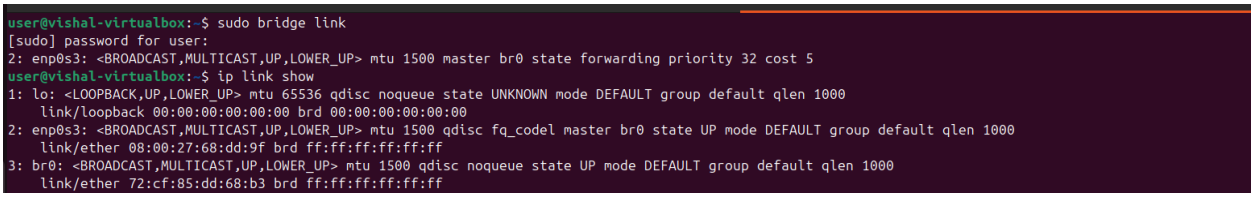
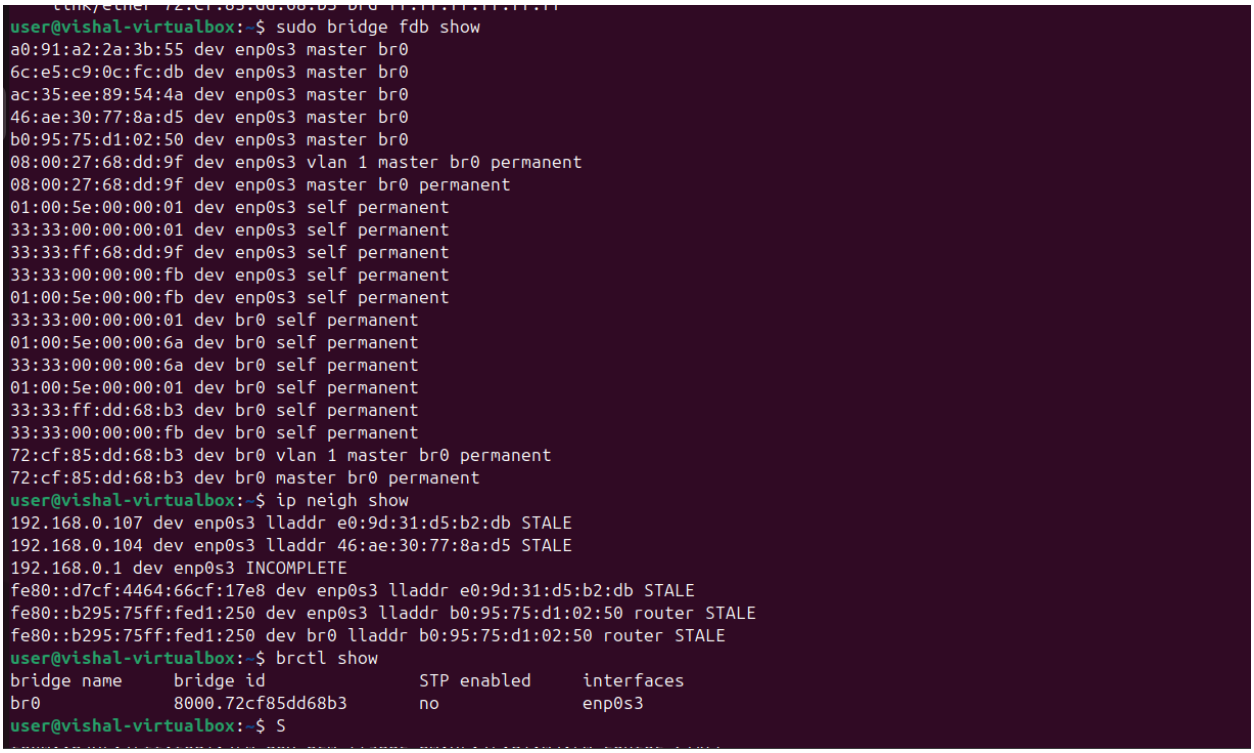
Q7) Use Linux to view the MAC address table of a switch (if using a Linux-based network switch). Use the bridge or ip link commands to inspect the MAC table and demonstrate a basic switch's operation.

Checking Bridged Interfaces and Viewing Available Network Interfaces



- **`enp0s3`** is the network interface.
- **`master br0`** → This means `enp0s3` is part of a **bridge (br0)**, acting like a switch.
- **`lo`** → Loopback interface (not involved in switching).
- **`enp0s3`** → Connected to `br0` (the switch bridge).
- **`br0`** → The virtual bridge that behaves like a network switch.

Viewing the MAC Address Table, Checking Connected Devices and Viewing Bridge Configuration



- Each entry contains a **MAC address**, showing which devices are connected.

- **`dev enp0s3 master br0`** → These MAC addresses are learned through `enp0s3` and stored in the `br0` switch.
- **Permanent Entries** (like `08:00:27:68:dd:9f`) are fixed, while dynamic ones may be updated when devices move.