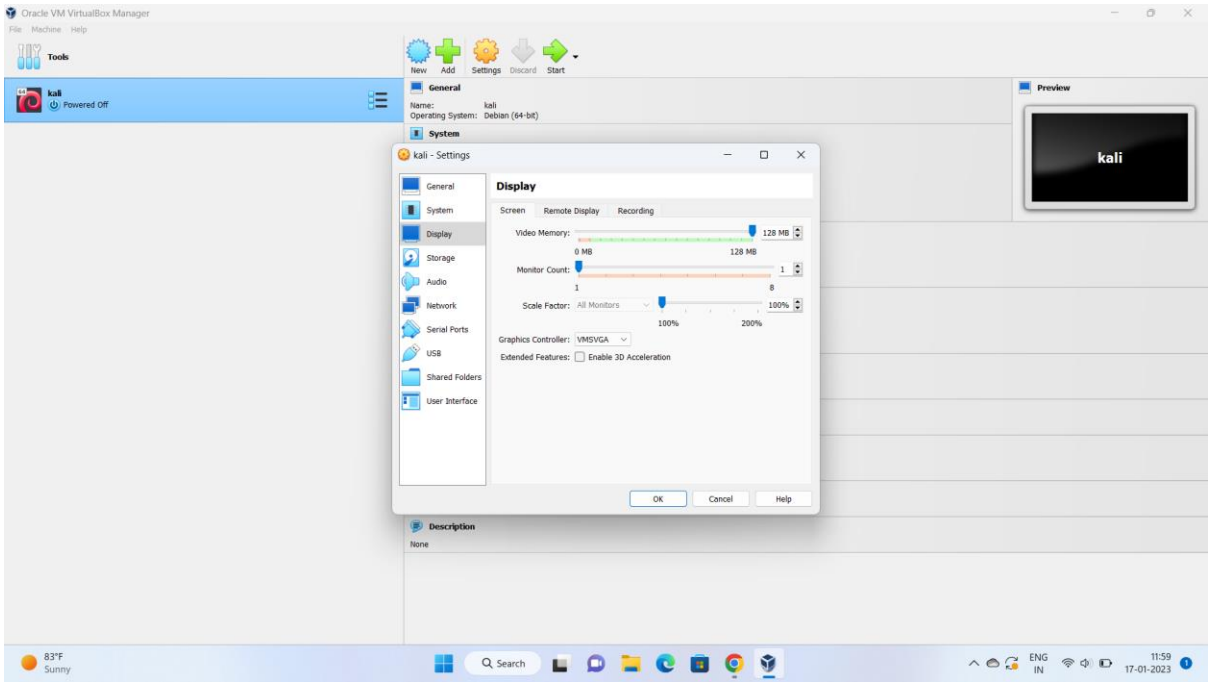
Step5:give data size above 20 gb



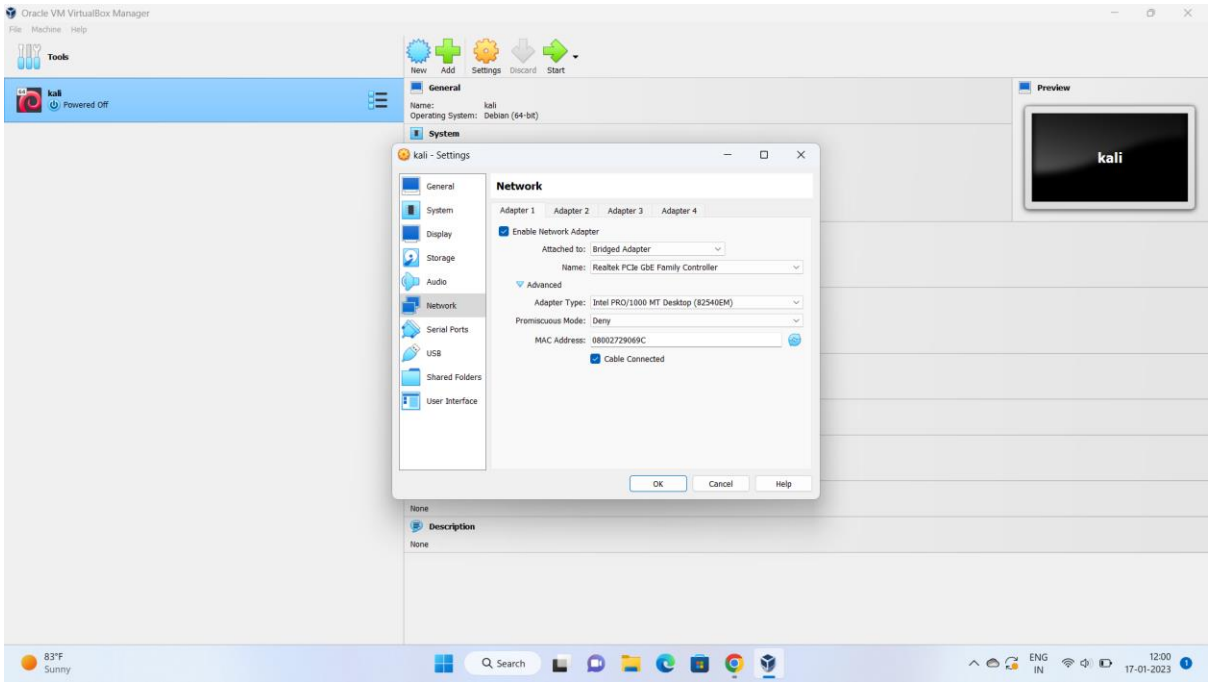
Step6:kali linux in virtual box



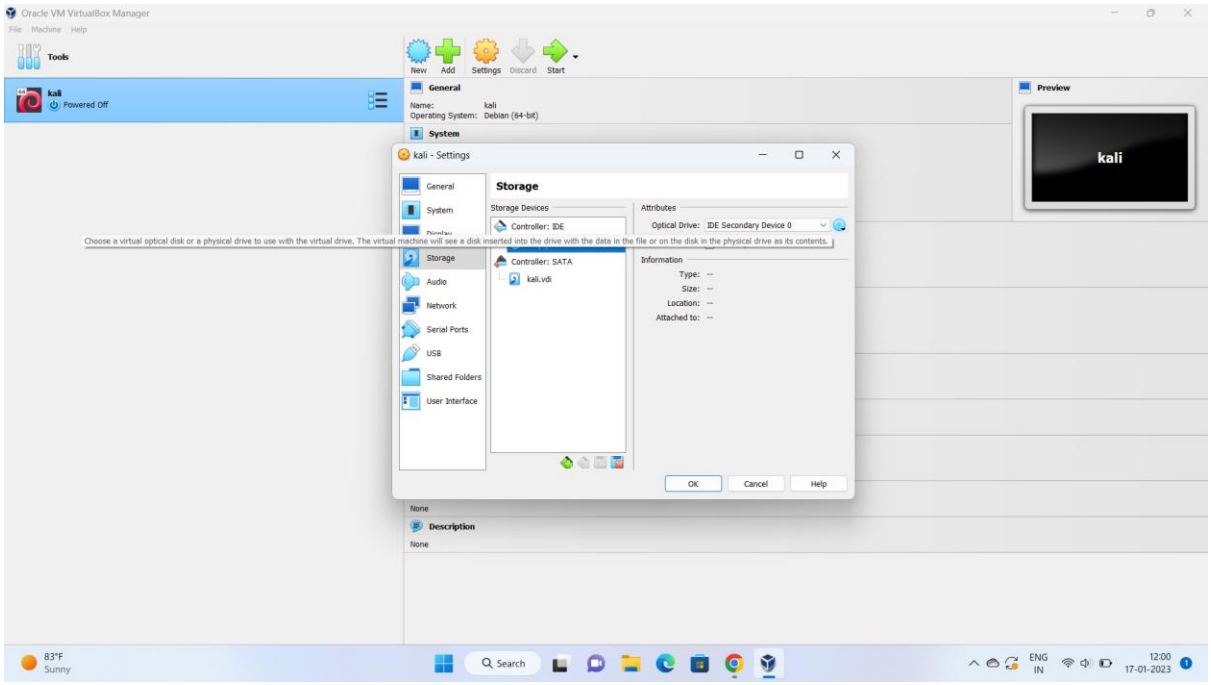
Step7:increase the vedio memory up to 128mb



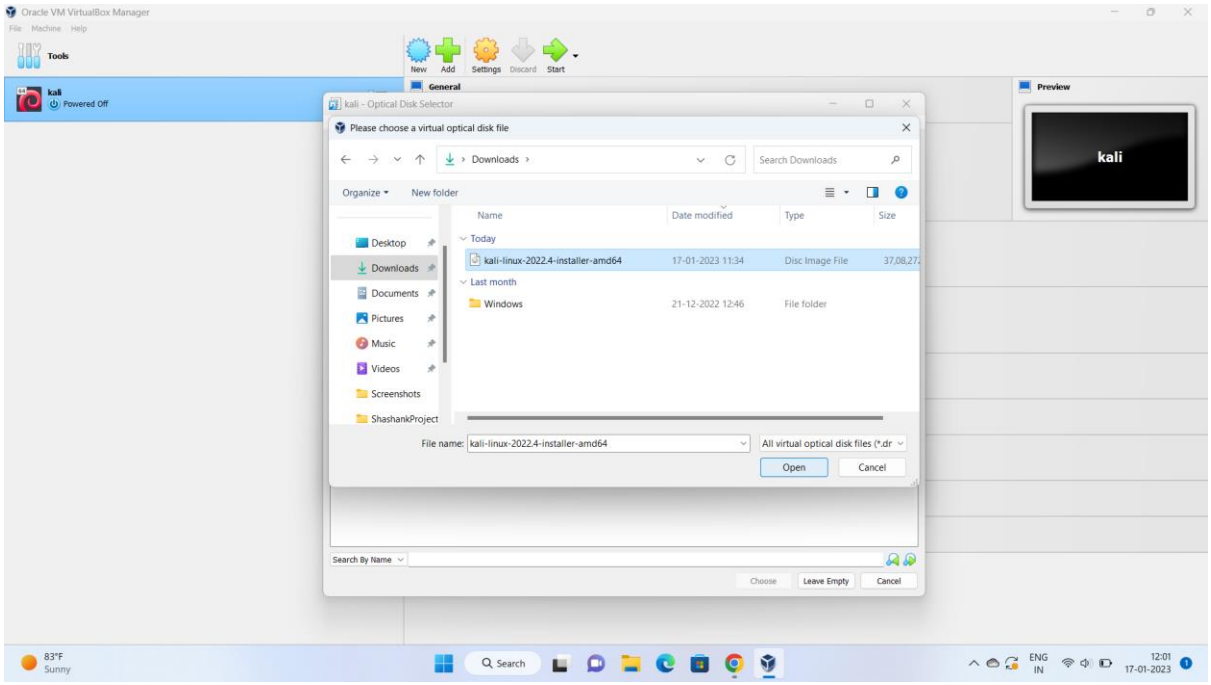
Step8: go to the network and change it to the bridge adapter



