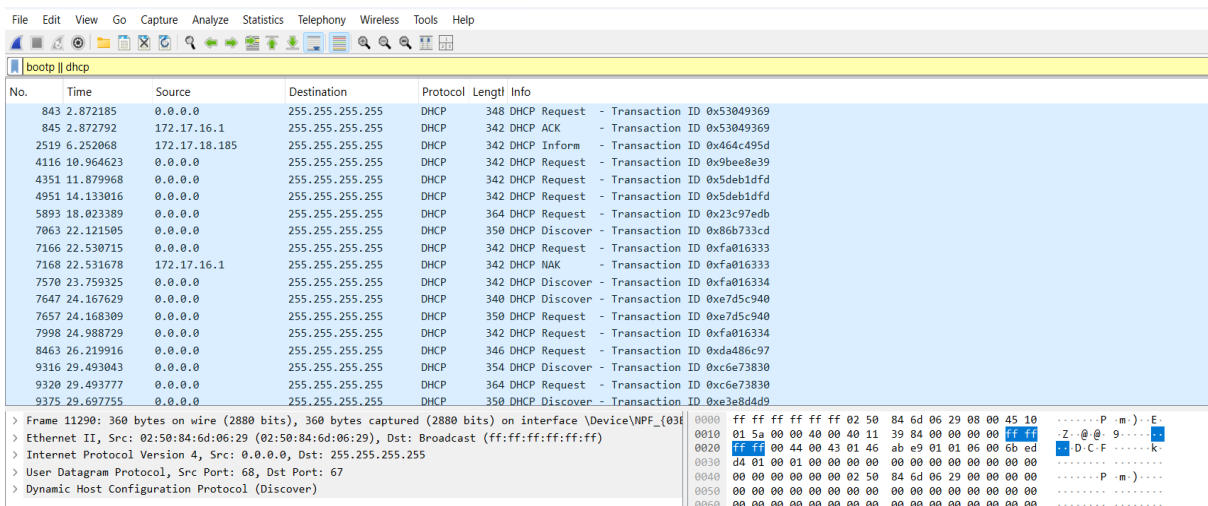## 4) Use Wireshark to capture DHCP Discover, Offer, Request, and Acknowledge messages and explain the process.

When a device connects to a network, it follows DORA to get an IP from a DHCP server.

bootp is used for DHCP messages.

DHCP DORA Process

Client → DHCP Discover:

Broadcasts - Any DHCP servers out there?

Sent to 255.255.255.255

Server → DHCP Offer:

DHCP server replies: I have an IP for you

Offers an IP

Client → DHCP Request:

Client asks: I accept this IP, please assign it

Server → DHCP Acknowledge:

Server confirms: Done! You can use this IP.