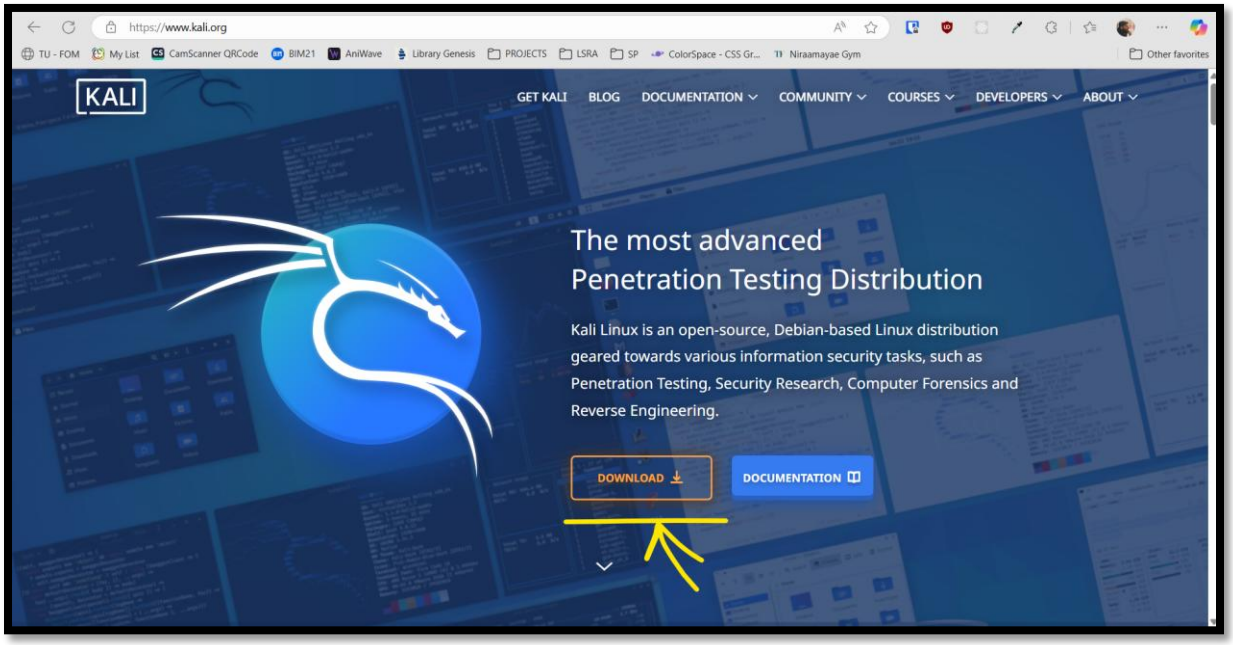
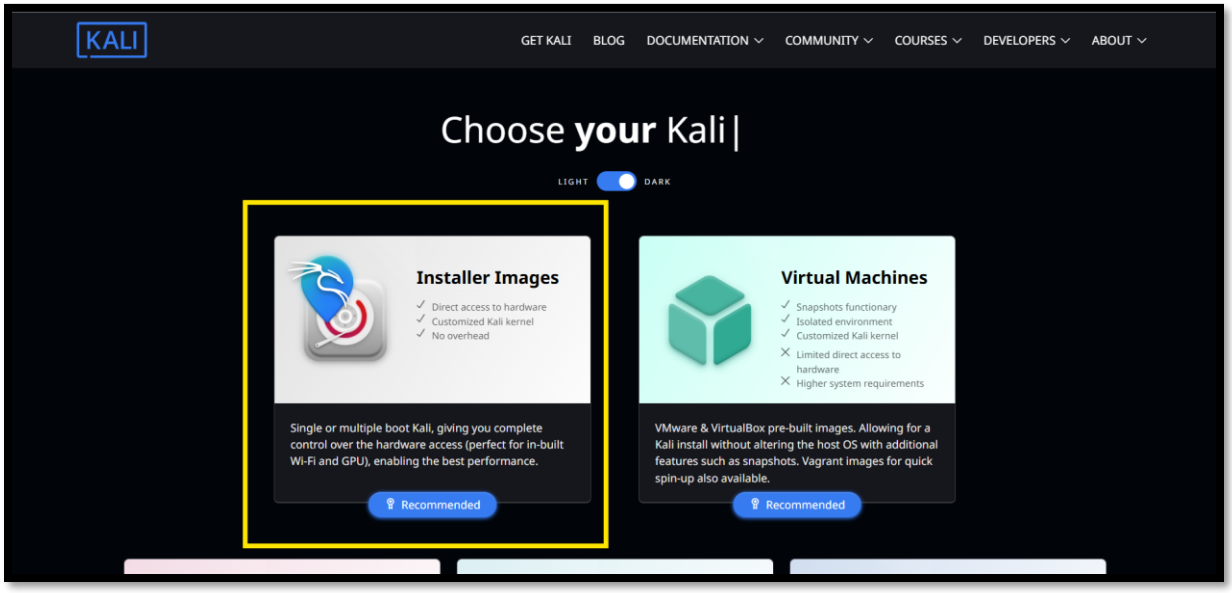
Lab 3: Download and Install Kali Linux on VirtualBox

1. Download Kali Linux

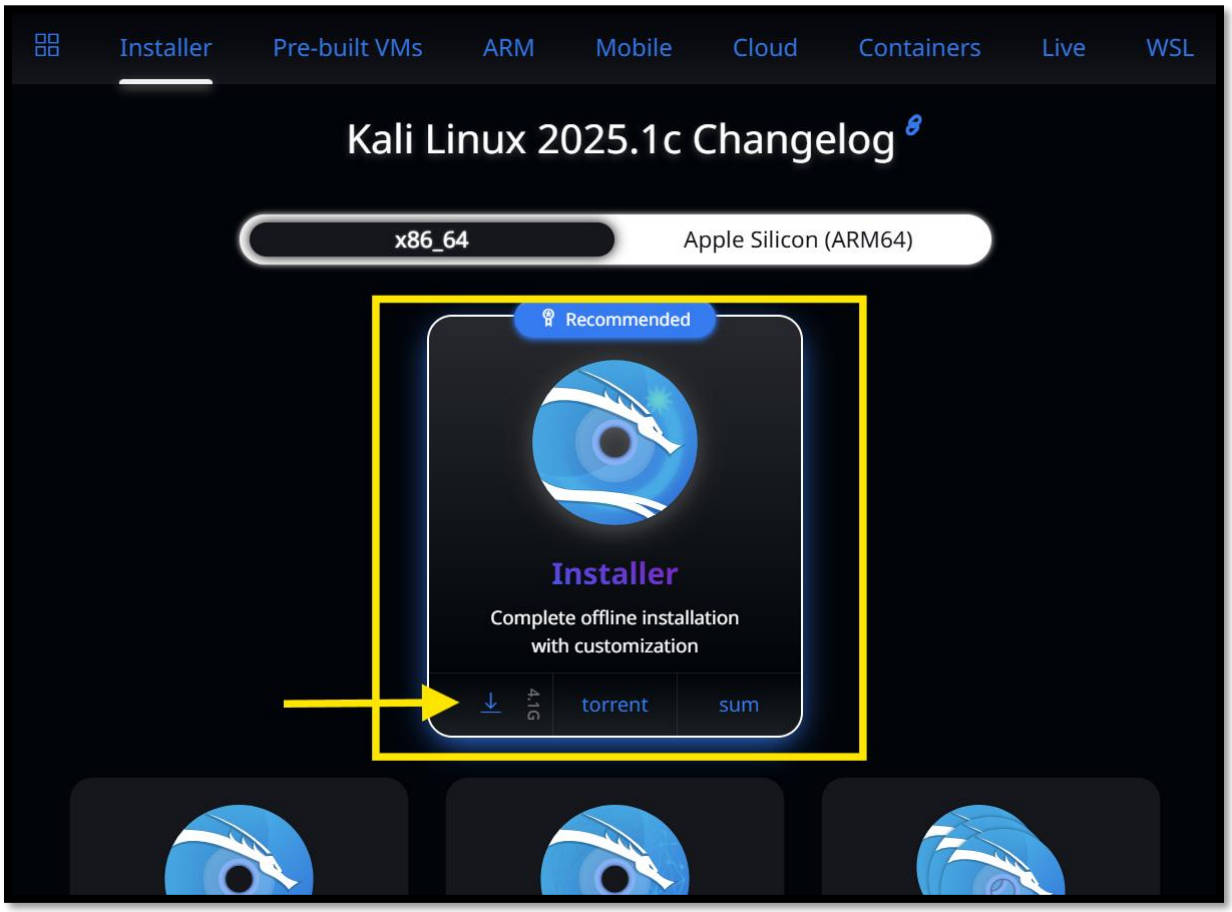
Step 1: Go to Kali Linux website, https://www.kali.org/ and click on download.

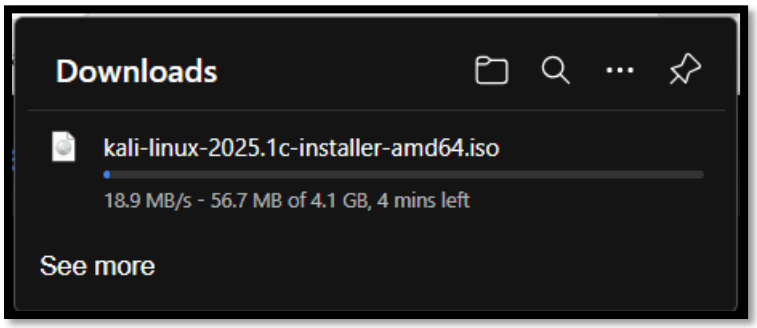


Step 2: Choose the option of Installer Image



Step 3: Click on the download button of the latest iso file of Kali and wait for it to complete the download.