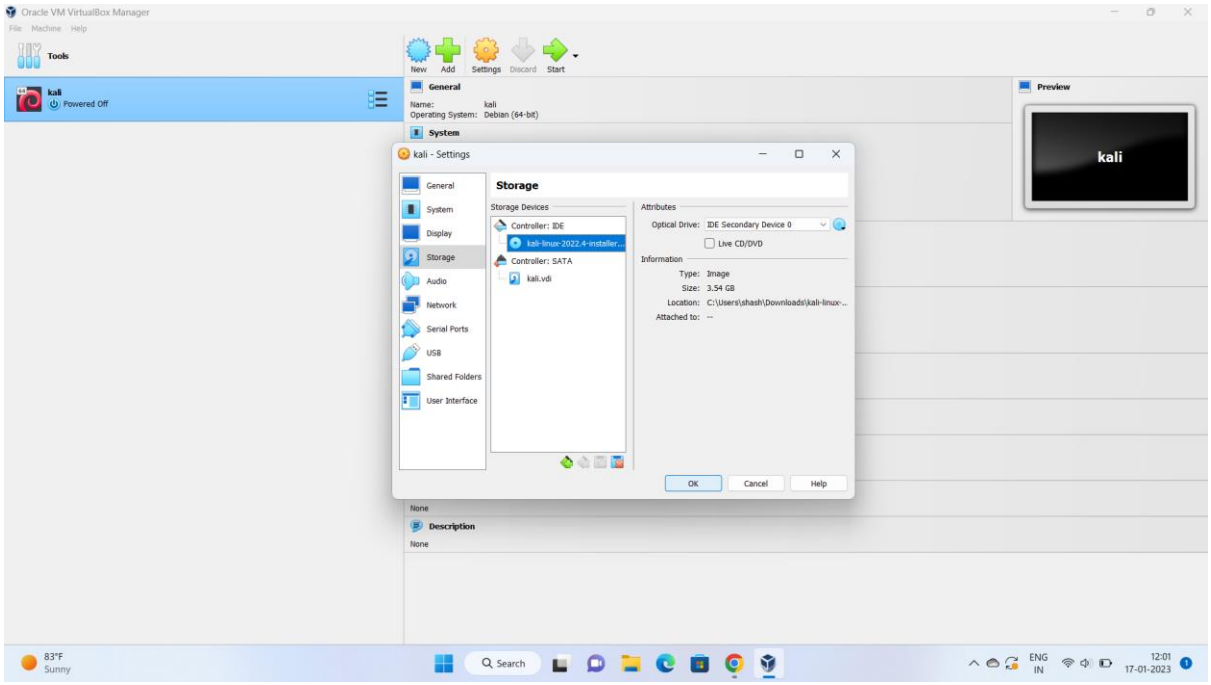
Step9: Go to the storage add the iso image of kali linux



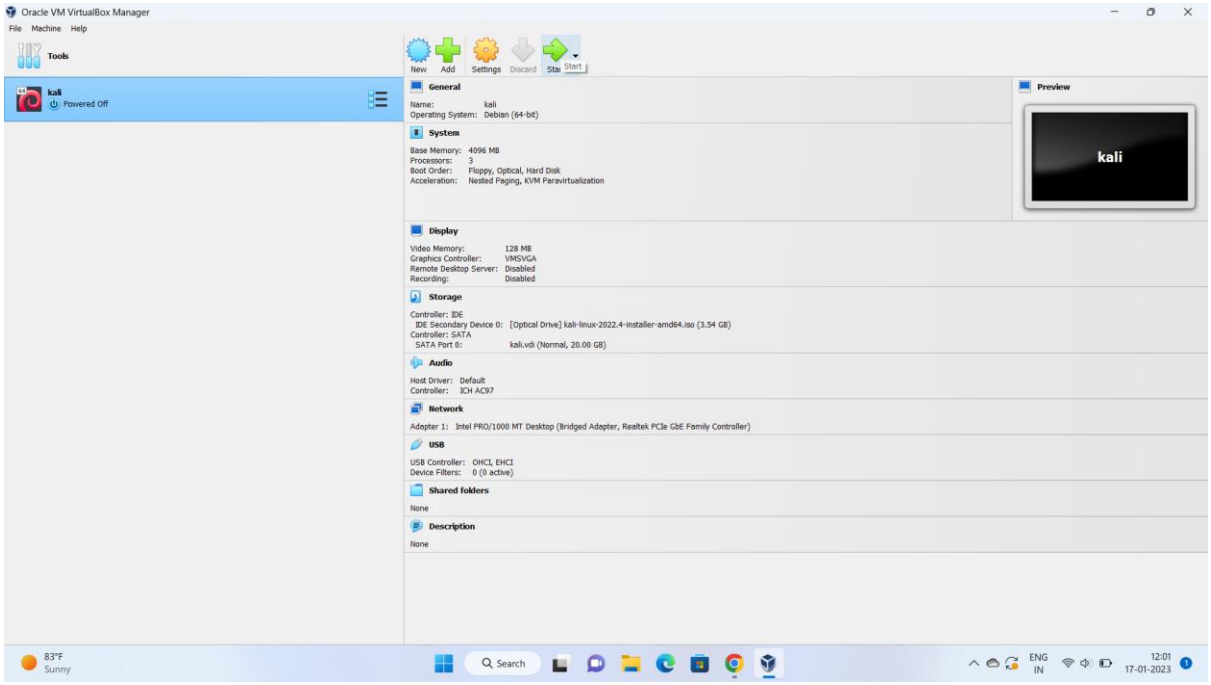
Step10:uploading the iso image



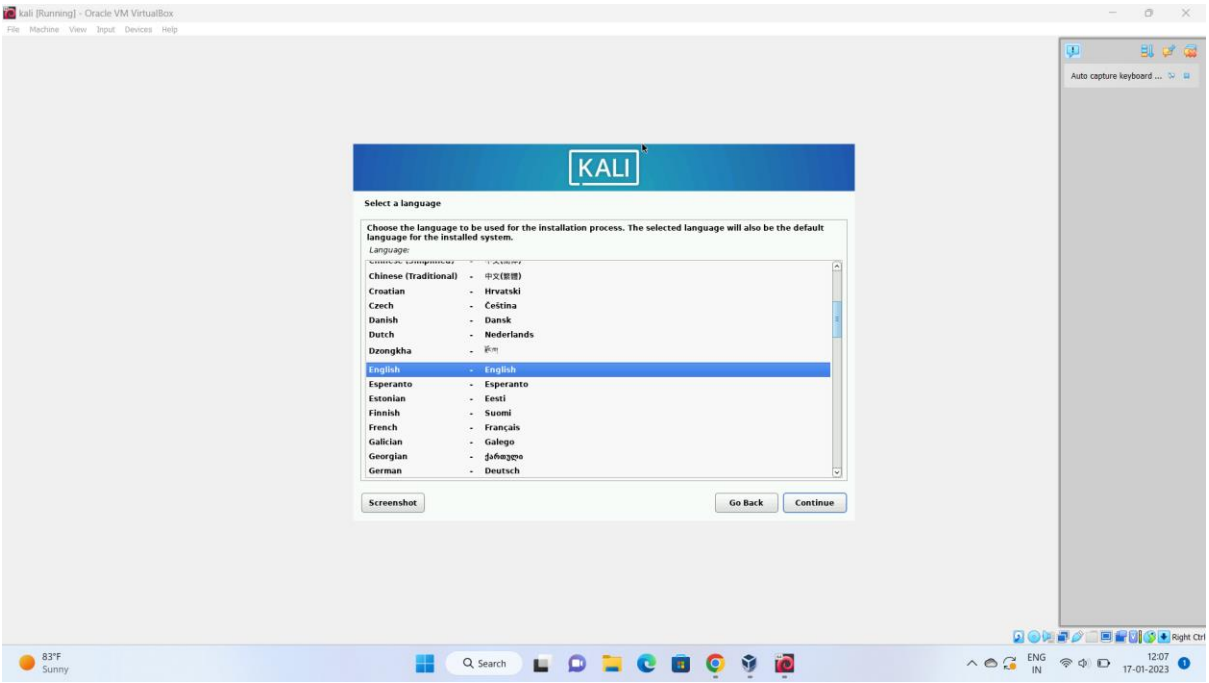
Step11: uploaded th iso image in the storage



