

### **Question-5:**

#### **Understand what happens when duplicate IPs are configured in a network**

1. When duplicate IP addresses are configured on a network, devices with the same IP will experience
  - Connectivity issues
  - Including packet loss,
  - Inconsistent network access, and potential complete network outages

The network struggles to determine which device to send data to, leading to a situation called an "IP conflict" or "address conflict."

2. Devices on the network maintain an ARP table that maps IP addresses to physical addresses.

With duplicate IPs, the ARP table will constantly update, causing further network instability.