

# Assignment-1

## Cloud Computing

### Virtualization: Installing VirtualBox & Setting Up Multiple OSes

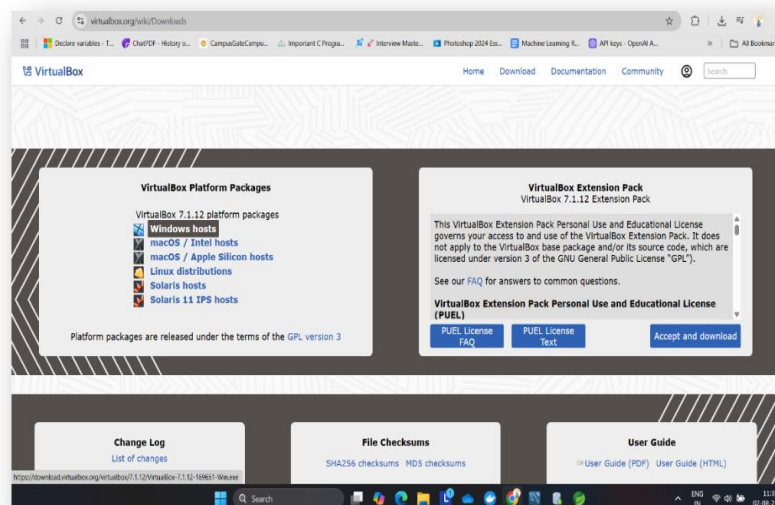
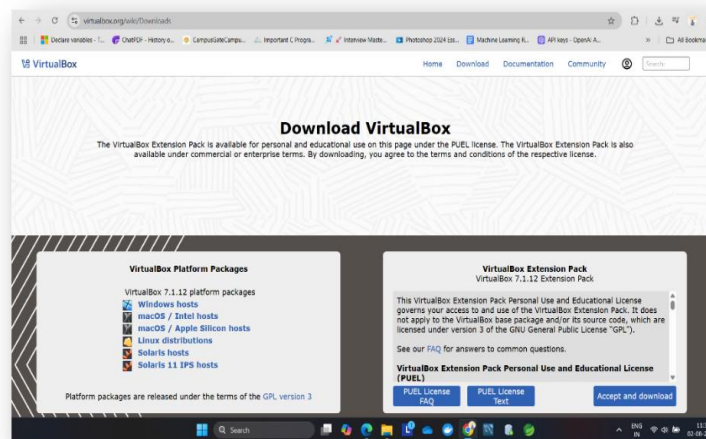
**Objective:** Install Oracle VirtualBox and create virtual machines (VMs) with different Linux distributions.