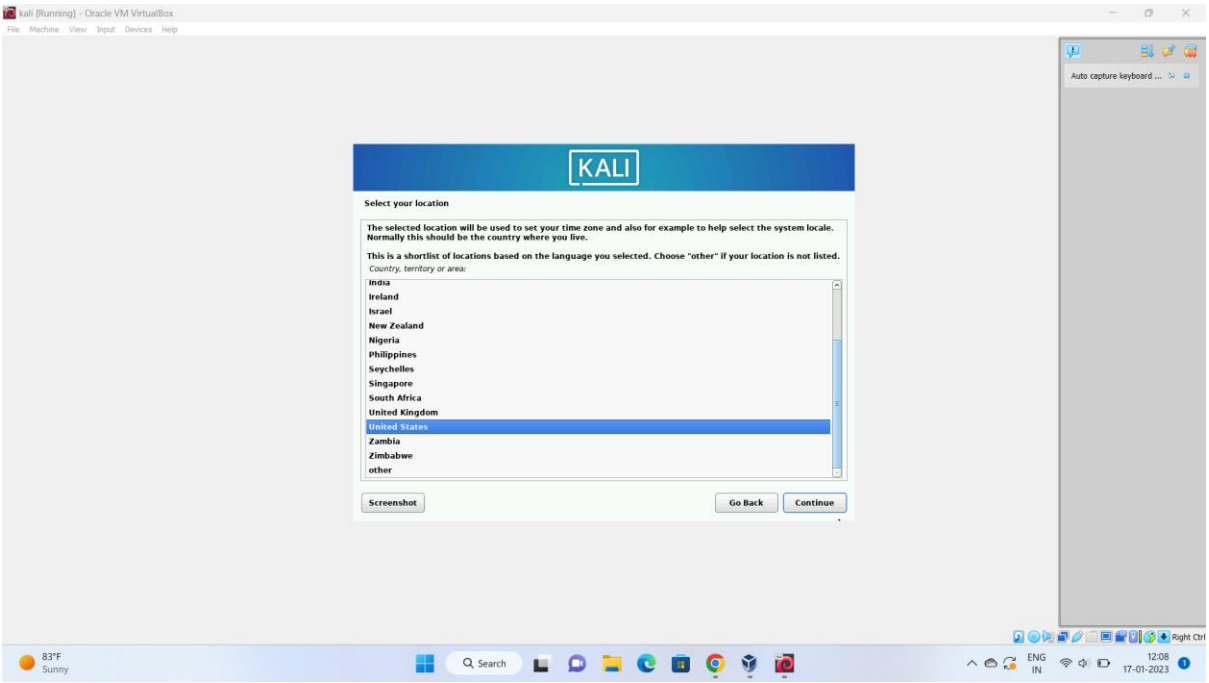
Step12:run the kali linux



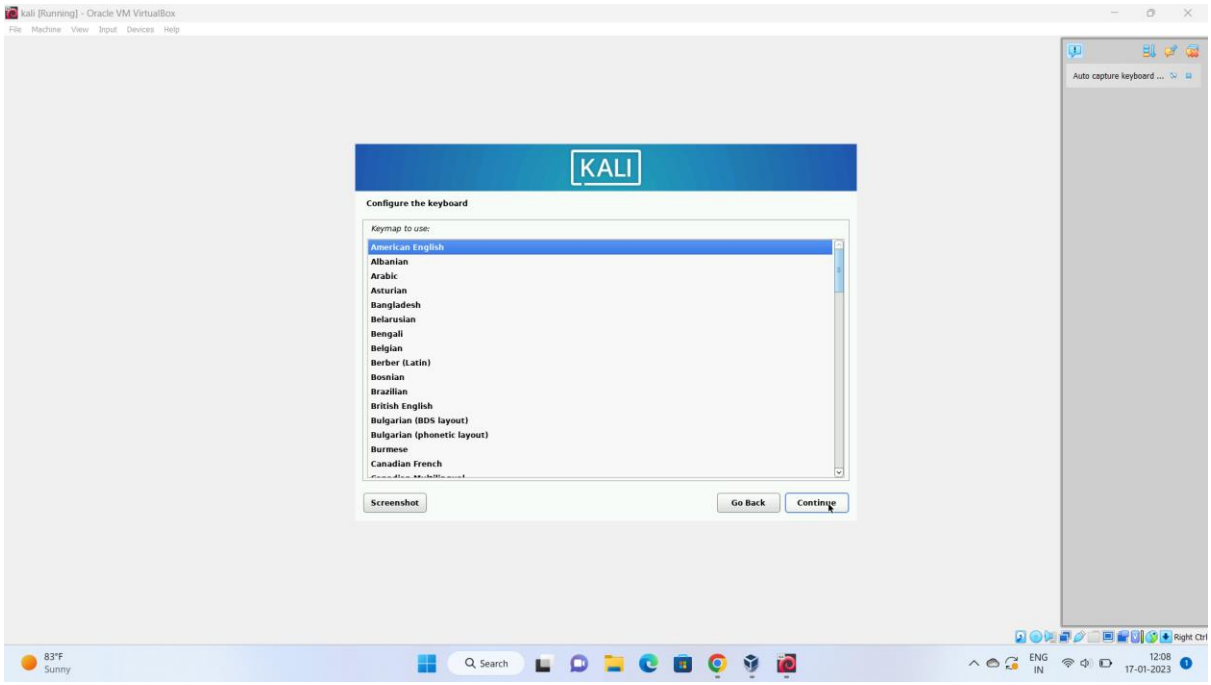
Step13:client on the graphical interface
Then u can see this and choose a language