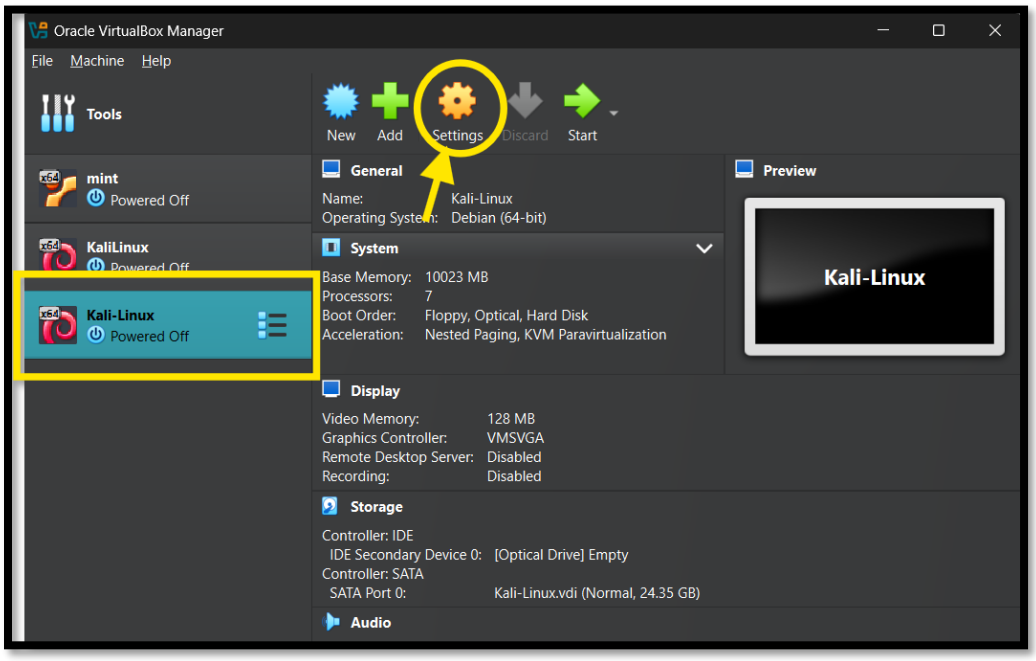




2. Setup Virtual Box for Kali Linux

[Note: The RAM, hardware, and network settings were already completed in Lab 2]

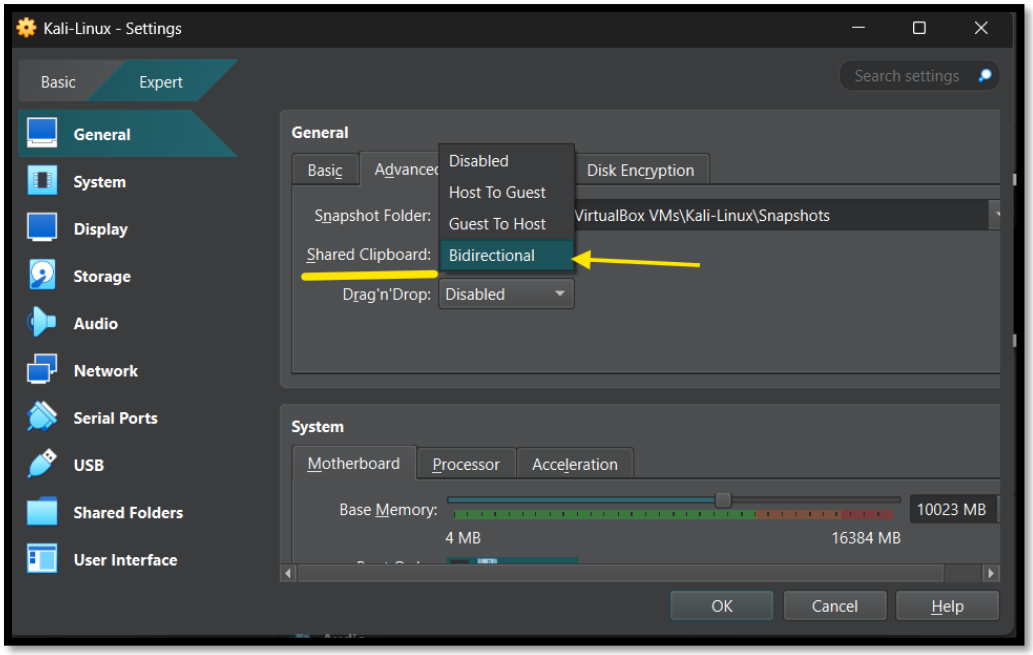
Step 1: Open the settings of previously set virtual machine Kali-Linux



Step 2: Open the General tab, and under Advanced set the shared clipboard to Bidirectional.

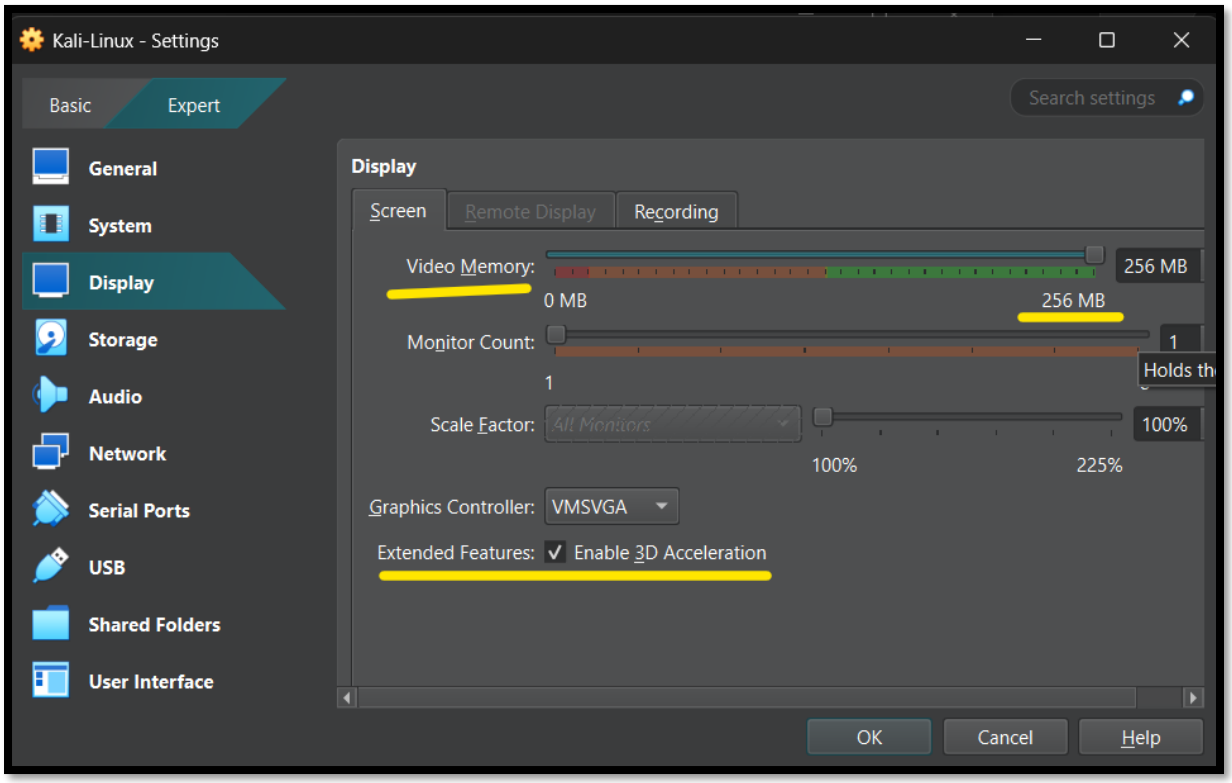
This helps with easy copy and paste of any text between the home OS (windows 11) and Kali.

[Optional: You can also enable drag 'n' drop]



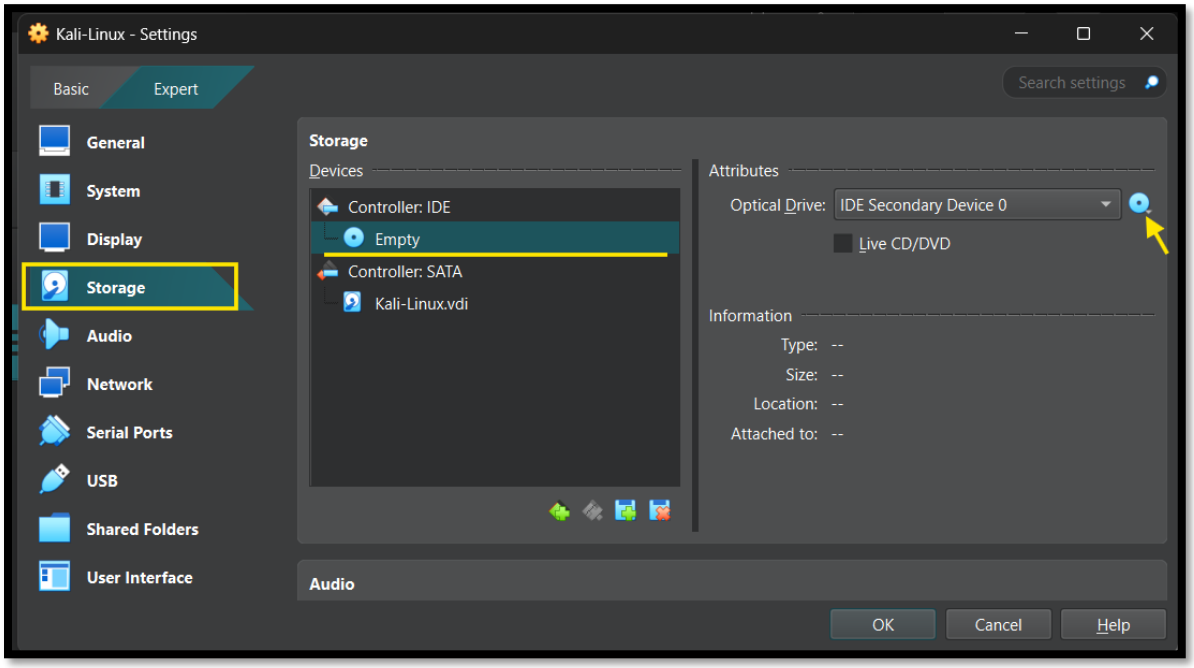
Step 3: Display Settings

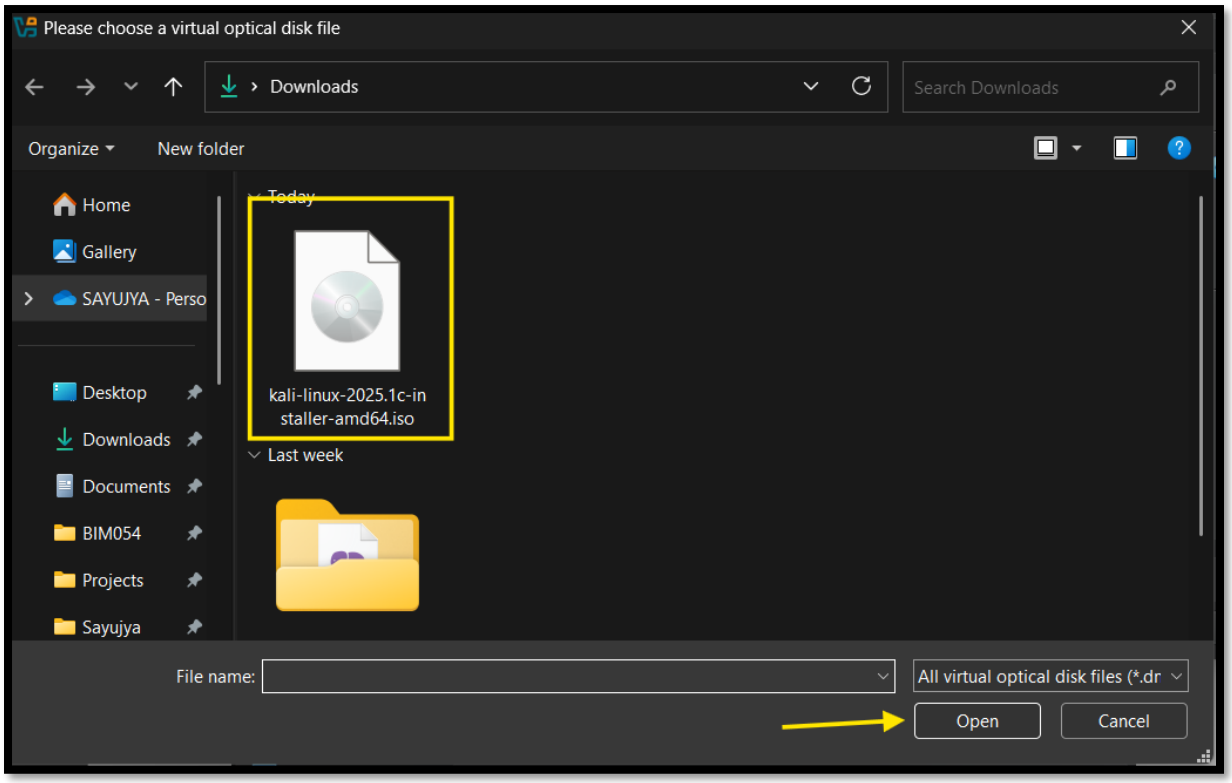
Under the display set video memory to max and enable 3d acceleration if you want to render 3D graphics.