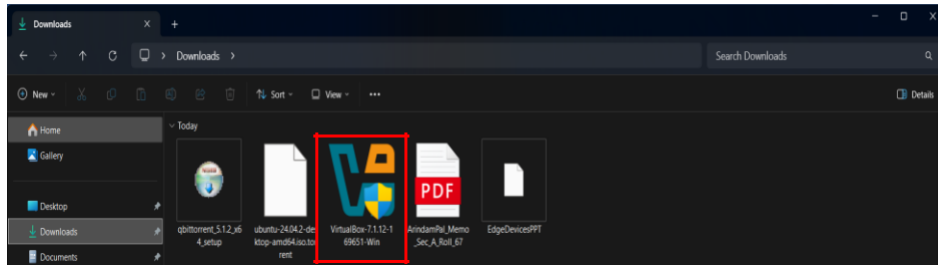
#### Step 1: Download VirtualBox

Go to: <https://www.virtualbox.org>

Click **Downloads**

Choose **Windows hosts** to download the .exe installer





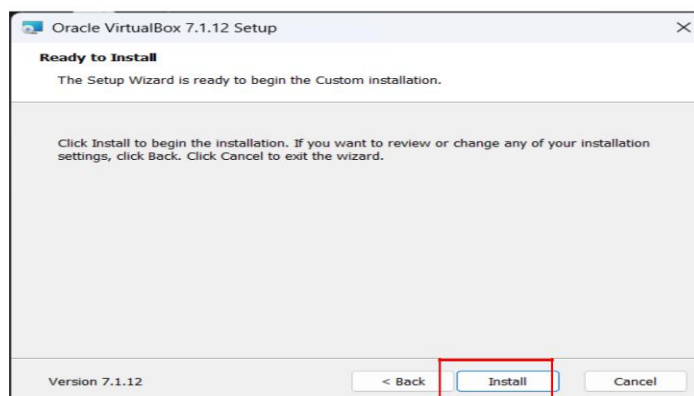
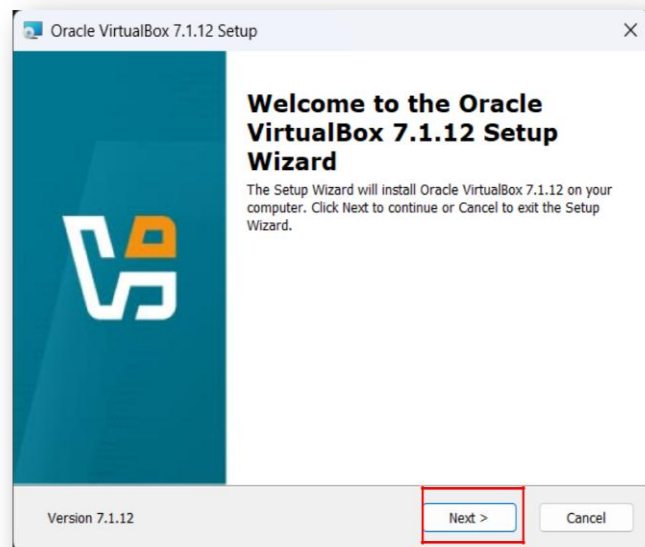
## Step 2: Run the Installer