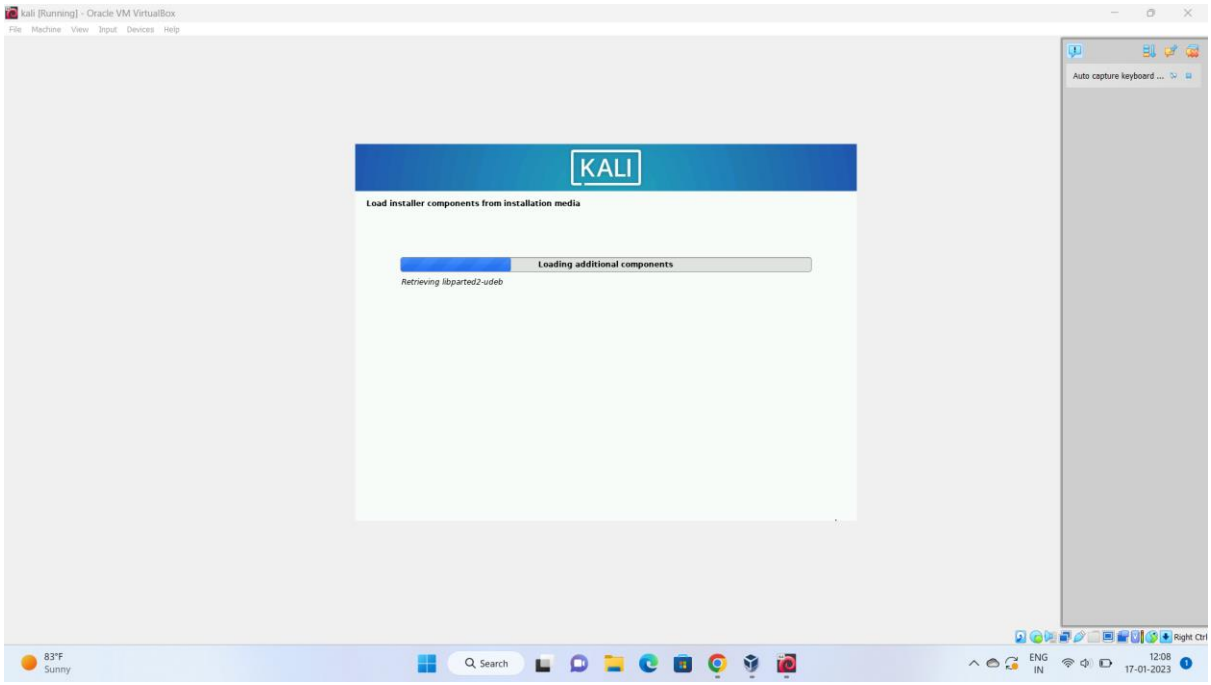
Step14: choose a location



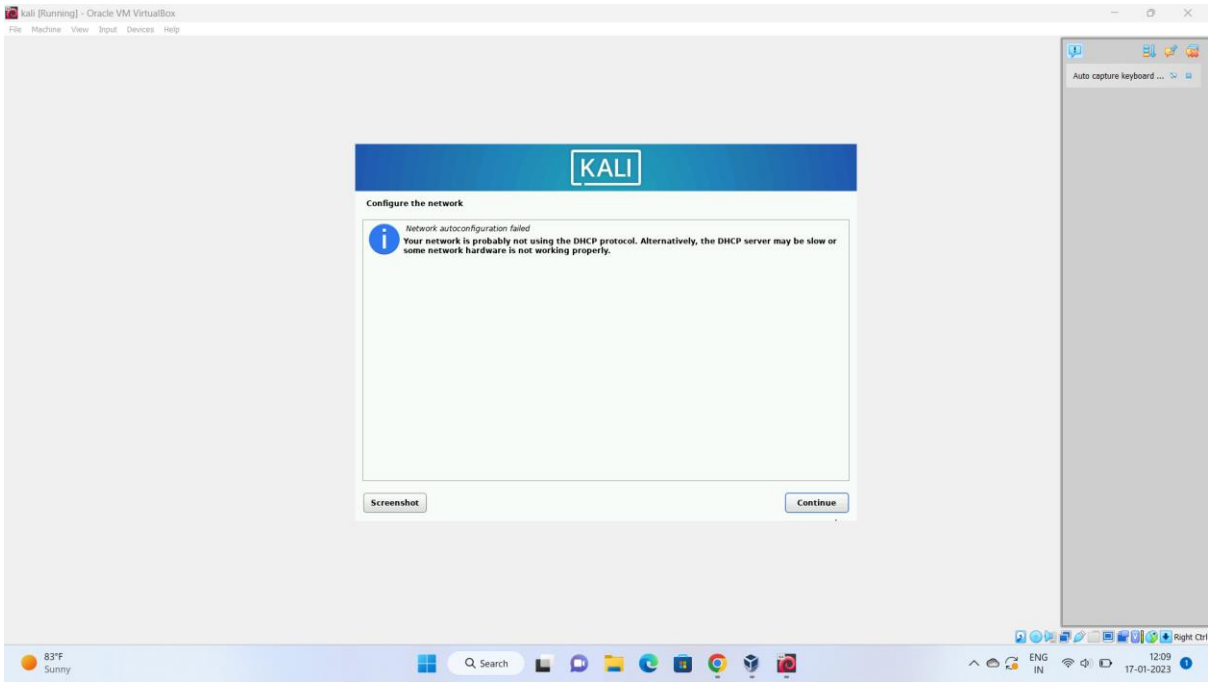
Step15: configure keyboard language



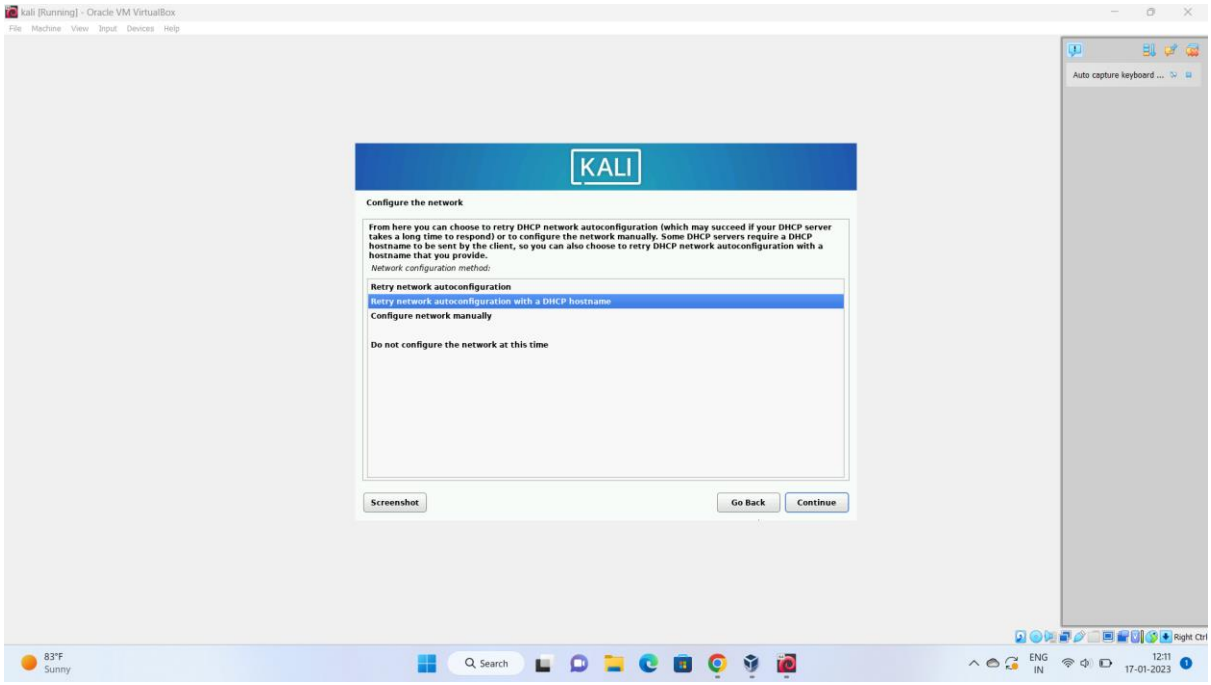
Step16:loading



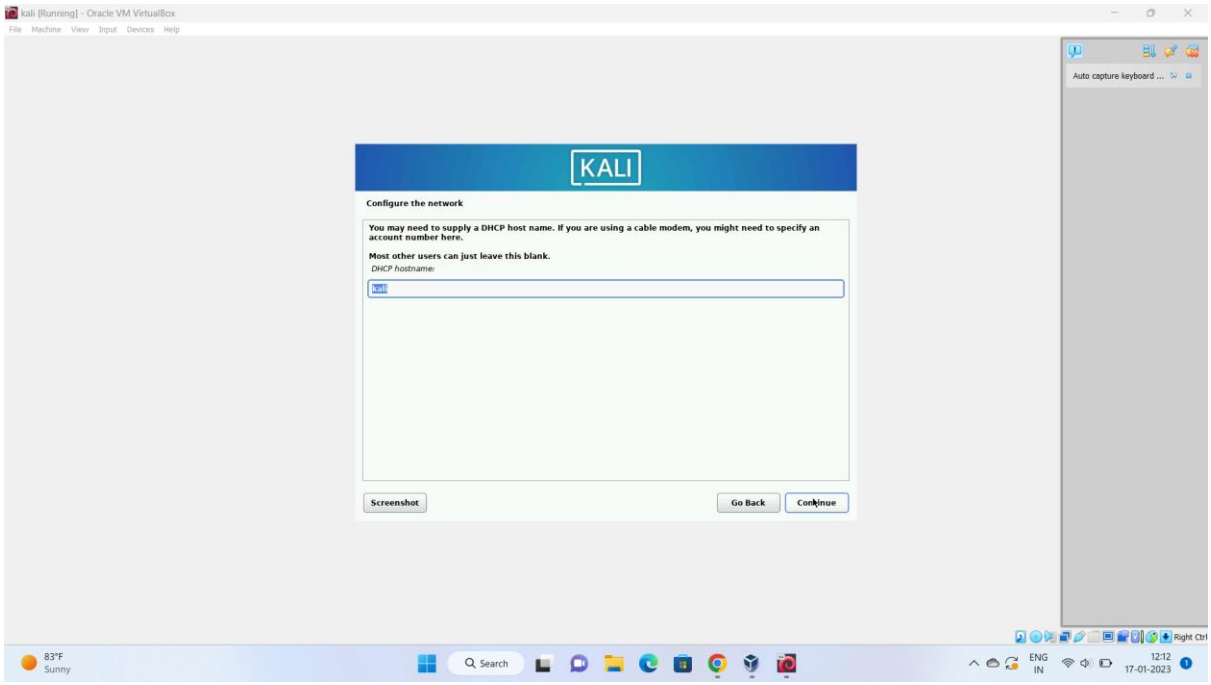
Step17: configure the network click on the next



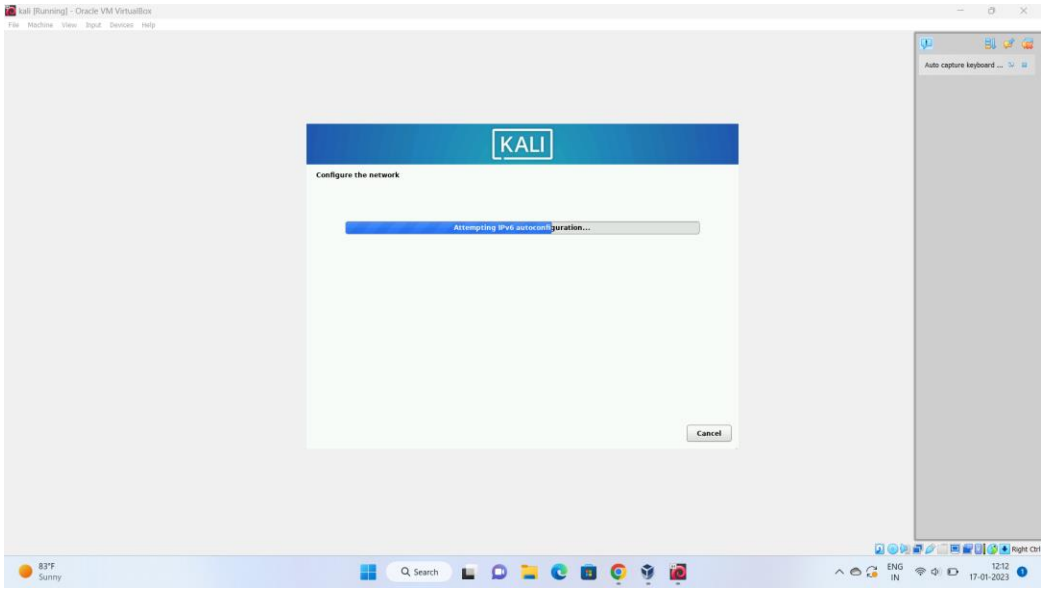
Step18: click second option



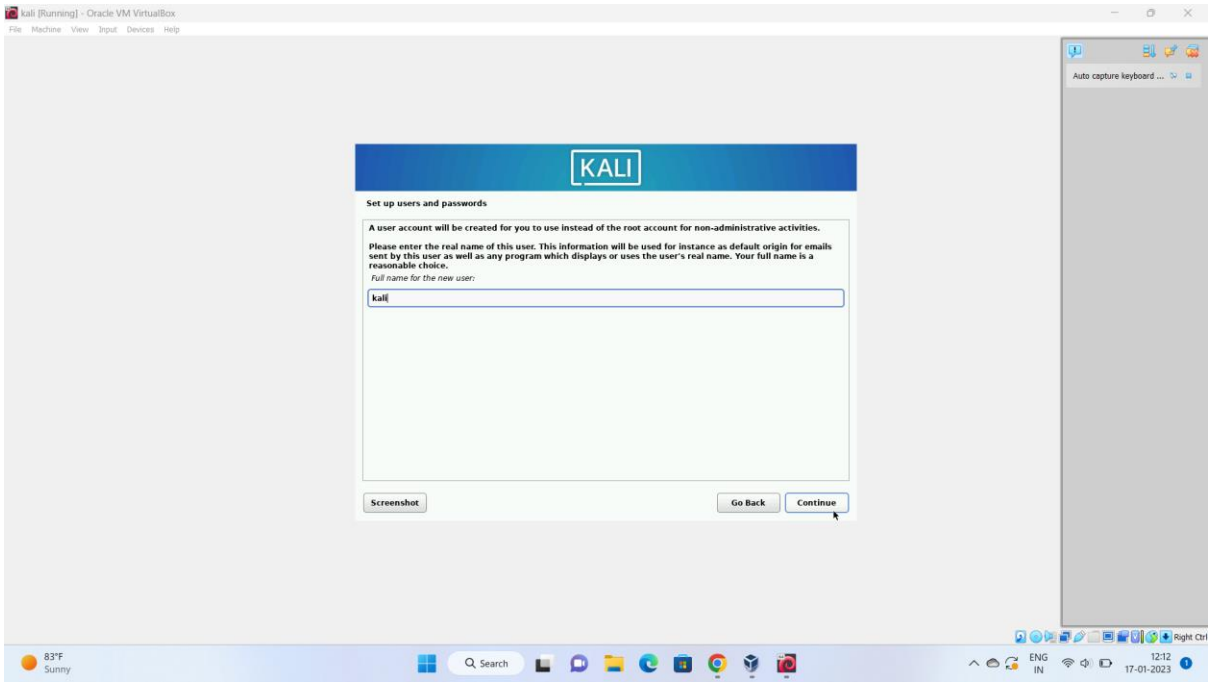
Step19:write the dhcp hostname and click on continue