Step 4: Select ISO File

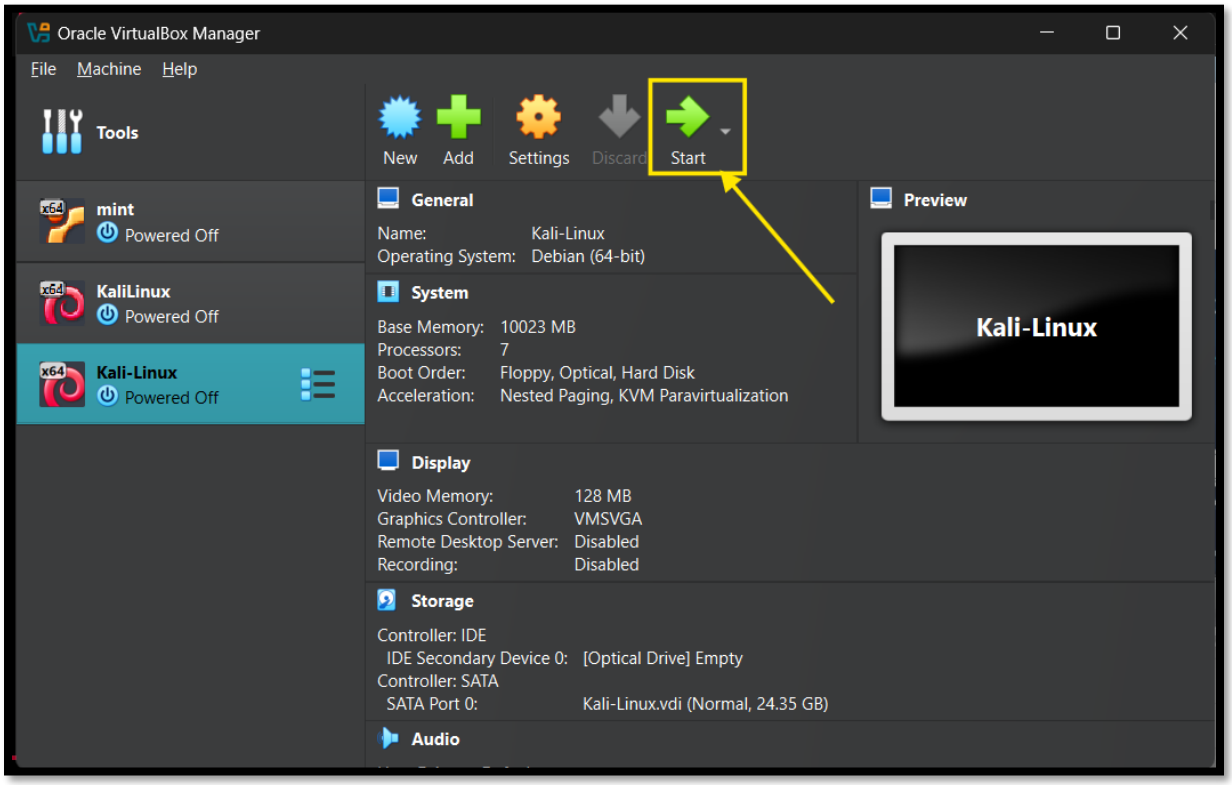
Under the storage settings, click on controller IDE and then Empty and click on the disk icon, then select a disk file and finally select the downloaded kali iso file.





Step 5: Start

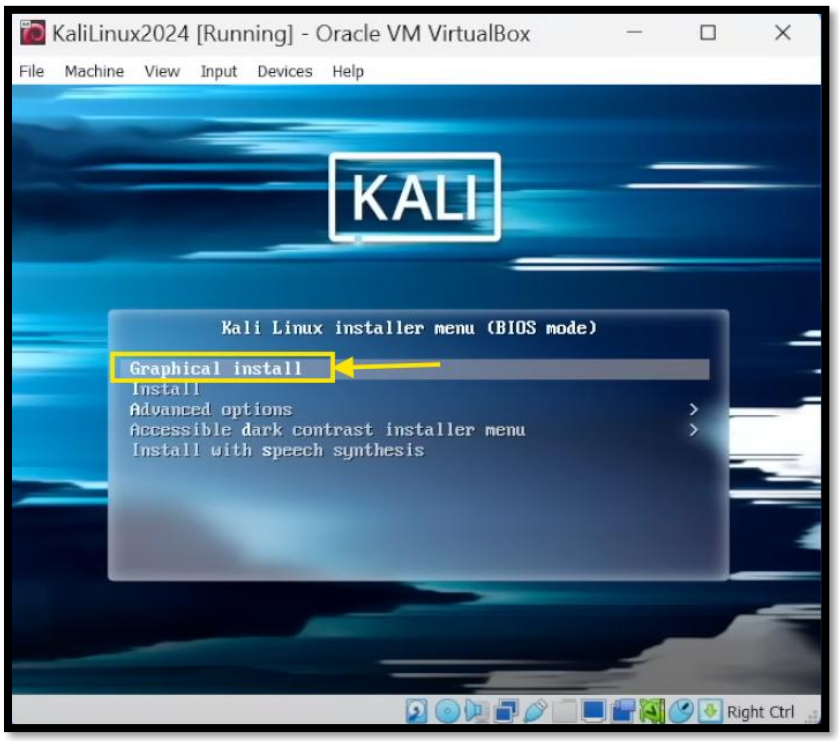
Press ok on the settings menu to close it and click on start.

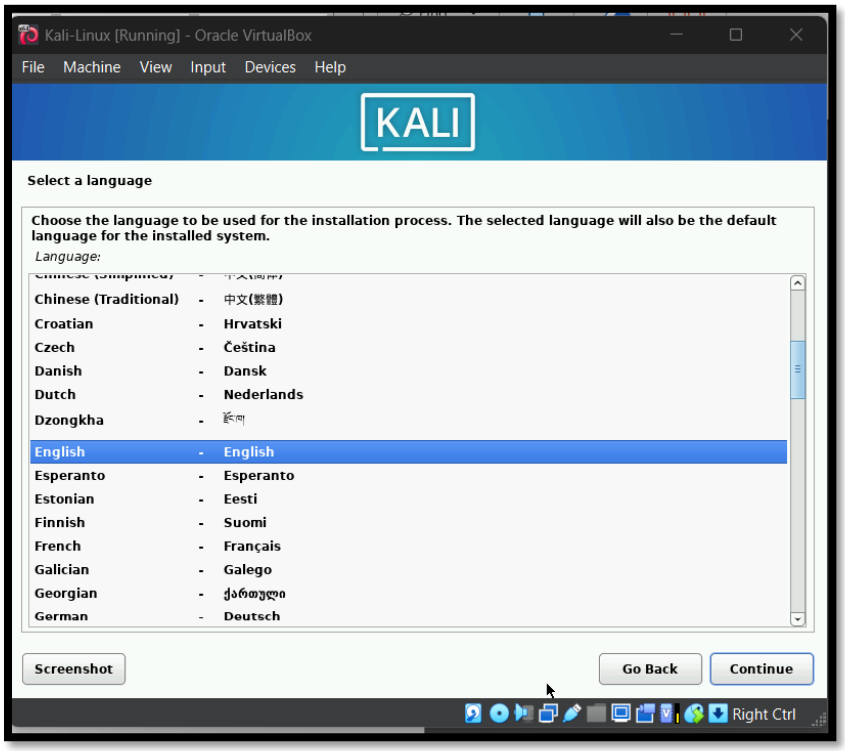


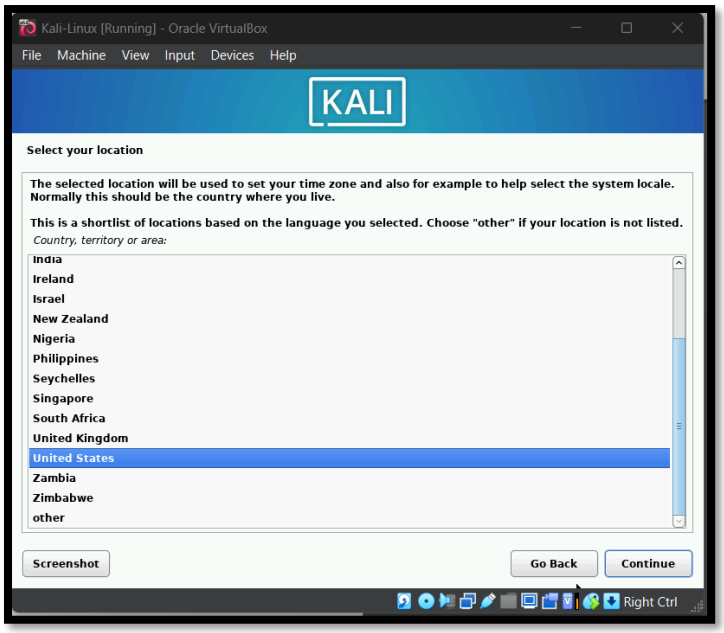
3. Installation of Kali Linux

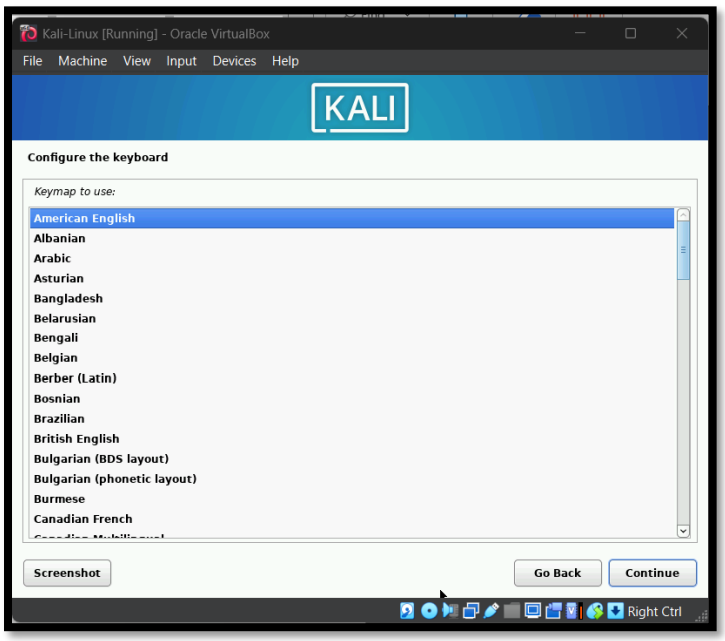
Step 1: Follow the installer's basic process