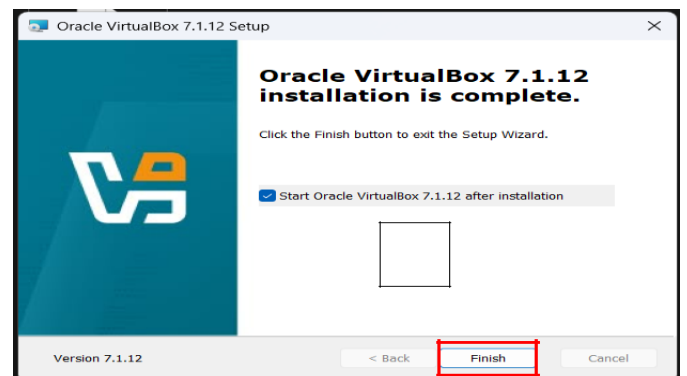
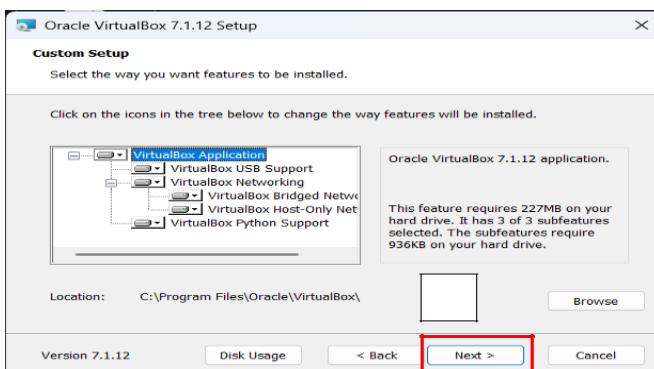
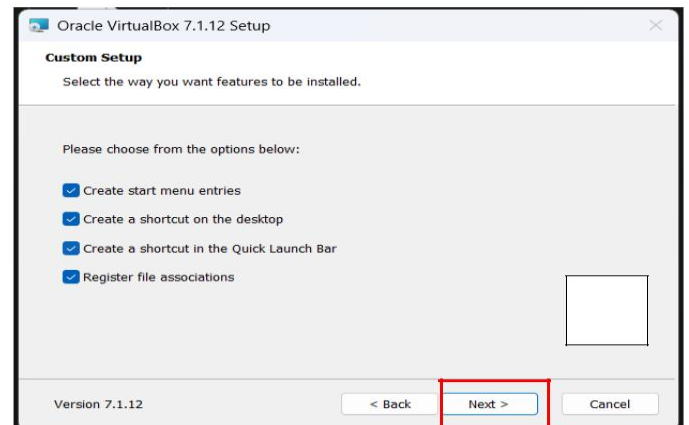
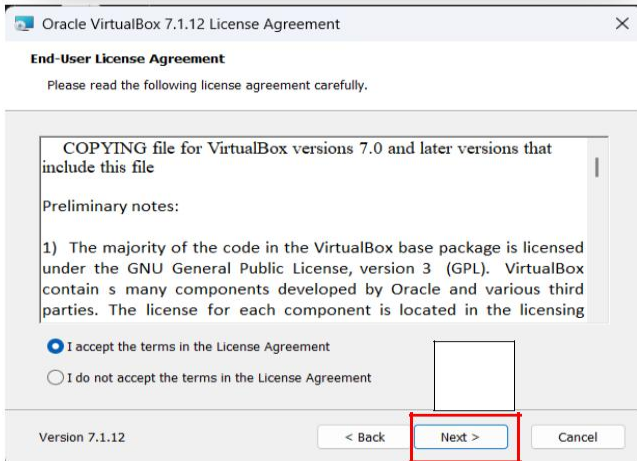
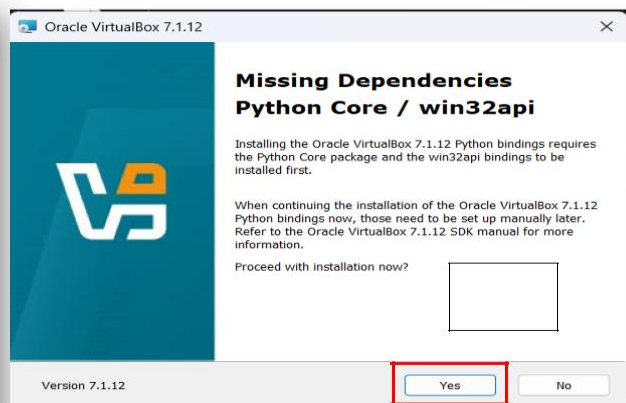
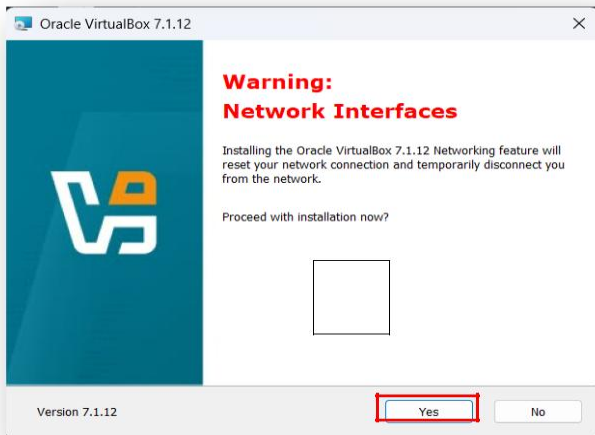
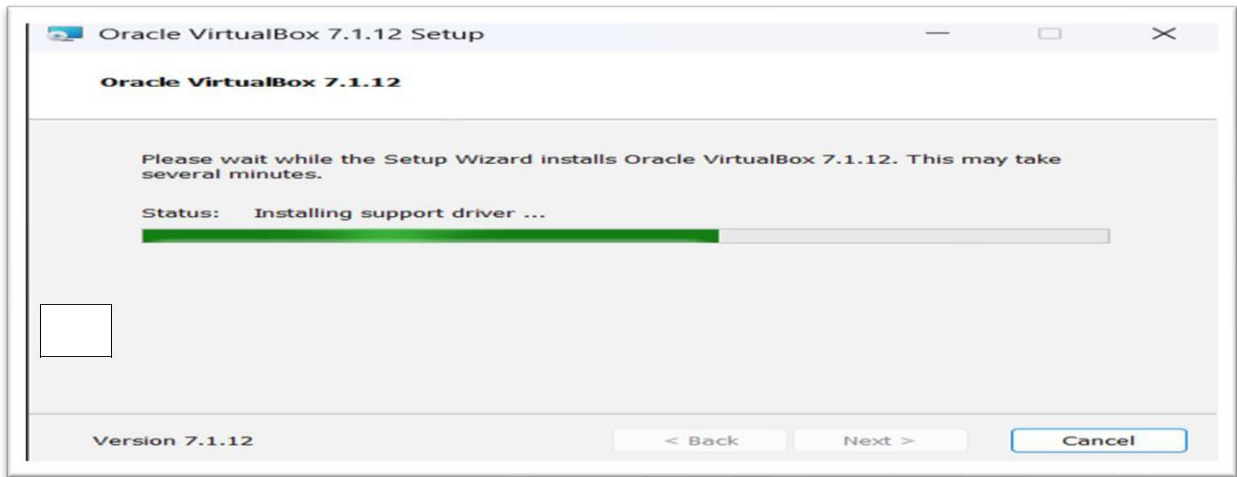
Double-click the downloaded .exe file

