Session - 1

step-by-step guide to installing Ubuntu on VirtualBox in Windows:

🧰 Requirements

Component	Description
💾 VirtualBox	Open-source virtualization software (Download from https://www.virtualbox.org)
🐧 Ubuntu ISO	Ubuntu disk image (Download from https://ubuntu.com/download/desktop)
💻 Windows OS	Host operating system (e.g., Windows 10 or 11)

🧭 Installation Steps

🔽 Step 1: Download Required Files

1. **Download VirtualBox**
   → https://www.virtualbox.org
2. **Download Ubuntu ISO (LTS preferred)**
   → https://ubuntu.com/download/desktop

💻 Step 2: Install VirtualBox

1. Open the **VirtualBox setup** file.
2. Follow the installer steps (Next > Next > Install).
3. Launch **VirtualBox** after installation.

🖥️ Step 3: Create a New Virtual Machine

1. Click **"New"** in VirtualBox.
2. Name it: Ubuntu
3. Type: **Linux**
4. Version: **Ubuntu (64-bit)**
5. Click **Next**

🧠 Step 4: Allocate Memory (RAM)

- Set **RAM size** to at least **2048 MB** (recommended: 4096 MB or more).
- Click **Next**

💽 Step 5: Create a Virtual Hard Disk

- Select **"Create a virtual hard disk now"**
- File type: **VDI (VirtualBox Disk Image)**
- Storage: **Dynamically allocated**
- Size: **25 GB or more**
- Click **Create**

📁 Step 6: Mount Ubuntu ISO

1. Select your VM → Click **Settings**
2. Go to **Storage**
3. Under **Controller: IDE**, click **Empty**
4. On the right, click the **disc icon** → Choose a disk file
5. Browse and select the **Ubuntu ISO** you downloaded
6. Click **OK**

▶️ Step 7: Start the VM

1. Select the Ubuntu VM → Click **Start**
2. The VM will boot from the ISO.

🐧 Step 8: Install Ubuntu

1. On Ubuntu screen, click **Install Ubuntu**
2. Choose keyboard layout
3. Installation type: Choose **Erase disk** (affects only the virtual disk)
4. Select your **timezone**
5. Create a **username and password**
6. Click **Install Now**
7. Wait for the installation to finish (10–20 minutes)

🔁 Step 9: Remove ISO and Reboot

After installation:

- Shutdown the VM.
- Go to **Settings → Storage** → Remove ISO from the virtual drive.
- Restart the VM.

✅ Step 10: Ubuntu is Ready!

You now have Ubuntu installed and running inside VirtualBox on Windows.

💡 Optional Tips

Feature	Benefit
Install Guest Additions	Enables full-screen mode, clipboard sharing
Shared Folders	Share files between Windows and Ubuntu
Network Settings	Enable Internet in the VM (NAT is default)