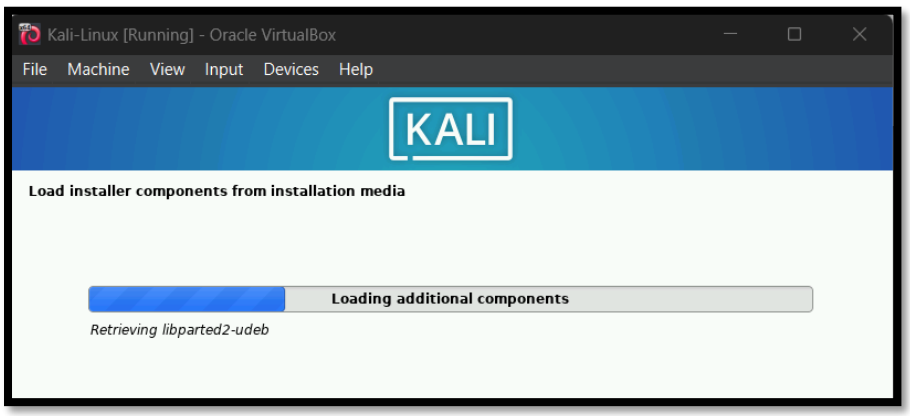
- Choose Graphical Install
- Select Language
- Choose Location
- Choose Keyboard Layout





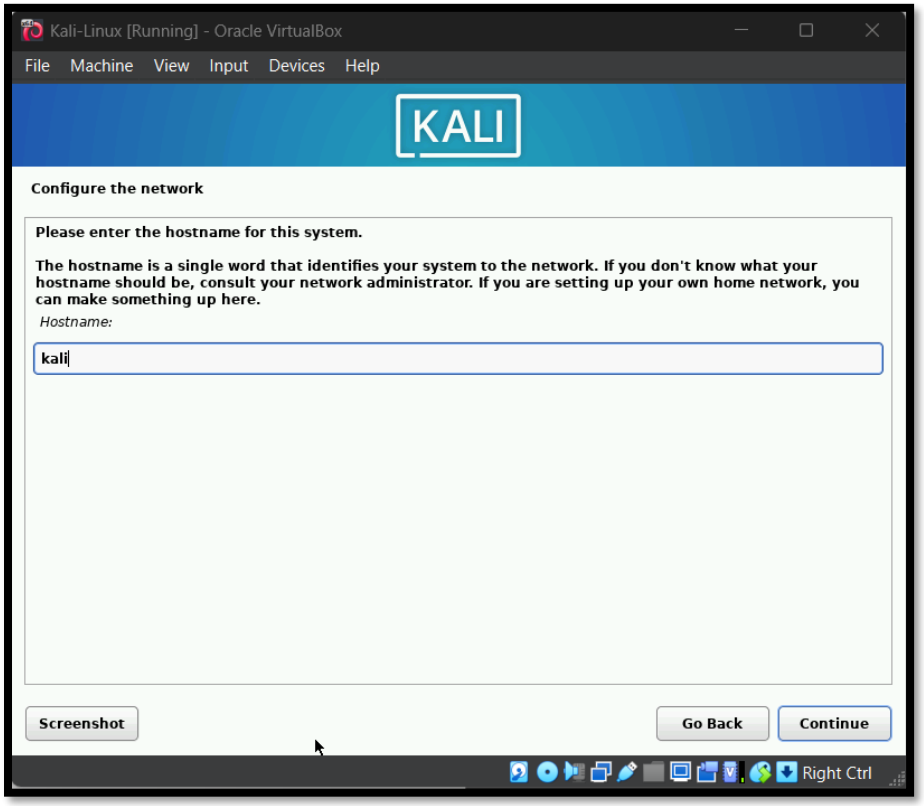

Kali-Linux [Running] - Oracle VirtualBox
File Machine View Input Devices Help
KALI
Select your location
The selected location will be used to set your time zone and also for example to help select the system locale. Normally this should be the country where you live.
This is a shortlist of locations based on the language you selected. Choose "other" if your location is not listed.
Country, territory or area:
India
Ireland
Israel
New Zealand
Nigeria
Philippines
Seychelles
Singapore
South Africa
United Kingdom
United States
Zambia
Zimbabwe
other
Screenshot
Go Back
Continue
Right Ctrl

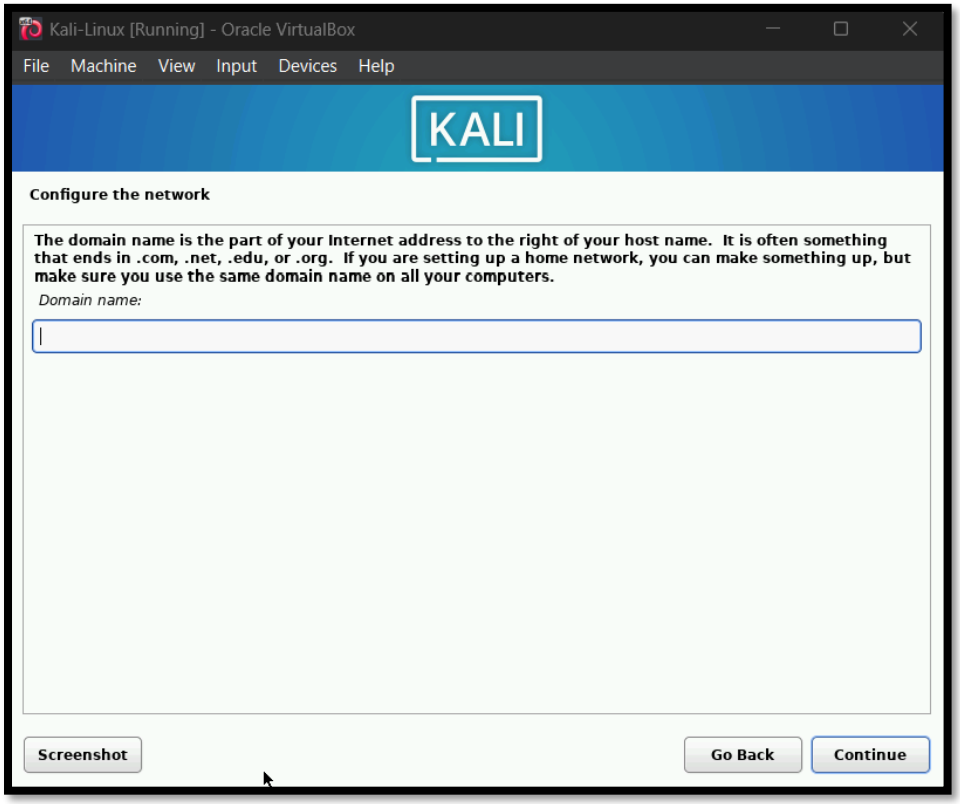

Kali-Linux [Running] - Oracle VirtualBox
File Machine View Input Devices Help
KALI
Configure the keyboard
Keymap to use:
American English
Albanian
Arabic
Asturian
Bangladesh
Belarusian
Bengali
Belgian
Berber (Latin)
Bosnian
Brazilian
British English
Bulgarian (BDS layout)
Bulgarian (phonetic layout)
Burmese
Canadian French
Screenshot
Go Back
Continue
Right Ctrl


Kali-Linux [Running] - Oracle VirtualBox
File Machine View Input Devices Help
KALI
Load installer components from installation media
Loading additional components
Retrieving libparted2-udeb

Step 2: Network Configuration

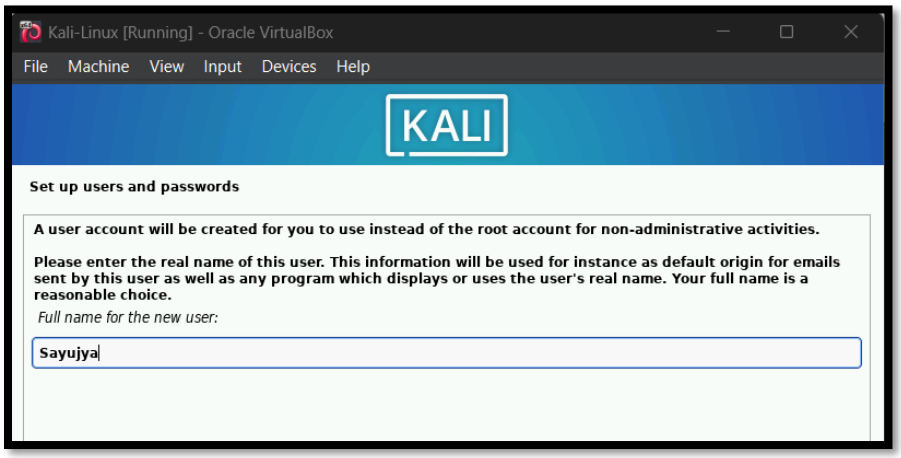
- Allow Kali to automatically set up a DHCP network
- Select a hostname
- Leave the domain name empty

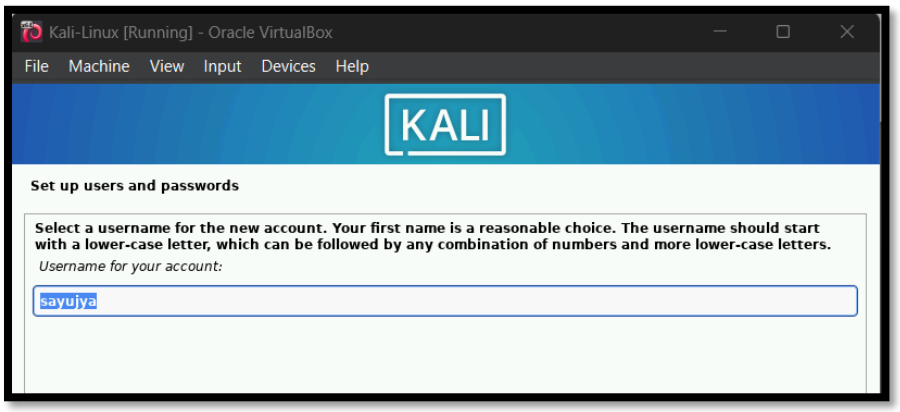


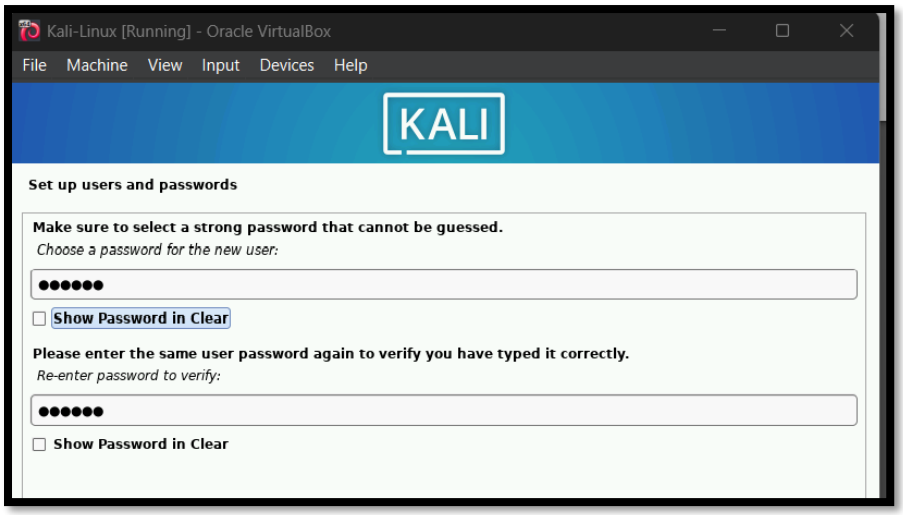


Step 3: Set up user details

- Enter the full name and press continue
- Enter a username then again press continue
- Set up a new password and click on continue