Click **Next** through the prompts (default options are fine)

Allow network access if prompted (important for VM networking)

Click **Install**, then **Finish** when done

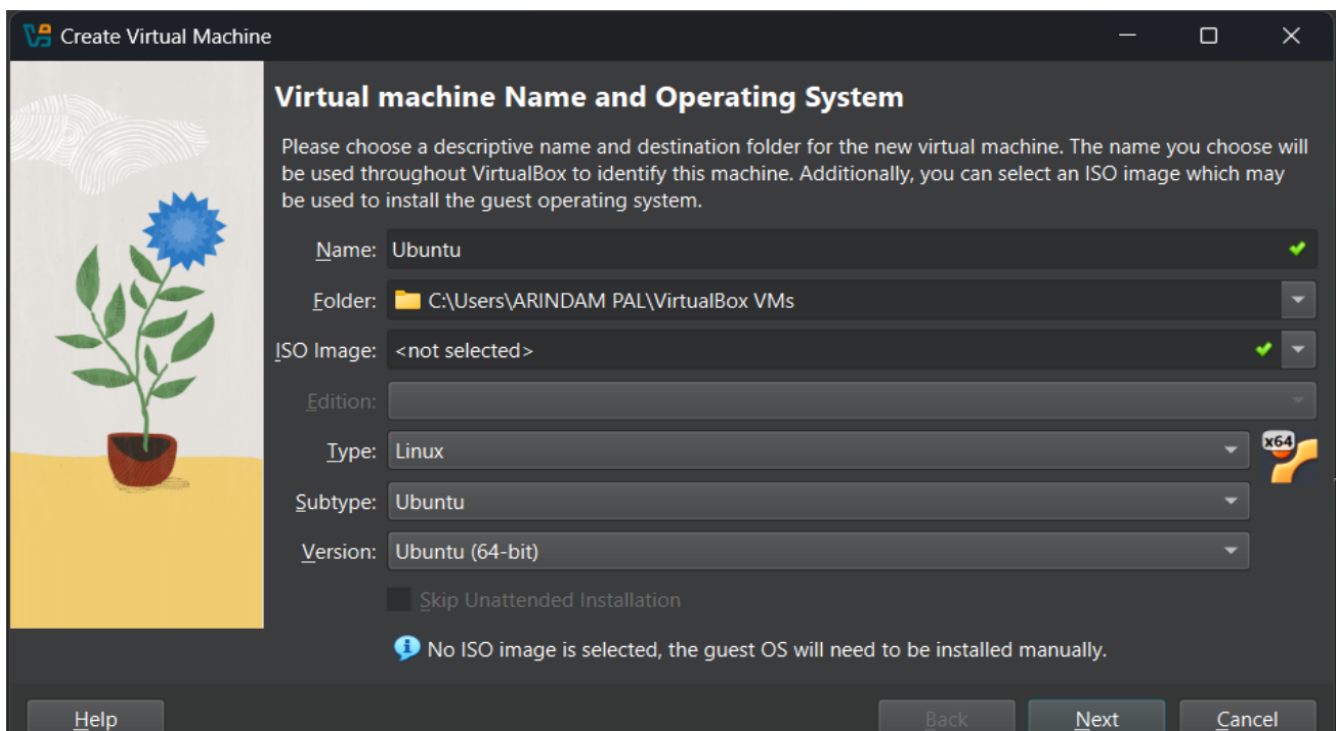
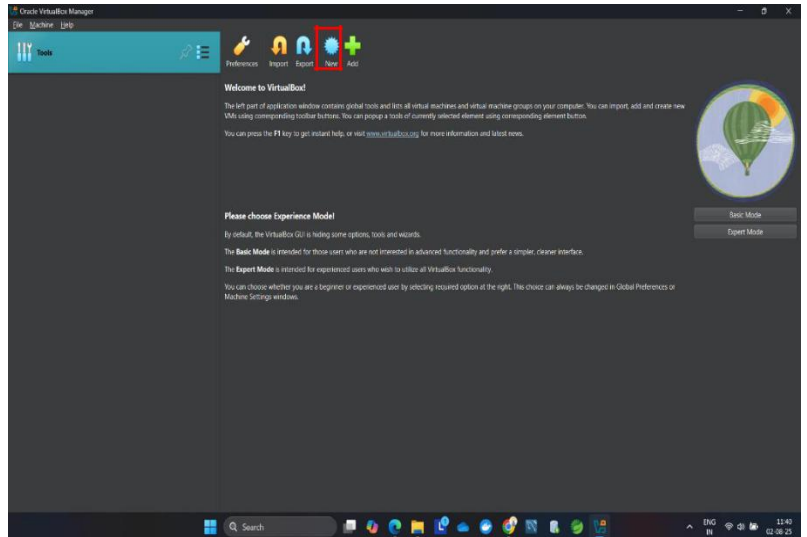