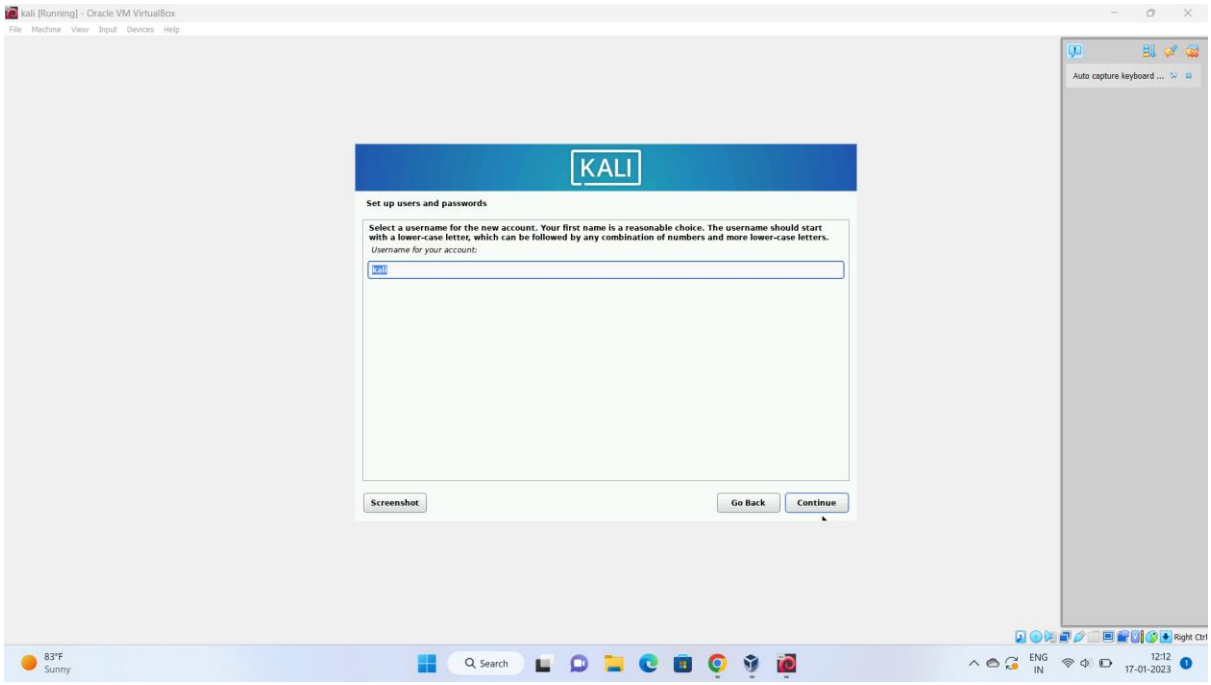
Step20:loading



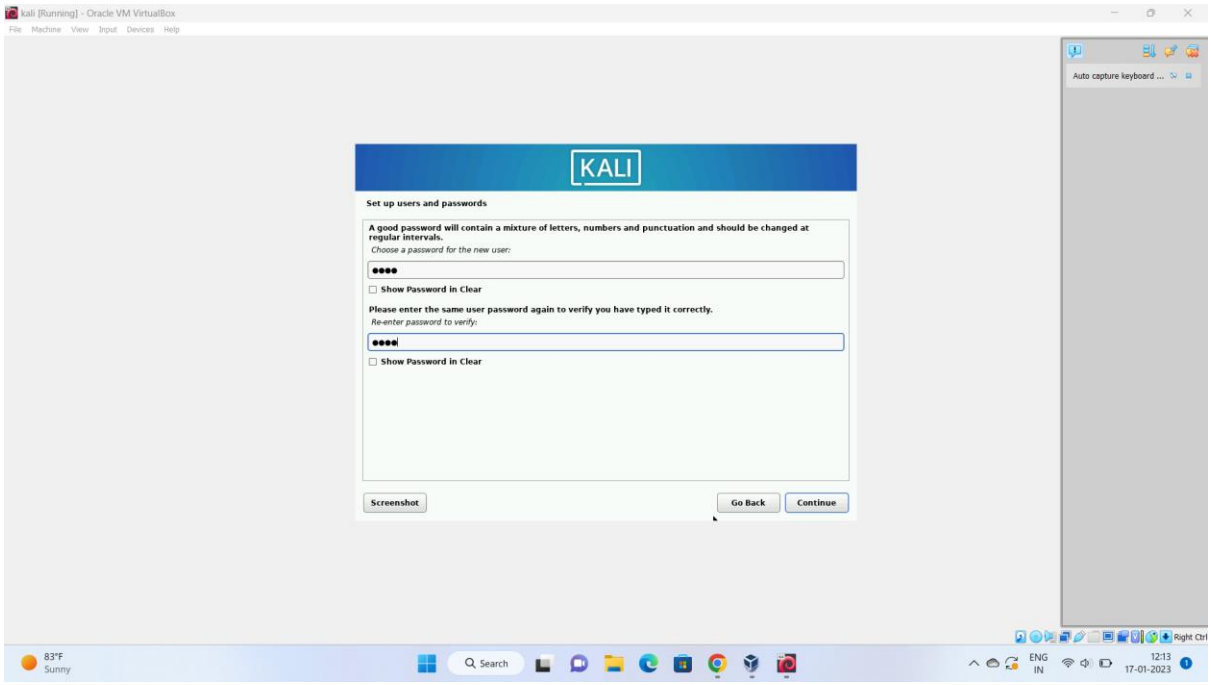
Step21: full name of the user and click on continue



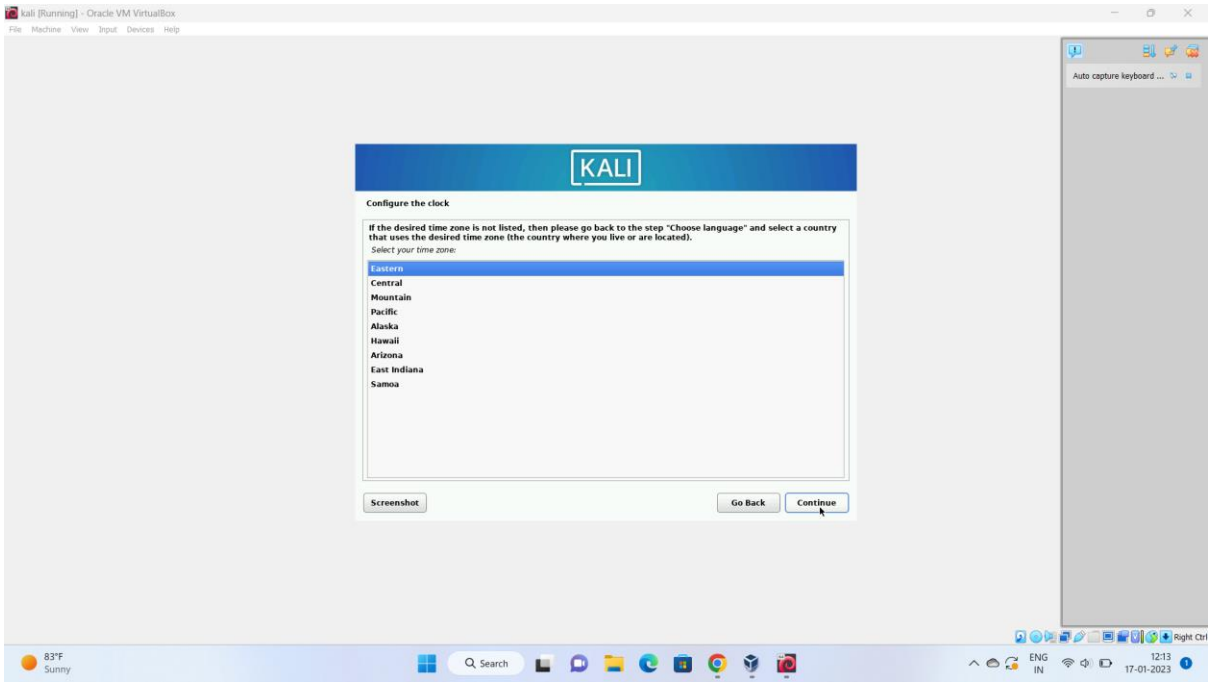
Step22:write a user name to your account and click on next



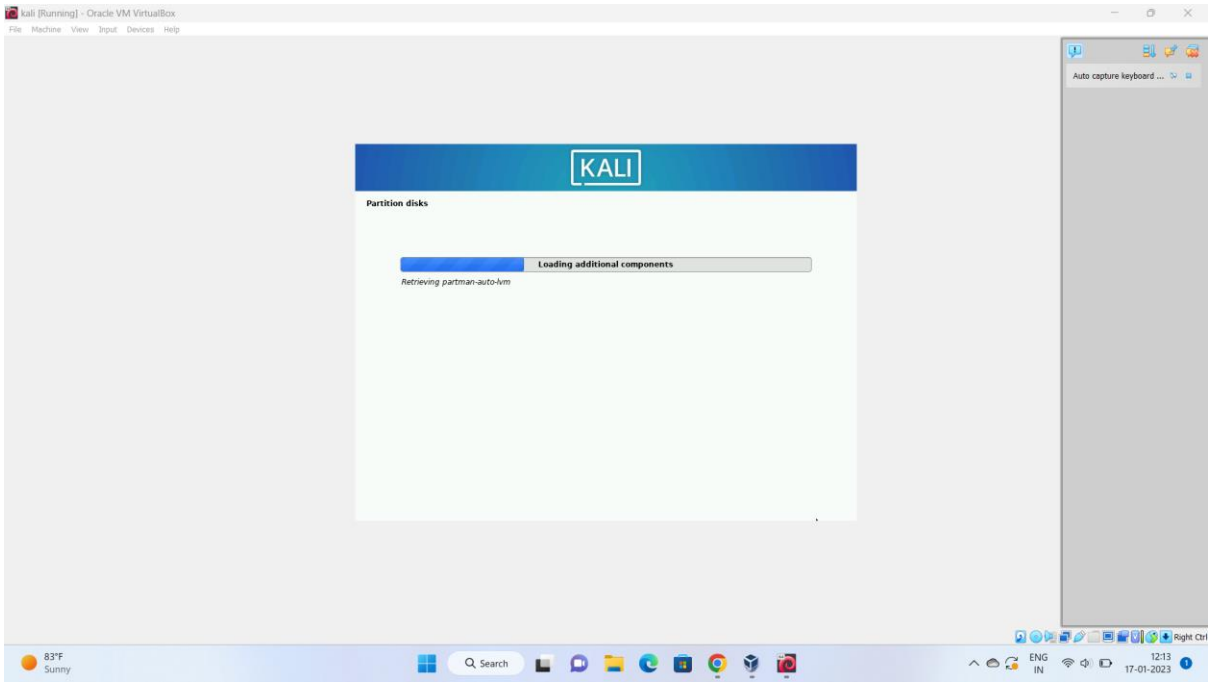
Step23: create the password and click on next