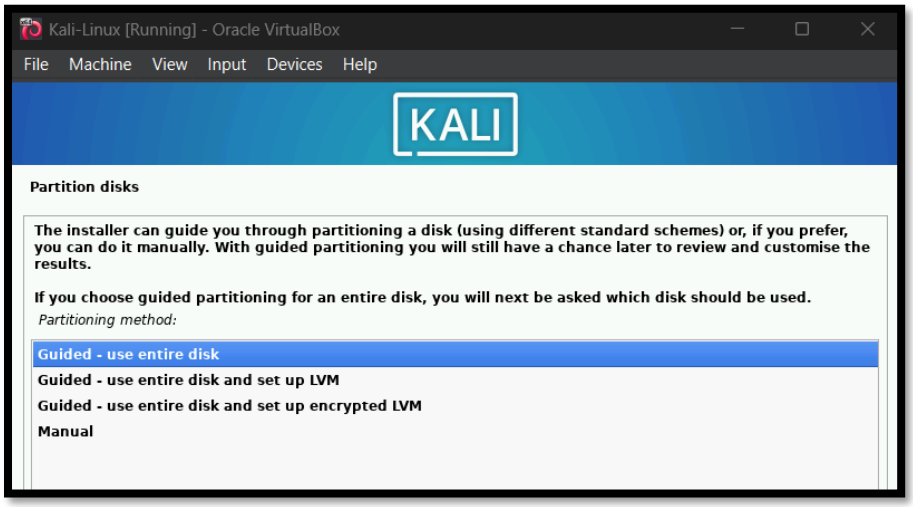


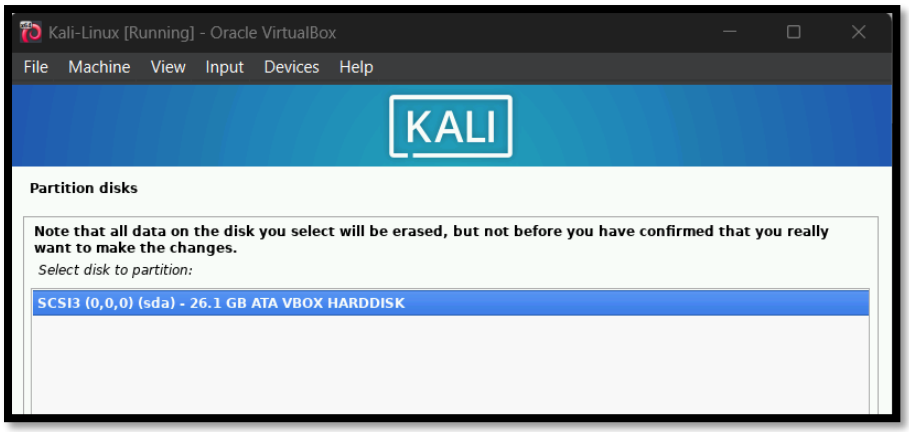


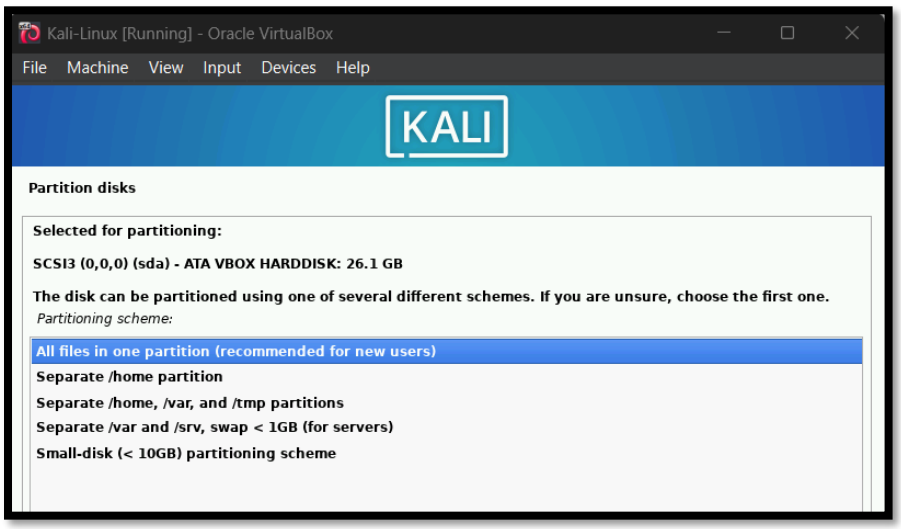


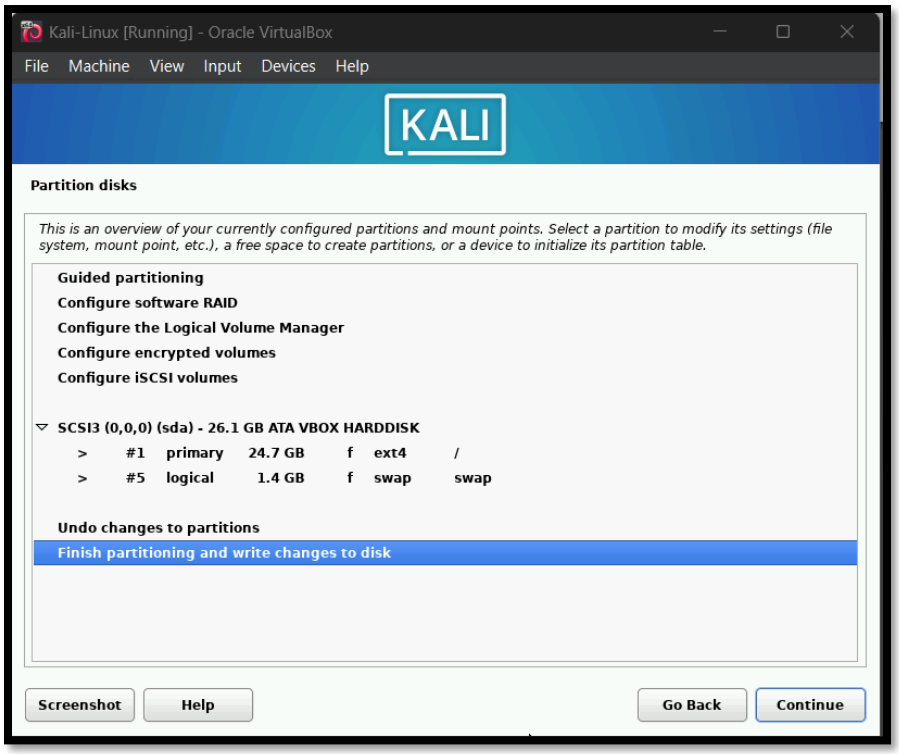
Step 4: Disk Partition

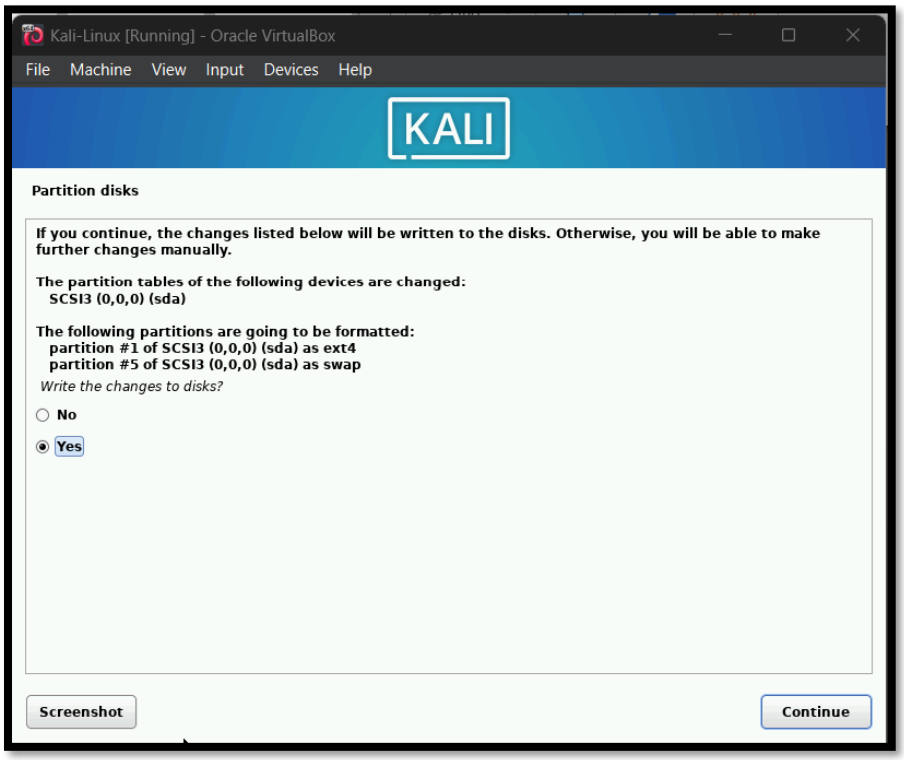
- Select “Guided – use entire disk”
- Select the virtual disk
- Select the partition type you like, I decided to go with all-in-one partition
- Select finish partitioning and then click on “yes”