## Create a New Virtual Machine

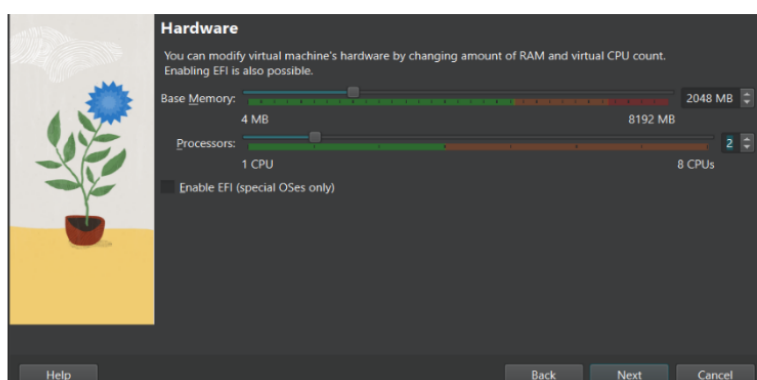
### Step 1: Open VirtualBox and Create New VM

- Click "New"
- Name: **Ubuntu**
- Type: **Linux**
- Version: **Ubuntu (64-bit)**
- Click Next



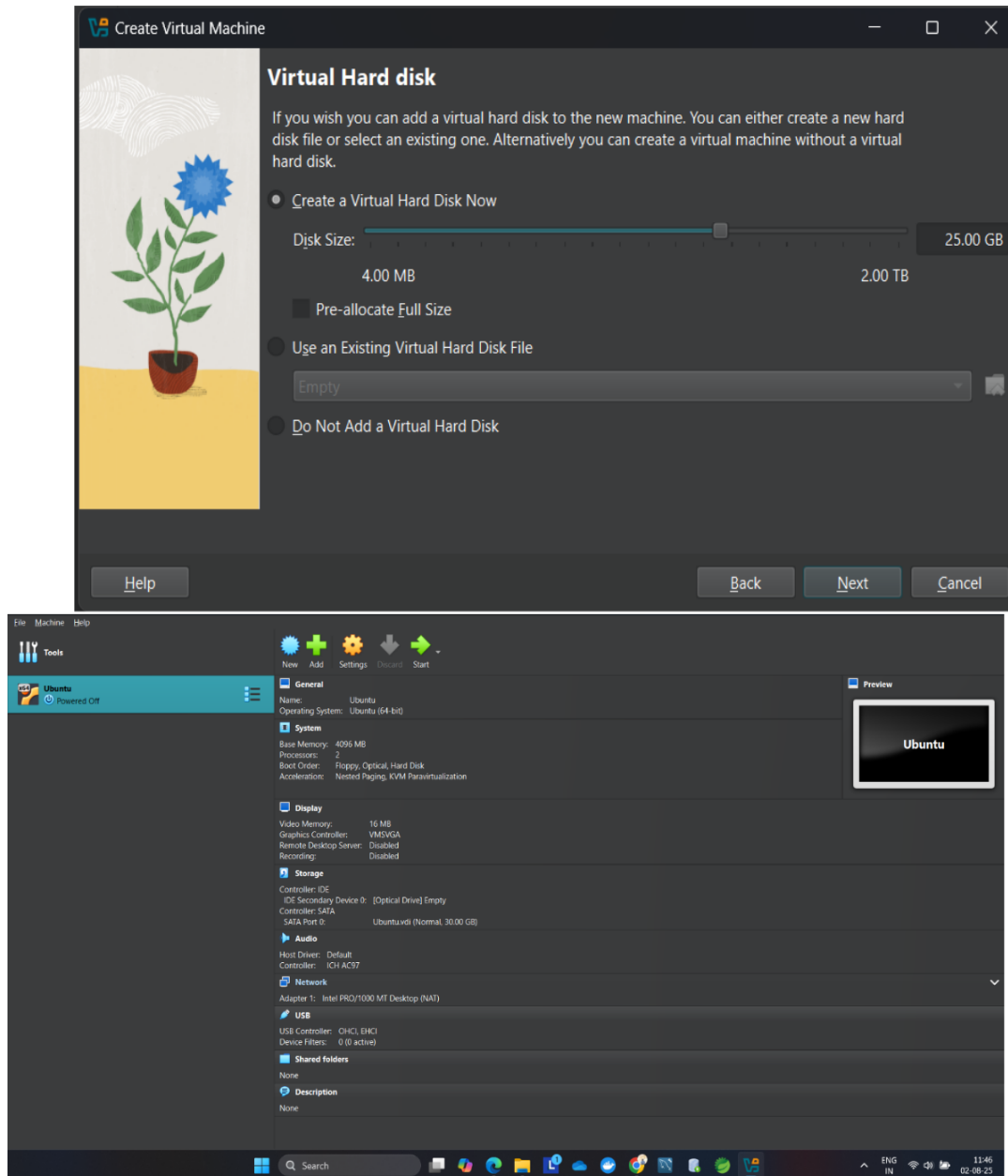
### Step 2: Set Memory Size (RAM)