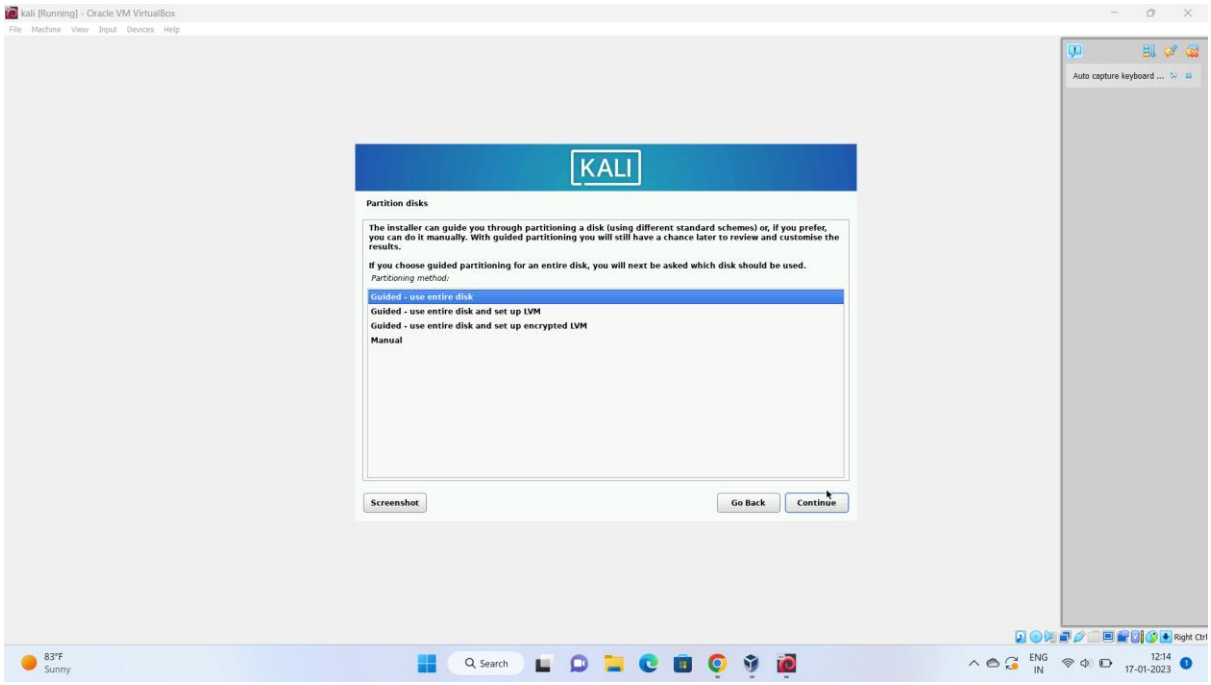
Step24:configure the clock and click on next



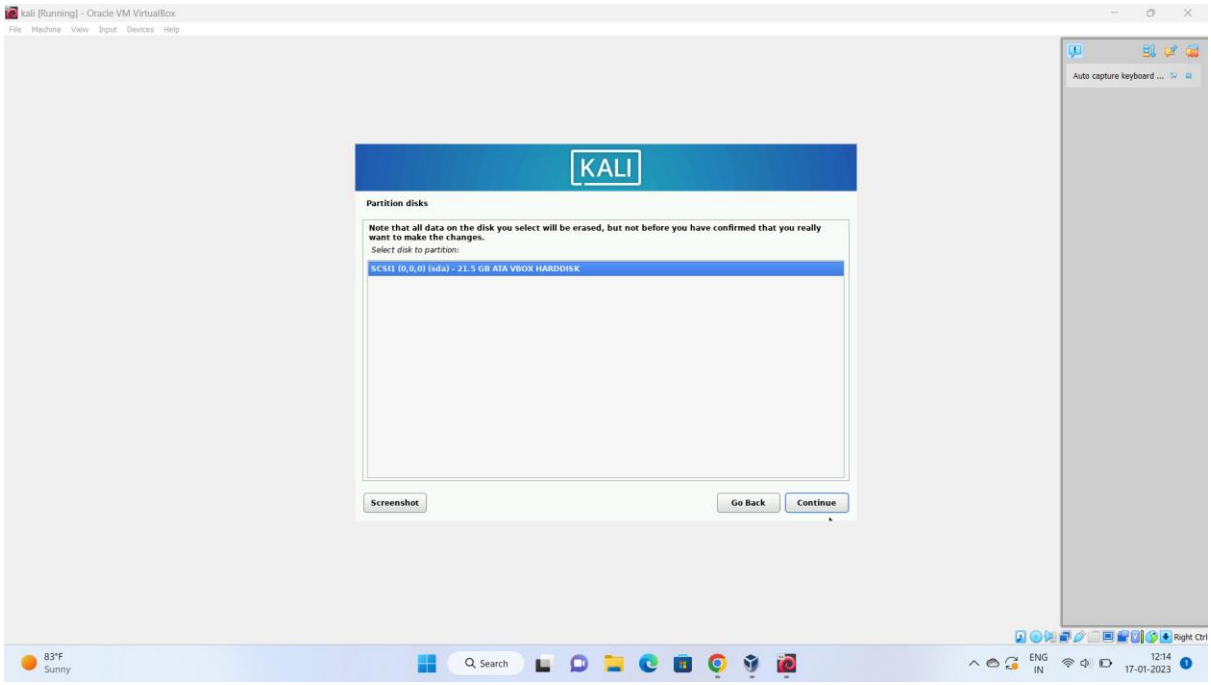
Step25 : loading



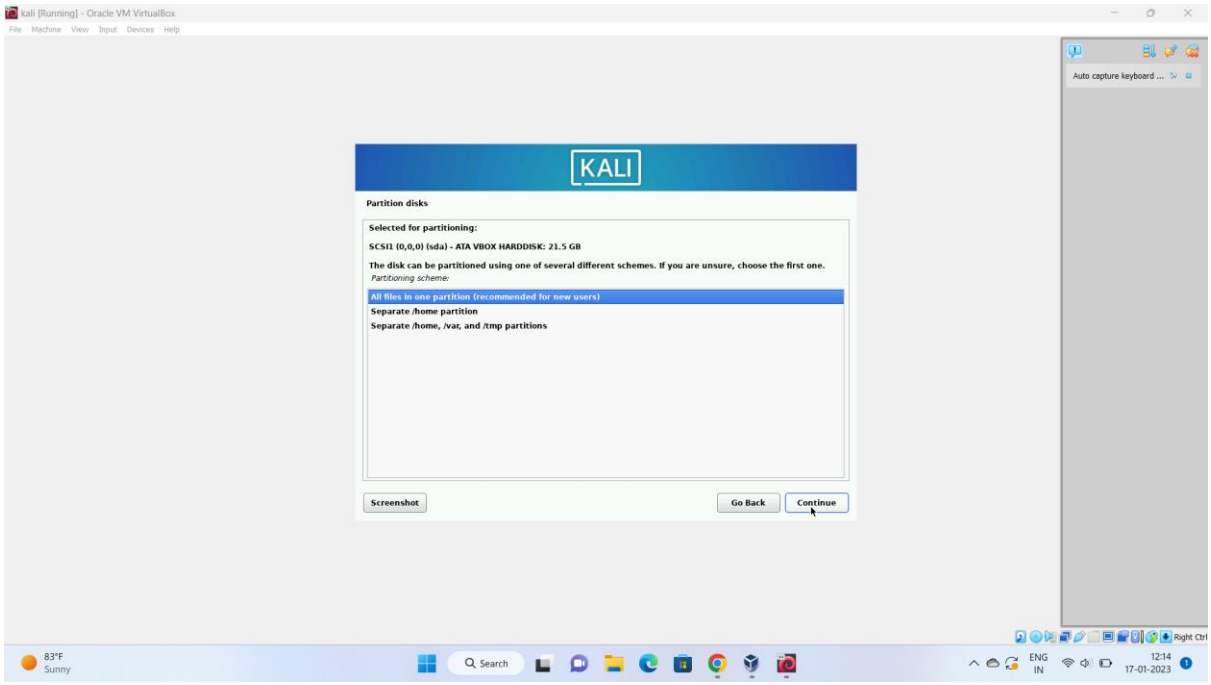
Step26: click on the guided use entire disk