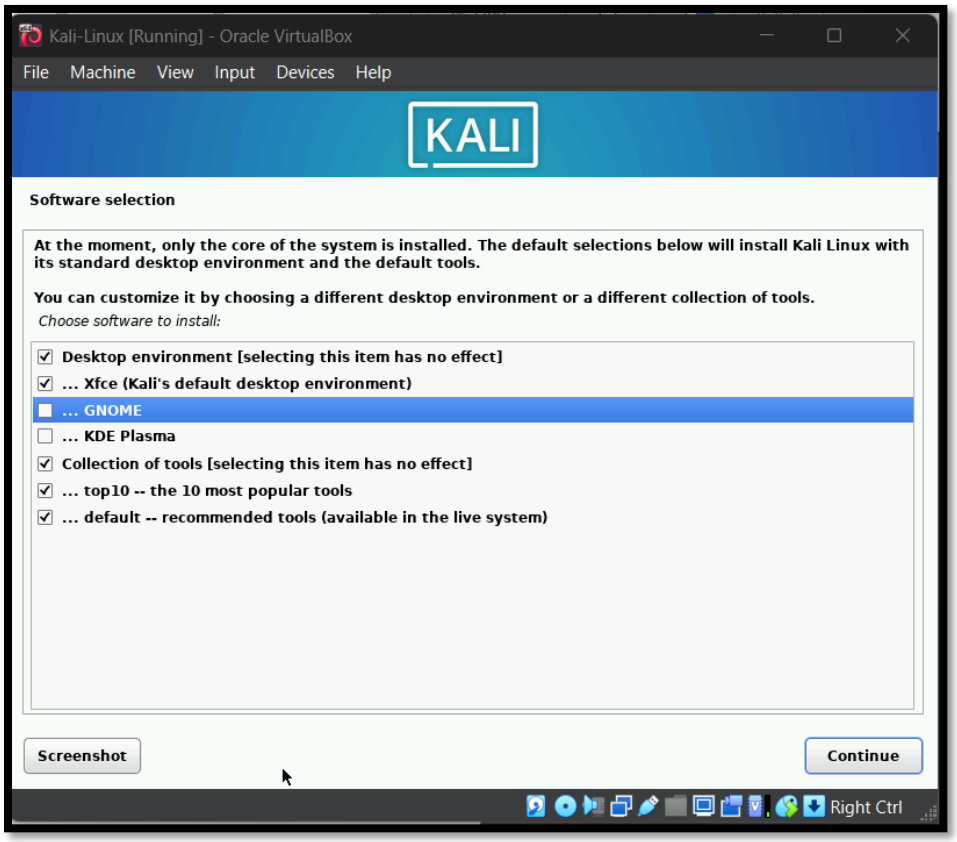


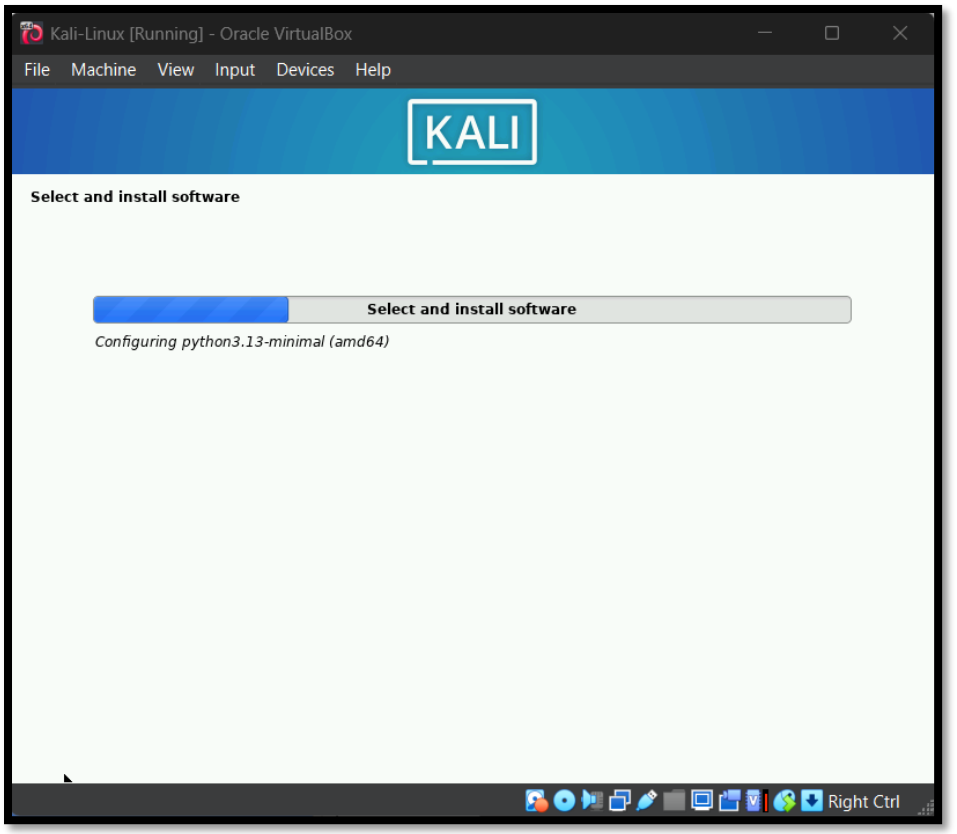

Kali-Linux [Running] - Oracle VirtualBox
File Machine View Input Devices Help
KALI
Partition disks
This is an overview of your currently configured partitions and mount points. Select a partition to modify its settings (file system, mount point, etc.), a free space to create partitions, or a device to initialize its partition table.
Guided partitioning
Configure software RAID
Configure the Logical Volume Manager
Configure encrypted volumes
Configure iSCSI volumes
SCSI3 (0,0,0) (sda) - 26.1 GB ATA VBOX HARDDISK
> #1 primary 24.7 GB f ext4 /
> #5 logical 1.4 GB f swap swap
Undo changes to partitions
Finish partitioning and write changes to disk
Screenshot
Help
Go Back
Continue


Kali-Linux [Running] - Oracle VirtualBox
File Machine View Input Devices Help
KALI
Partition disks
If you continue, the changes listed below will be written to the disks. Otherwise, you will be able to make further changes manually.
The partition tables of the following devices are changed:
SCSI3 (0,0,0) (sda)
The following partitions are going to be formatted:
partition #1 of SCSI3 (0,0,0) (sda) as ext4
partition #5 of SCSI3 (0,0,0) (sda) as swap
Write the changes to disks?
No
Yes
Screenshot
Continue

Step 5: Software Select

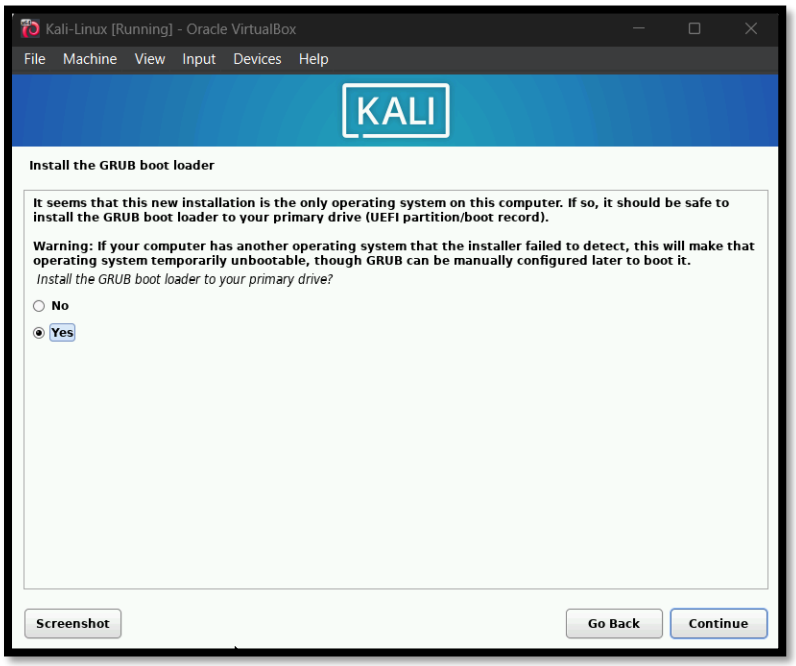
You can either choose Xfce or GNOME as the default software, I chose Xfce and then wait for the software to install.

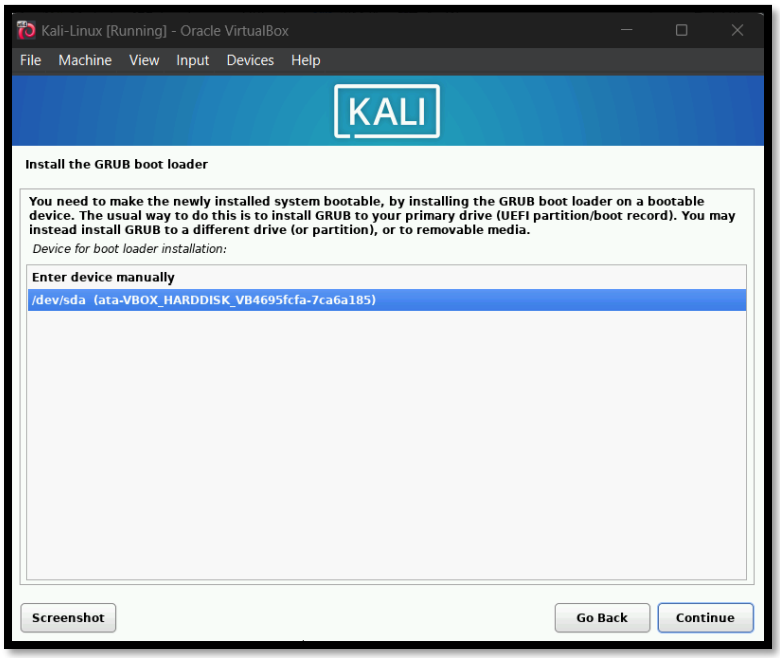


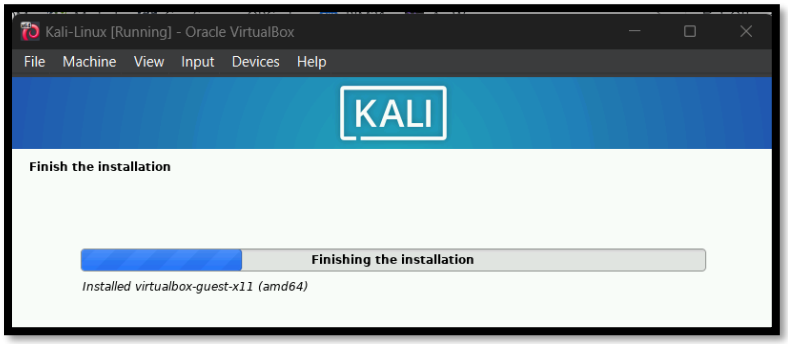


Step 6: Installing boot loader

- Select yes to install the GRUB boot loader
- Then select the virtual drive and then continue to finish the installation