- Choose at least **2048 MB (2 GB)** for lightweight use
- **4096 MB (4 GB)** is better if your system has 8+ GB RAM



### Step 3: Create Virtual Hard Disk

- Select: **Create a virtual hard disk now**
- Click **Create**
- Choose **VDI** (VirtualBox Disk Image) → Click **Next**
- Choose **Dynamically allocated** → Click **Next**
- Set disk size to **25–40 GB** → Click **Create**

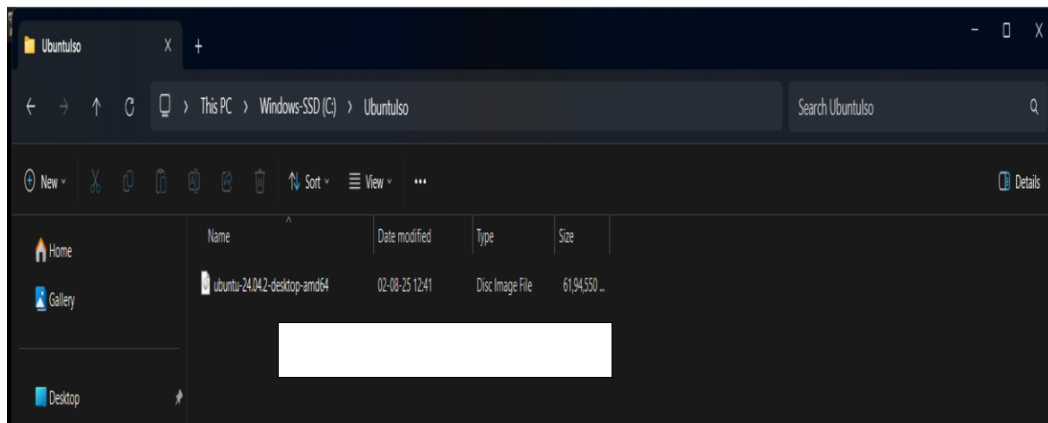
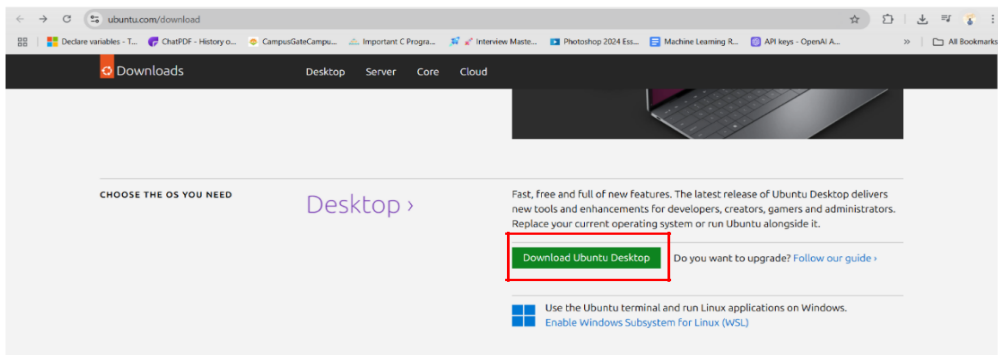
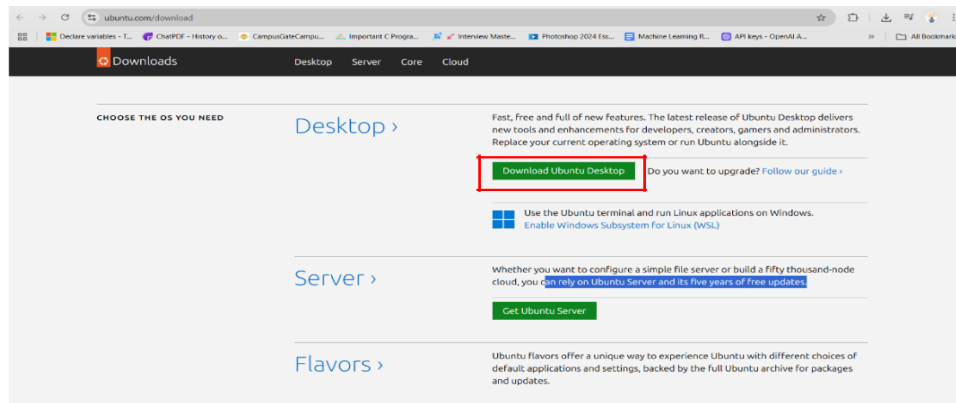


