

## CC – Practical 3

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### Step 1: Install Oracle VirtualBox

- Download and install **Oracle VirtualBox** from [VirtualBox official site](#).
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### Step 2: Download an OS ISO (Linux/Windows)

- For **Linux**, you can download Ubuntu, CentOS, or Debian ISO.
  - For **Windows**, download a Windows ISO from Microsoft's official website.
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### Step 3: Create a New Virtual Machine (VM)

1. Open **VirtualBox** → Click **New**.
  2. Set a **Name**, **Type** (Linux/Windows), and **Version**.
  3. Allocate **RAM** (Minimum: 2GB for Linux, 4GB for Windows).
  4. Choose **Create a Virtual Hard Disk Now** → Select **VDI** (VirtualBox Disk Image).
  5. Choose **Dynamically Allocated** or **Fixed Size** storage → Set at least **20GB**.
  6. Click **Create**.
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### Step 4: Enable Para-Virtualization

1. Select the created VM → Click **Settings**.
  2. Go to **System** → **Acceleration** tab.
  3. In the **Paravirtualization Interface** dropdown, choose:
    - **KVM** (for Linux)
    - **Hyper-V** (for Windows)
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### Step 5: Attach OS ISO and Install OS

1. Go to **Settings** → **Storage**.
  2. Click **Empty** under **Controller: IDE** → Select **Choose a disk file**.
  3. Select the downloaded **ISO** file.
  4. Click **OK** and **Start** the VM.
  5. Follow the OS installation steps.
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### Step 6: Verify Para-Virtualization

- Run:
  - For **Linux**: `lscpu | grep Hypervisor`
  - For **Windows**: Check **Task Manager** → **Performance** → **CPU** (See "Virtualization: Enabled")