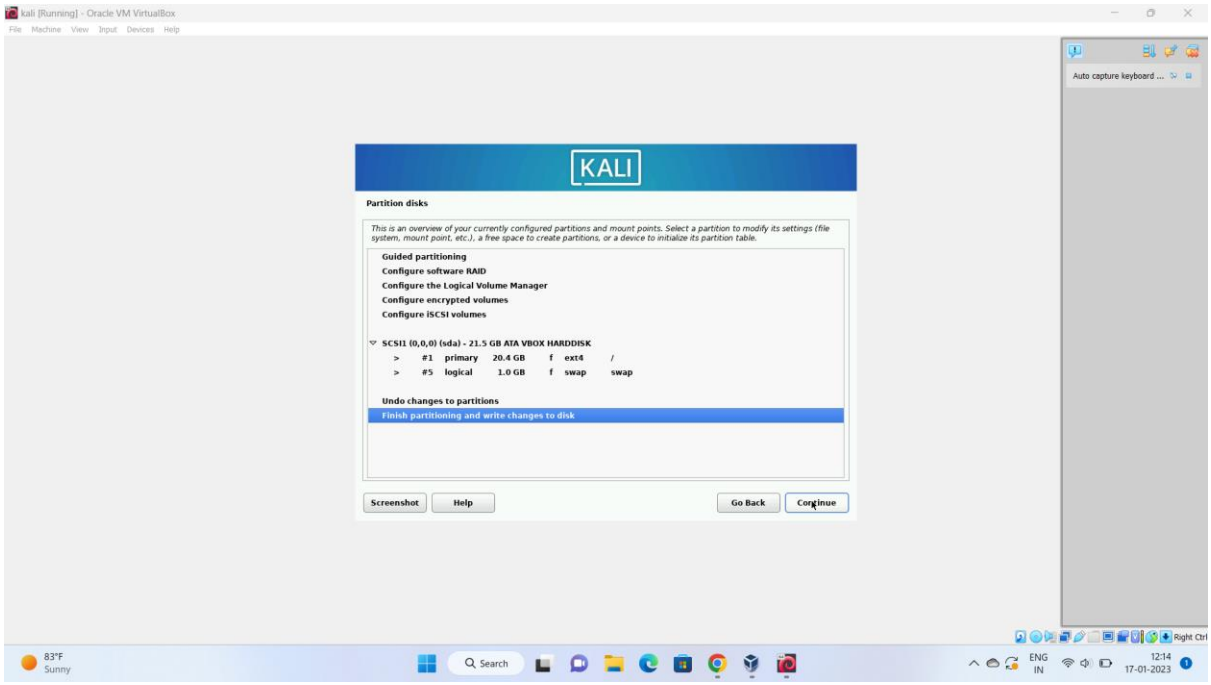
Step27: click on continue



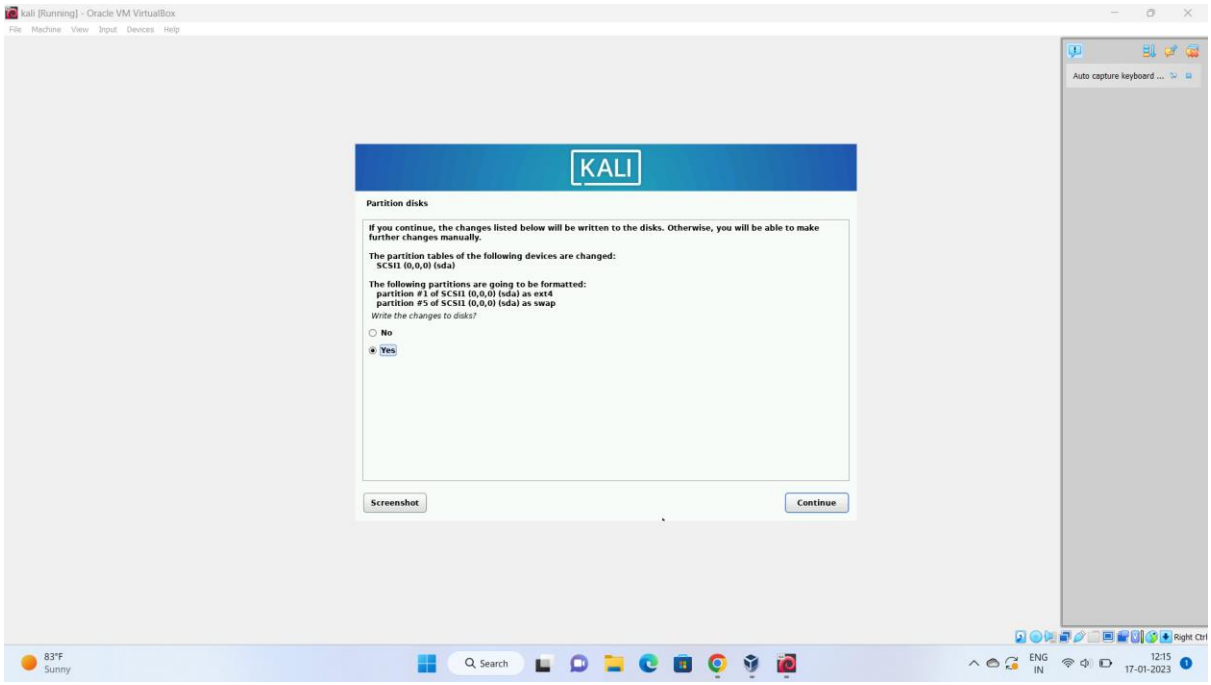
Step28: click on all files in one partion