### Download Ubuntu ISO

#### Step 1: Get Ubuntu Desktop ISO

- Go to: <https://ubuntu.com/download/desktop>
- Click **Download Ubuntu Desktop**

Wait for the ~**5.9 GB** ISO file to download



Downloaded File

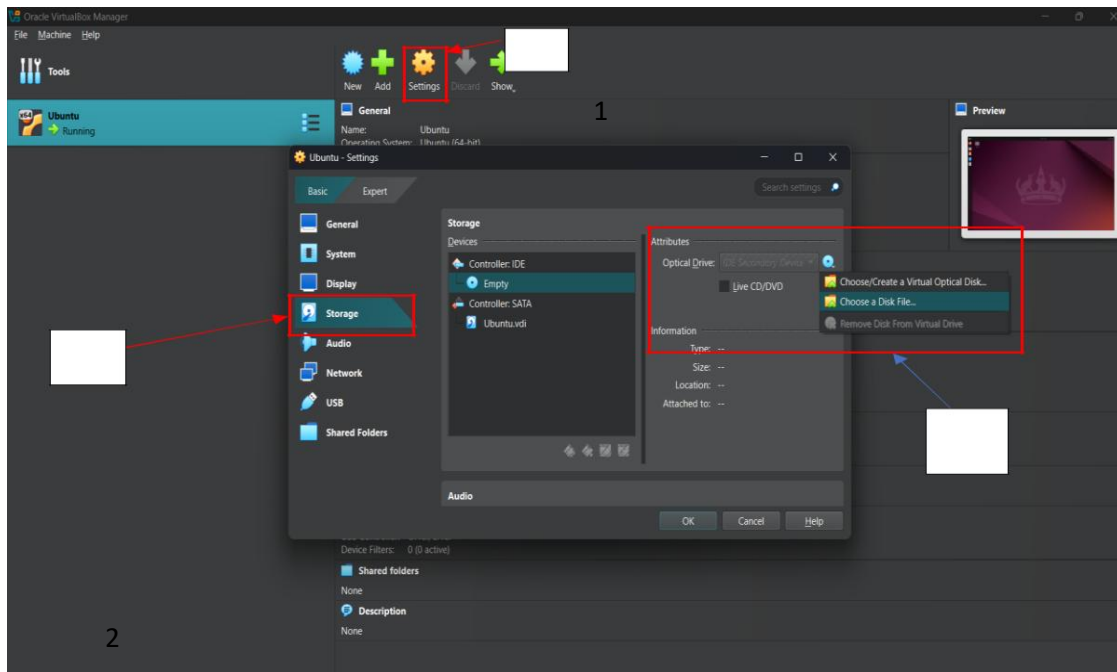
## Attach Ubuntu ISO

### Step 1: Go to VM Settings → Storage

- Under **Controller: IDE**, click the empty CD icon
- On the right, click the CD icon again → Choose "**Choose a disk file...**"
- Browse and select the Ubuntu ISO you downloaded