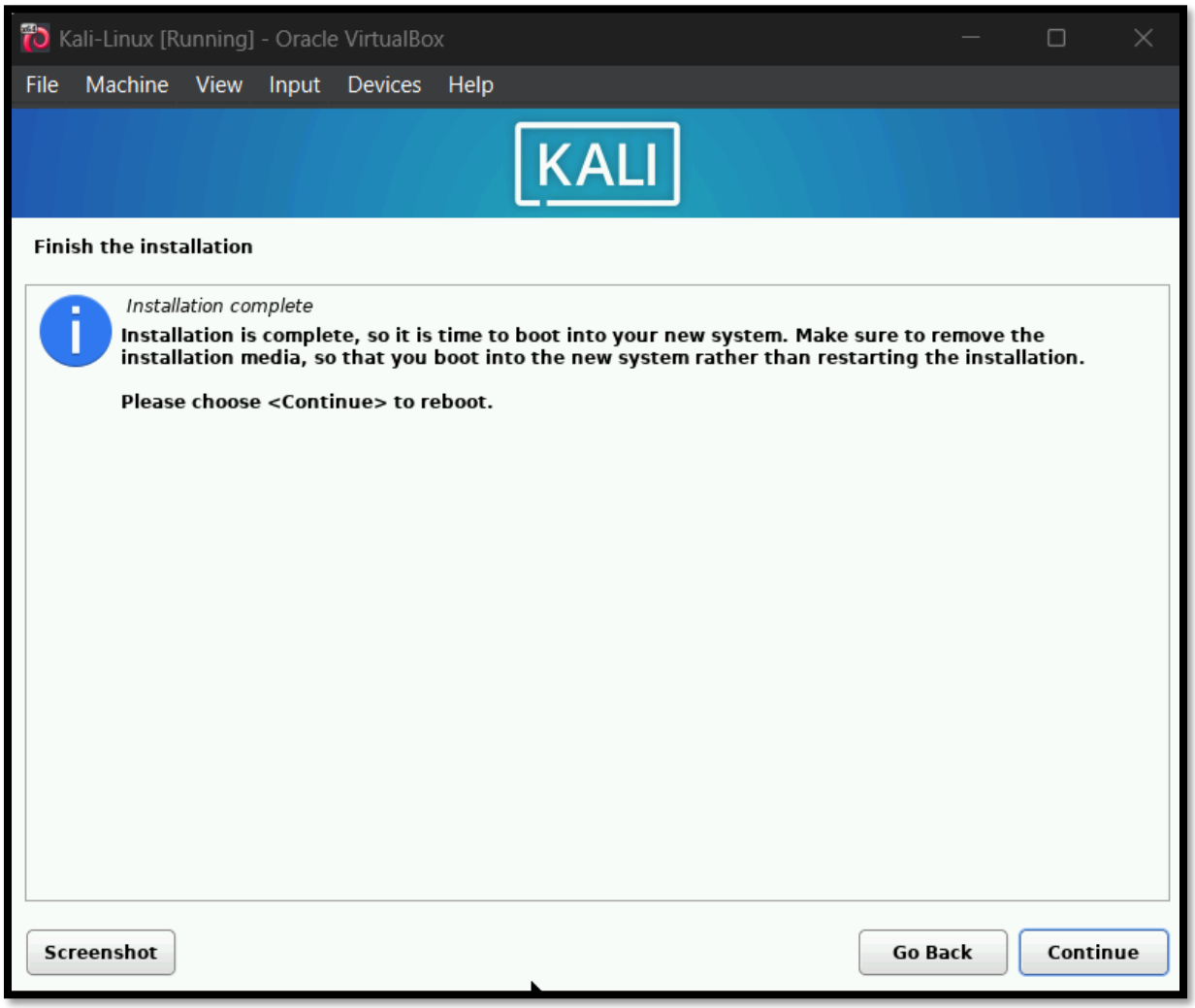






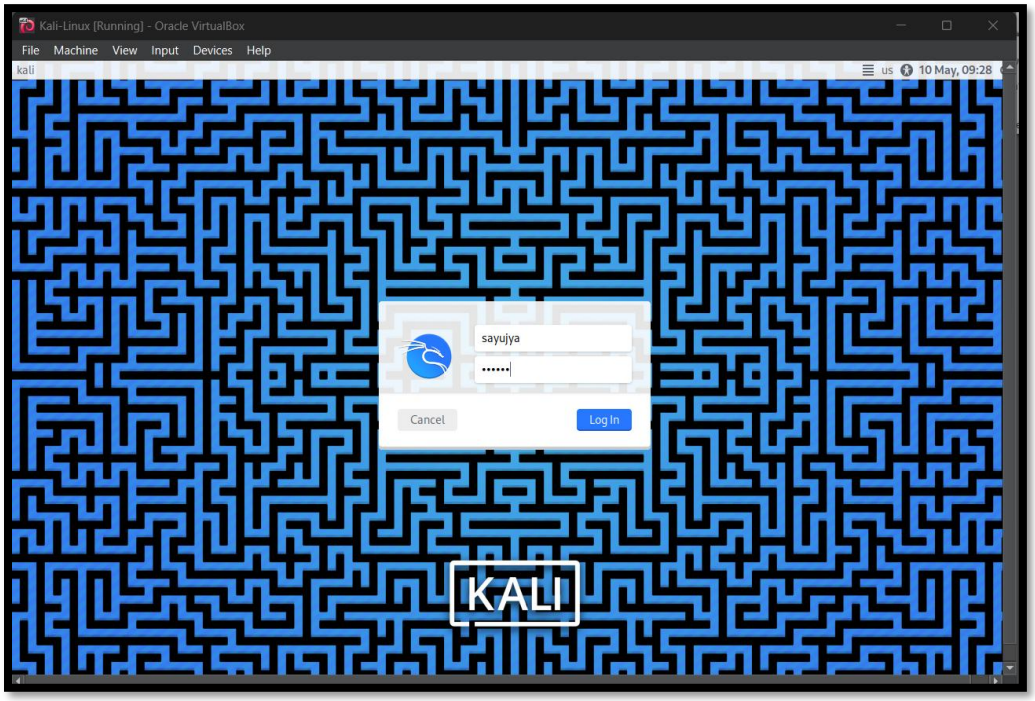
Step 7: Finish

Click on continue to reboot to finish the installation.



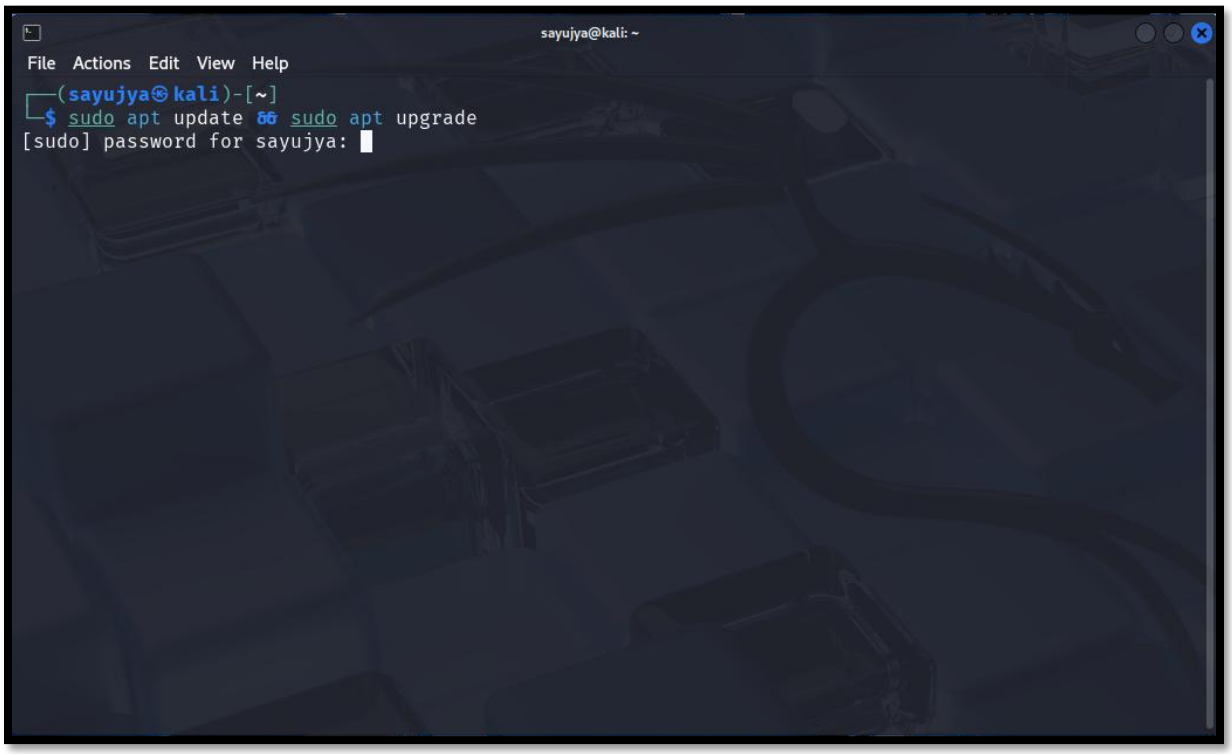
4. Set up Kali Linux

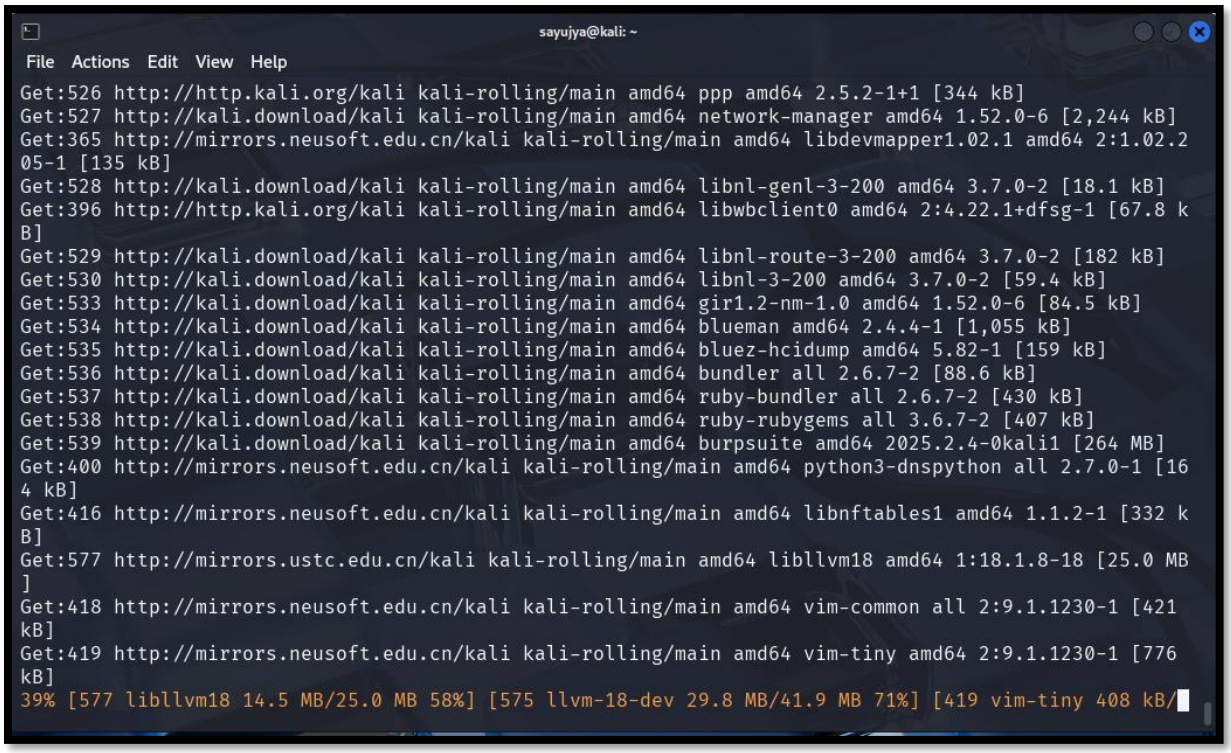
Step 1: Open the Kali Linux and Enter Your Login Details