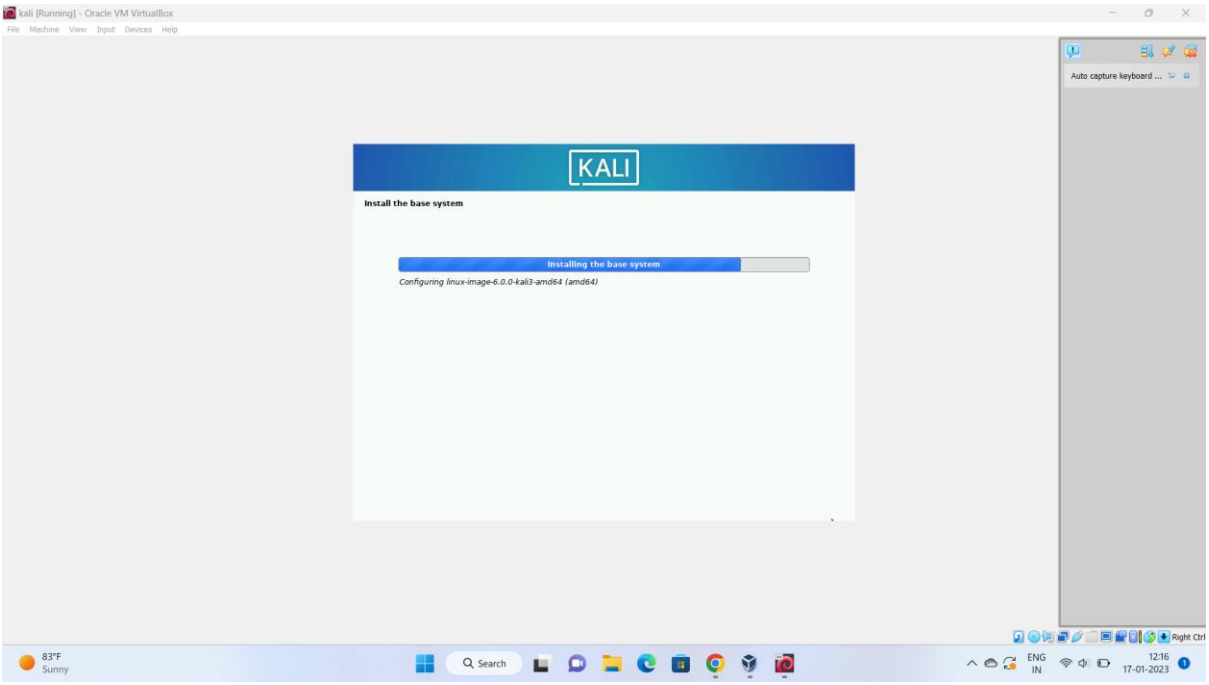
Step29:click on continue



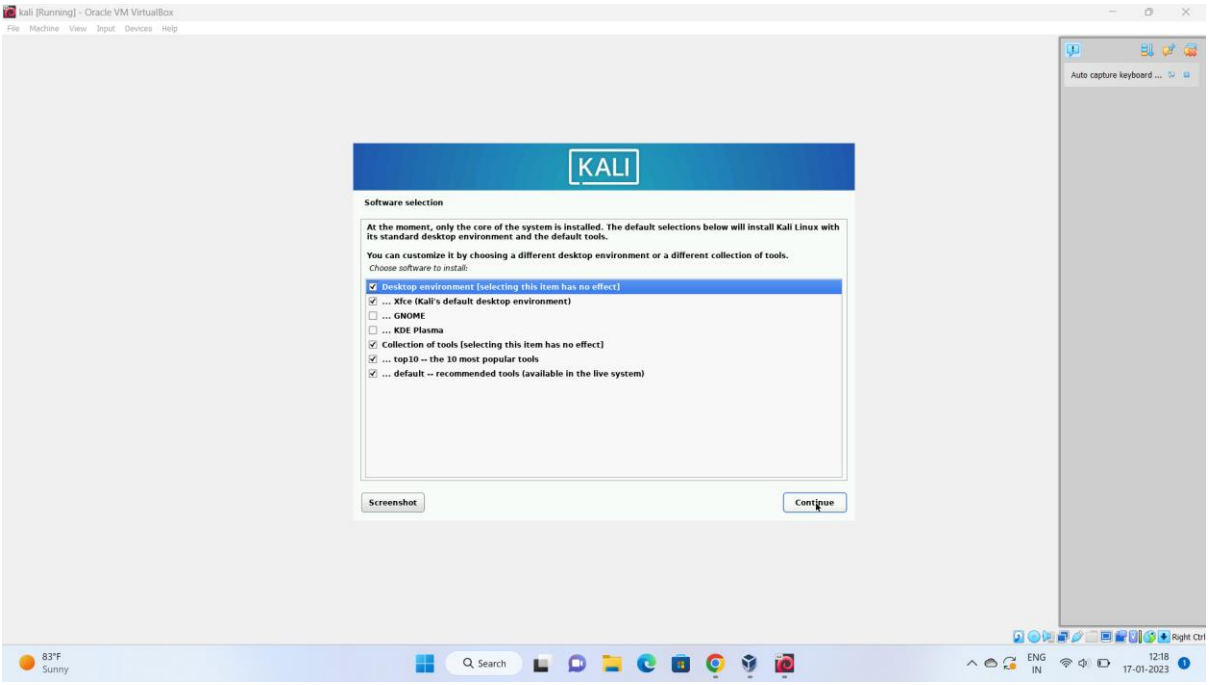
Step30: click on yes



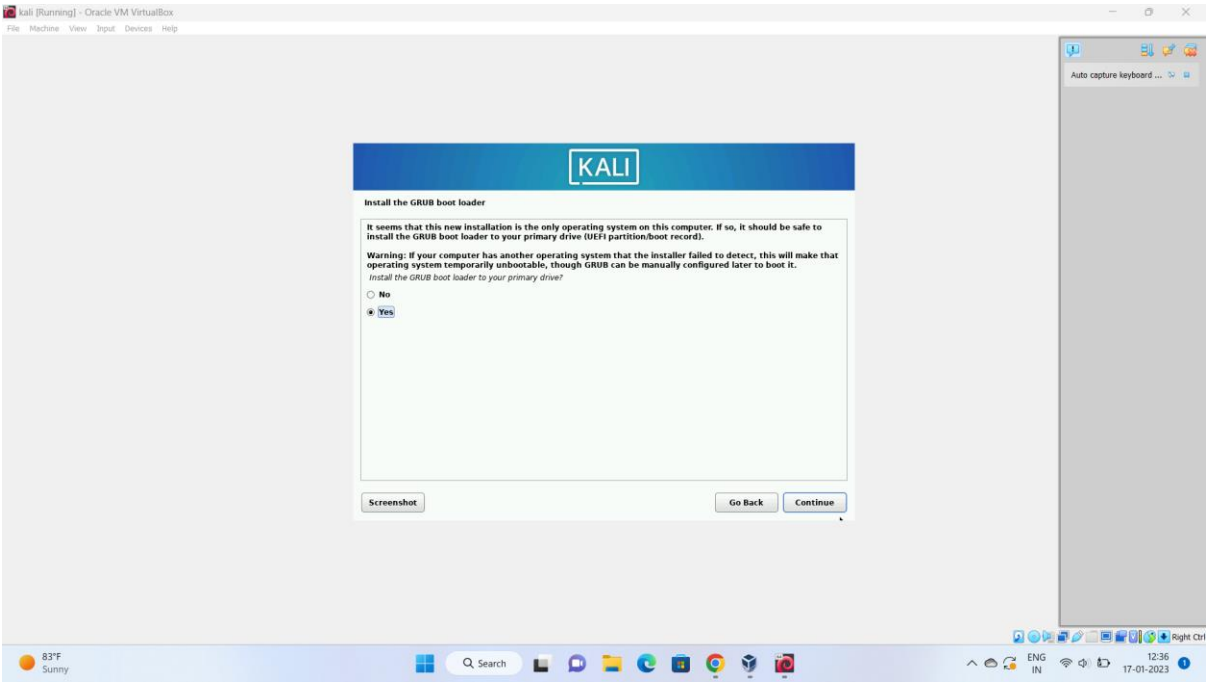
step31:loading



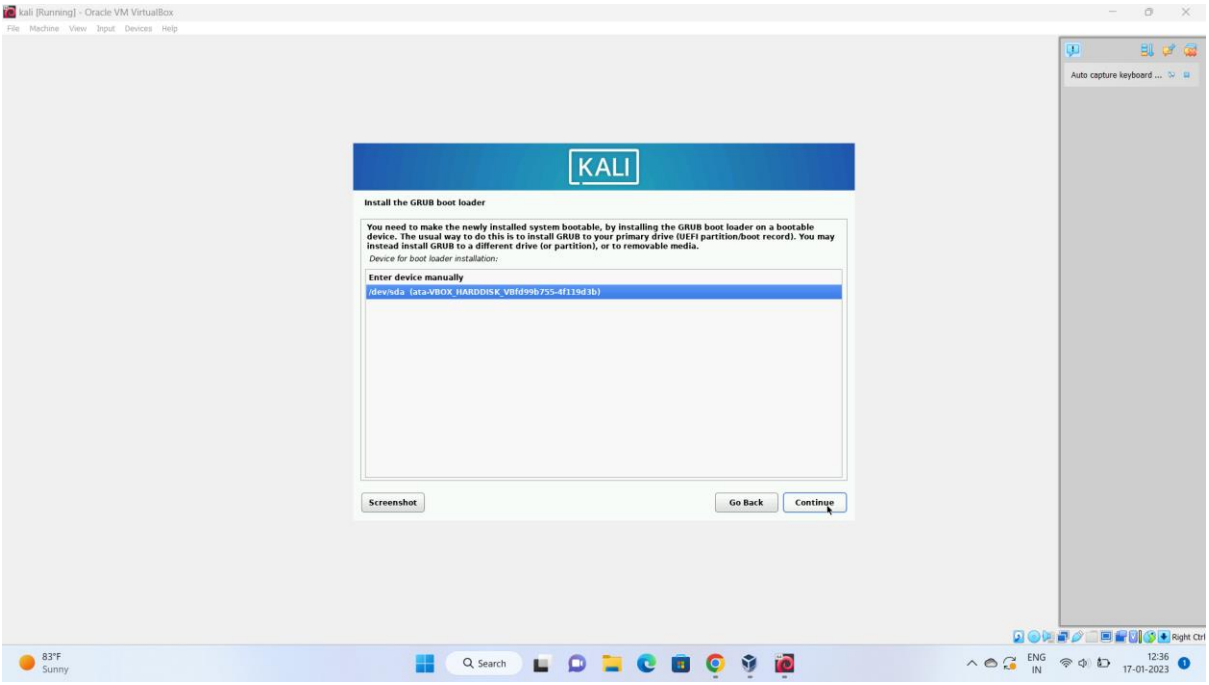
Step32:leave default option



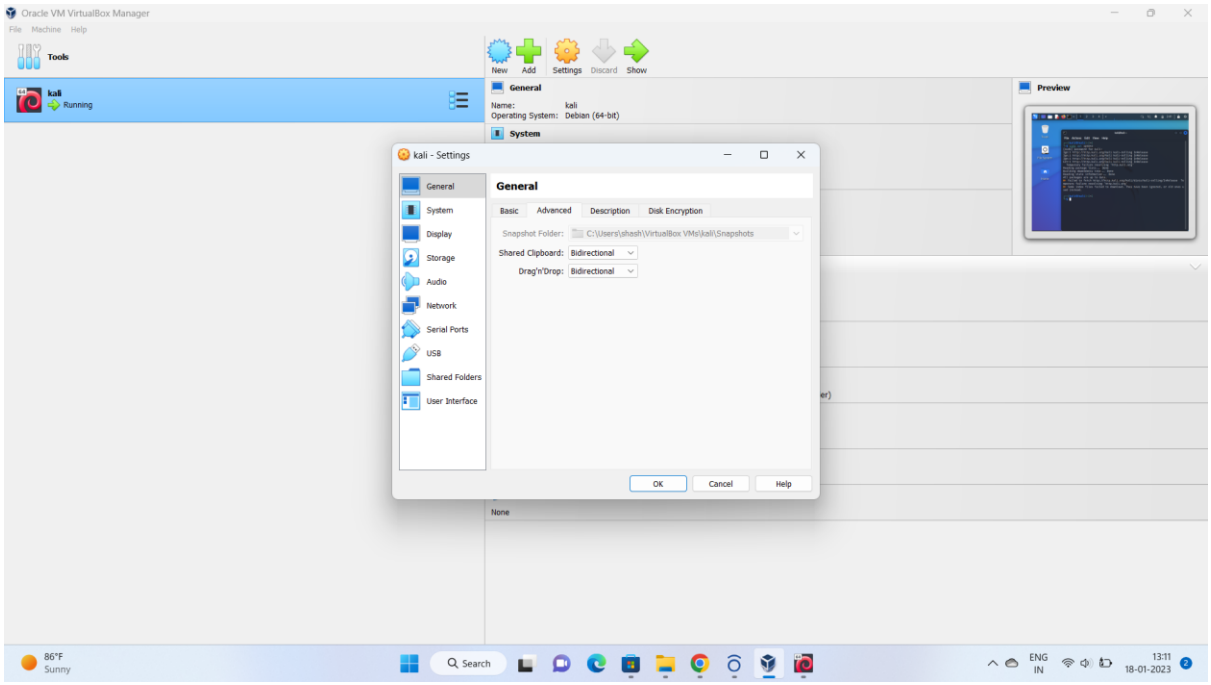
Step33: click on yes



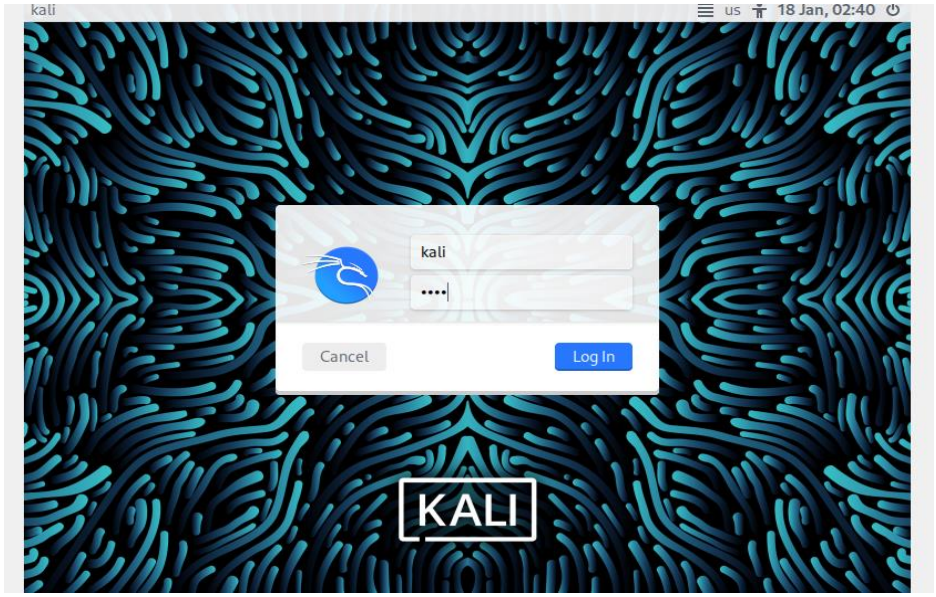
Step34: click on continue



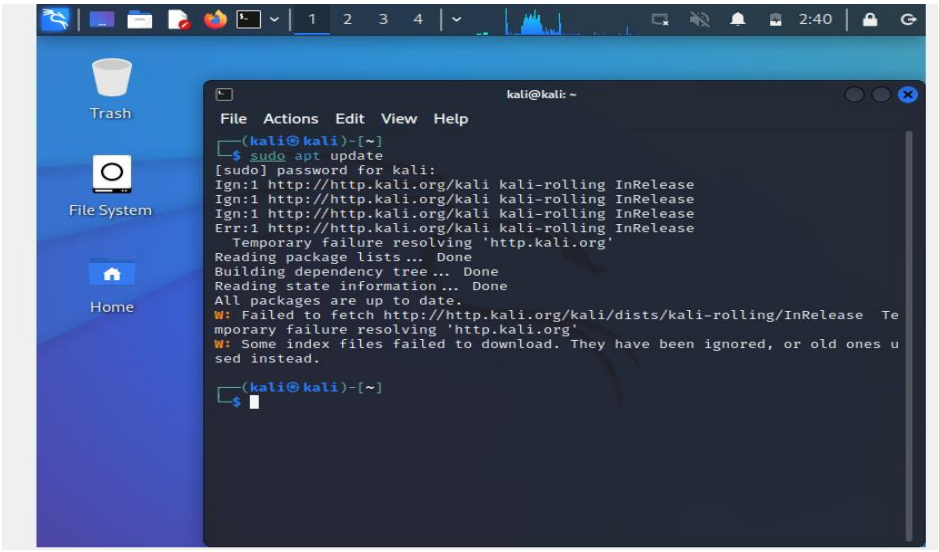
Step35:go to general settings change the settings as bidirectional for both



Step36:run the machine



Step37:the kali linux is ready


1 2 3 4
2:40
Trash
File System
Home
kali@kali: ~
File Actions Edit View Help
┌──(kali㉿kali)-[~]
└─$ sudo apt update
[sudo] password for kali:
Ign:1 http://http.kali.org/kali kali-rolling InRelease
Ign:1 http://http.kali.org/kali kali-rolling InRelease
Ign:1 http://http.kali.org/kali kali-rolling InRelease
Err:1 http://http.kali.org/kali kali-rolling InRelease
Temporary failure resolving 'http.kali.org'
Reading package lists ... Done
Building dependency tree ... Done
Reading state information ... Done
All packages are up to date.
W: Failed to fetch http://http.kali.org/kali/dists/kali-rolling/InRelease Temporary failure resolving 'http.kali.org'
W: Some index files failed to download. They have been ignored, or old ones used instead.
┌──(kali㉿kali)-[~]
└─$