### Step 2: Save and Start

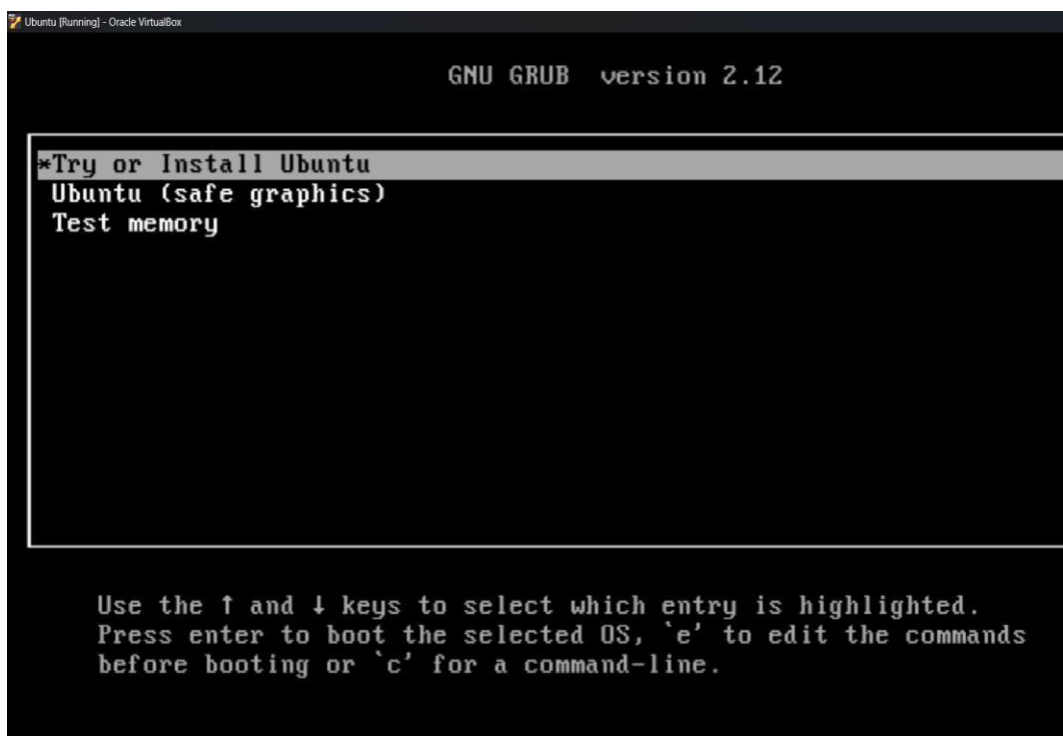
- Click **OK**
- Click **Start** on your VM



## Install Ubuntu OS in the VM

### Step 1: Select "Try or Install Ubuntu"

- When prompted in the black screen (GRUB menu), press **Enter** on: **Try or Install Ubuntu**





## Step 2: Choose "Install Ubuntu"

- Select language → Click **Install Ubuntu**
- Keyboard layout → Click **Continue**

## Step 3: Installation Options

- Choose **Normal Installation**
- Select **Erase disk and install Ubuntu**  
(Don't worry, this erases the *virtual* hard disk only, not your real system)
- Click **Install Now** → Confirm if prompted

## Step 4: Set User Info

- Set your name, computer name, username, and password
- Click **Continue**

## Step 5: Wait for Installation

- Let it complete (may take 5–10 minutes)

## Step 6: Reboot

- When it says **Installation complete**, click **Restart Now**
- **Important:** Before reboot, remove the ISO
- Go to **Devices** → **Optical Drives** → **Remove Disk from Virtual Drive** ○ Then press **Enter** to reboot



**Done**