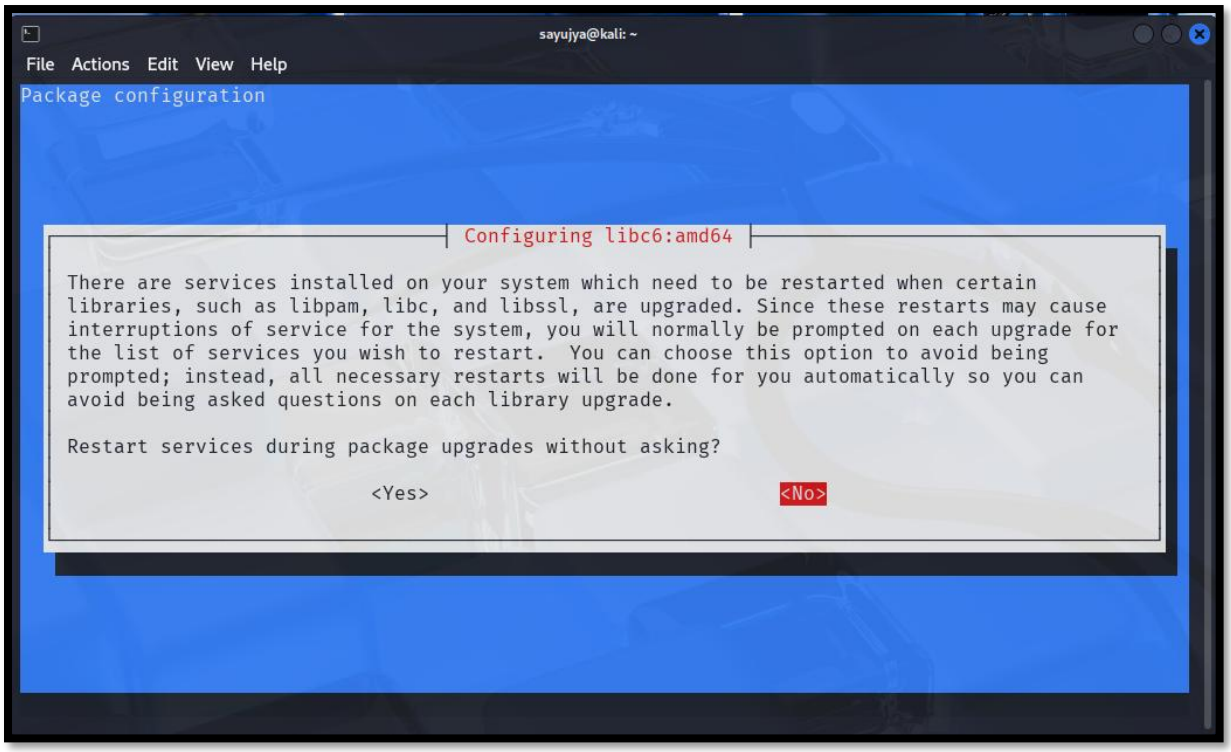


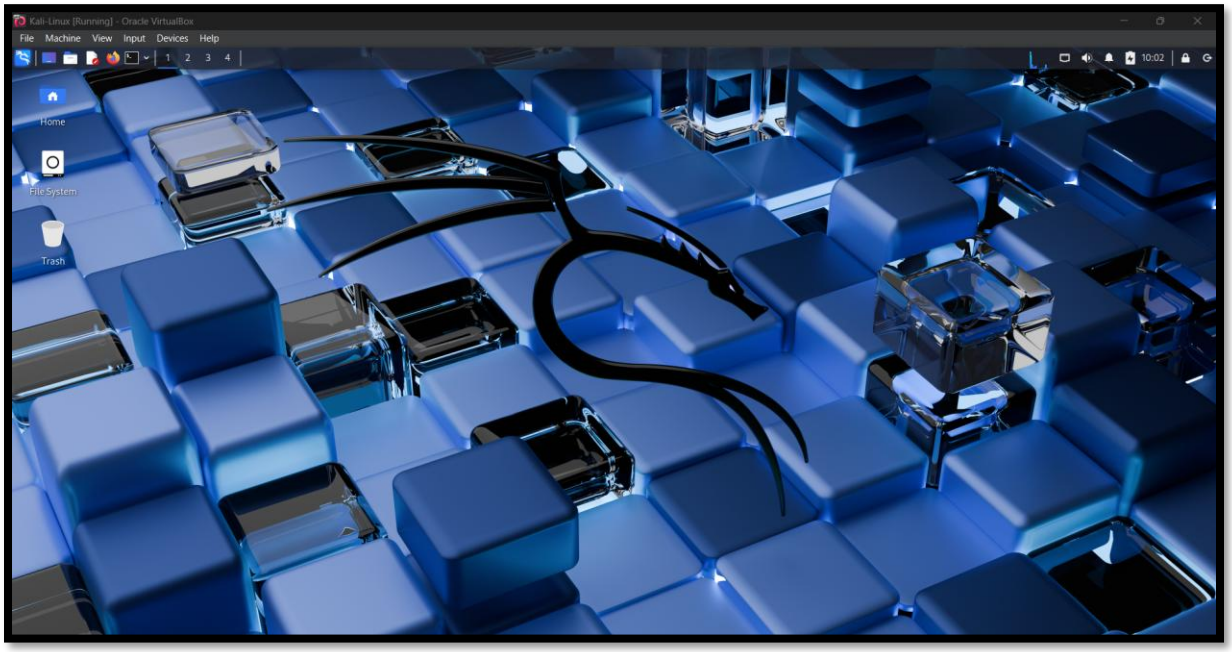
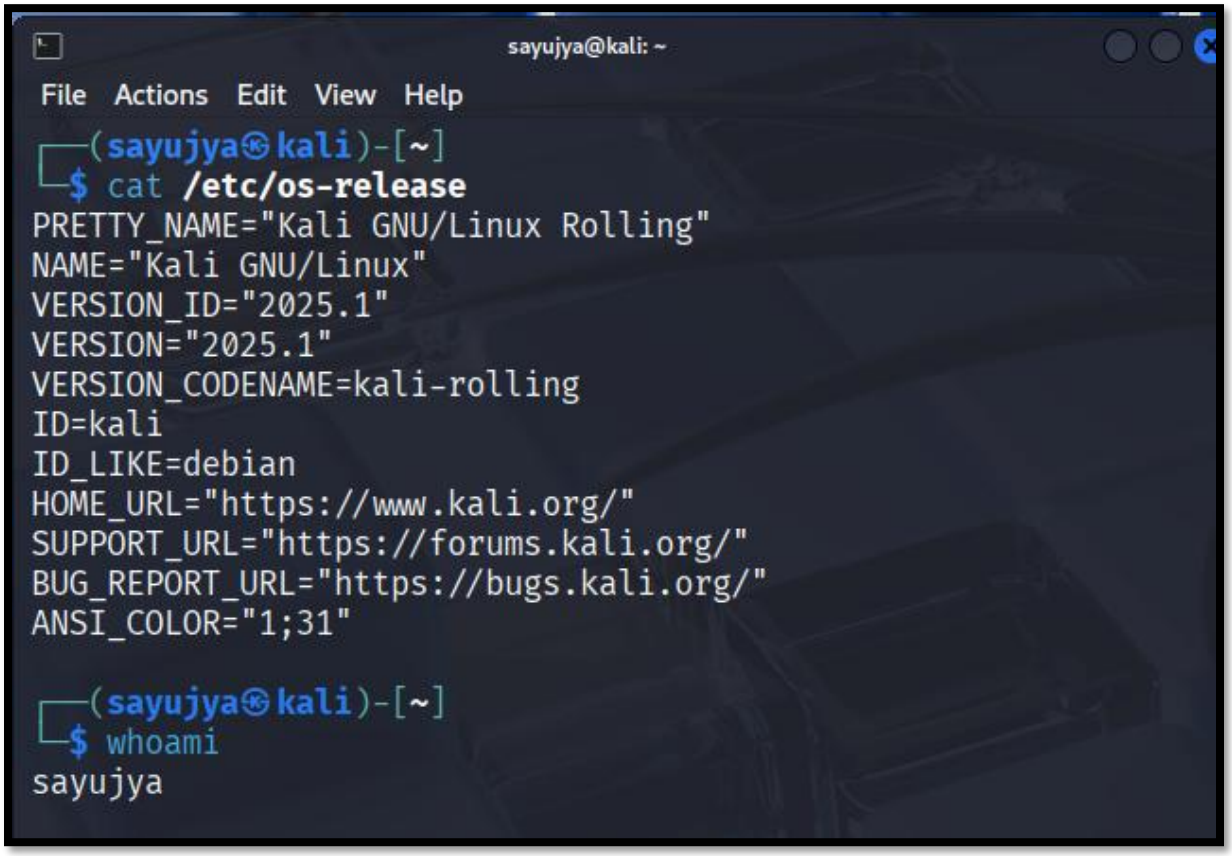
Step 2: Update

- Enter Win + T to open the terminal
- Run the command sudo apt update && sudo apt upgrade to download and install the new versions of local packages
- Enter your password and press enter, then again enter “y” to accept all the dependencies and install them in your kali system.
- Press yes when prompted to restart automatically while upgrading.




sayujya@kali: ~
File Actions Edit View Help
Get:526 http://http.kali.org/kali kali-rolling/main amd64 ppp amd64 2.5.2-1+1 [344 kB]
Get:527 http://kali.download/kali kali-rolling/main amd64 network-manager amd64 1.52.0-6 [2,244 kB]
Get:365 http://mirrors.neusoft.edu.cn/kali kali-rolling/main amd64 libdevmapper1.02.1 amd64 2:1.02.2
05-1 [135 kB]
Get:528 http://kali.download/kali kali-rolling/main amd64 libnl-genl-3-200 amd64 3.7.0-2 [18.1 kB]
Get:396 http://http.kali.org/kali kali-rolling/main amd64 libwbclient0 amd64 2:4.22.1+dfsg-1 [67.8 k
B]
Get:529 http://kali.download/kali kali-rolling/main amd64 libnl-route-3-200 amd64 3.7.0-2 [182 kB]
Get:530 http://kali.download/kali kali-rolling/main amd64 libnl-3-200 amd64 3.7.0-2 [59.4 kB]
Get:533 http://kali.download/kali kali-rolling/main amd64 gir1.2-nm-1.0 amd64 1.52.0-6 [84.5 kB]
Get:534 http://kali.download/kali kali-rolling/main amd64 blueman amd64 2.4.4-1 [1,055 kB]
Get:535 http://kali.download/kali kali-rolling/main amd64 bluez-hcidump amd64 5.82-1 [159 kB]
Get:536 http://kali.download/kali kali-rolling/main amd64 bundler all 2.6.7-2 [88.6 kB]
Get:537 http://kali.download/kali kali-rolling/main amd64 ruby-bundler all 2.6.7-2 [430 kB]
Get:538 http://kali.download/kali kali-rolling/main amd64 ruby-rubygems all 3.6.7-2 [407 kB]
Get:539 http://kali.download/kali kali-rolling/main amd64 burpsuite amd64 2025.2.4-0kali1 [264 MB]
Get:400 http://mirrors.neusoft.edu.cn/kali kali-rolling/main amd64 python3-dnspython all 2.7.0-1 [16
4 kB]
Get:416 http://mirrors.neusoft.edu.cn/kali kali-rolling/main amd64 libnftables1 amd64 1.1.2-1 [332 k
B]
Get:577 http://mirrors.ustc.edu.cn/kali kali-rolling/main amd64 libllvm18 amd64 1:18.1.8-18 [25.0 MB
]
Get:418 http://mirrors.neusoft.edu.cn/kali kali-rolling/main amd64 vim-common all 2:9.1.1230-1 [421
kB]
Get:419 http://mirrors.neusoft.edu.cn/kali kali-rolling/main amd64 vim-tiny amd64 2:9.1.1230-1 [776
kB]
39% [577 libllvm18 14.5 MB/25.0 MB 58%] [575 llvm-18-dev 29.8 MB/41.9 MB 71%] [419 vim-tiny 408 kB/


sayujya@kali: ~
File Actions Edit View Help
Package configuration
Configuring libc6:amd64
There are services installed on your system which need to be restarted when certain
libraries, such as libpam, libc, and libssl, are upgraded. Since these restarts may cause
interruptions of service for the system, you will normally be prompted on each upgrade for
the list of services you wish to restart. You can choose this option to avoid being
prompted; instead, all necessary restarts will be done for you automatically so you can
avoid being asked questions on each library upgrade.
Restart services during package upgrades without asking?
<Yes>
<No>

Step 3: Finish

After the reboot the setup is completed.