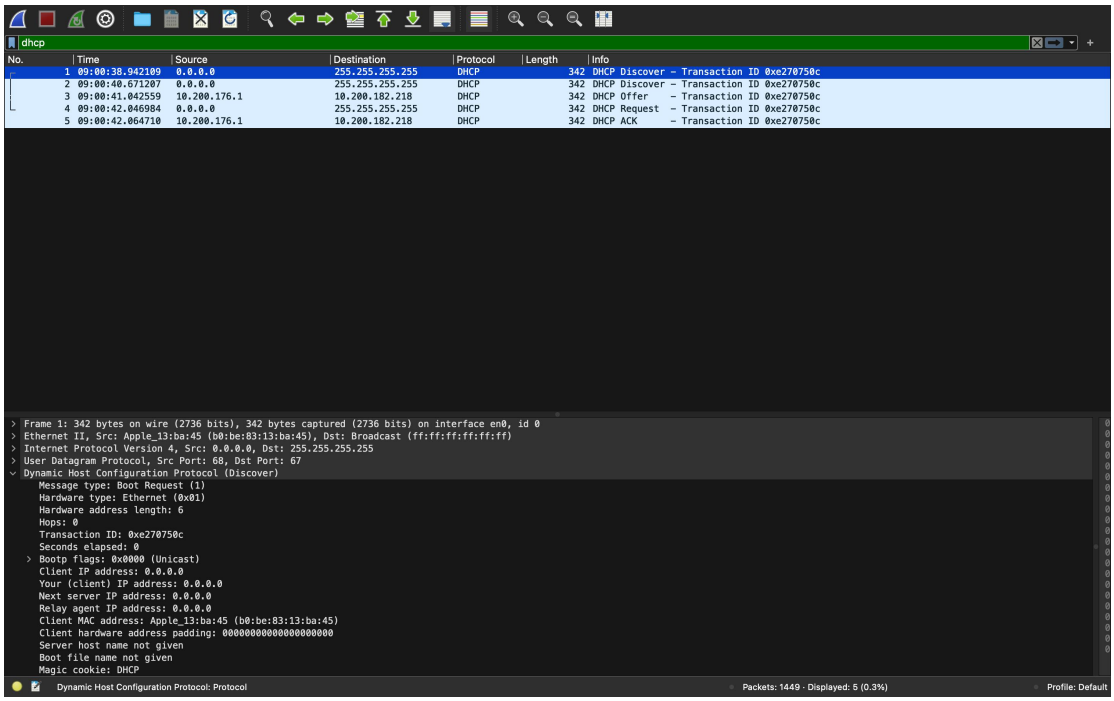
LAB9
210010033



1. It is sent using the UDP protocol.

2. Source IP is 0.0.0.0 .
   It's a designated address set by the administrator for a specific purpose until it's allocated the correct IP address by the DHCP server.

3. Destination IP is 255.255.255.255 .
   When this address is designated as the destination, it sends the packet to every device on the network.

4. Transaction ID is 0xe270750c

5. The other information that the client is requesting include Subnet Mask, Classless Static, Route Router, Domain

Name Server, DHCP Captive-Portal, Domain Search.

6.

Both the Discover and Offer data-grams have the same transaction ID. Hence, we can say that this offer message is being sent in response to the previous mentioned DHCP Discover message.

7. Source IP is 10.200.176.1
   It is the IP of DHCP server.

8. Destination IP is 10.200.182.218
   It is the IP which DHCP server gave client.

9. Various information provided by the DHCP client are
   DHCP Server Identifier: 10.200.176.1
   IP Address Lease Time: 1 hour (3600)
   Renewal Time Value: 30 minutes (1800)
   Rebinding Time Value: 52 minutes, 30 seconds (3150)
   Subnet Mask: 255.255.248.0
   Domain Name Server: 10.250.200.3
   First hop Router: 10.200.176.2

10. Source Port: 68
    Destination Port: 67

11. Source IP is 0.0.0.0
    It's a designated address set by the administrator for a specific purpose until it's allocated the correct IP address by the DHCP server.

12. Destination IP is 255.255.255.255
    When this address is designated as the destination, it sends the packet to every device on the network.

13. Transaction ID is 0xe270750c
    Yes, it matches with that of the offer and discover messages.

14. There is no difference in between the entries in the 'parameter request list' option in this Request message and the same list option in the earlier Discover message

15. Source IP is 10.200.176.1
    Same as the Source IP in the DHCP offer datagram.

16. Destination IP is 10.200.182.218
    Same as the Destination IP in the DHCP offer datagram.

17. Your (client) IP address is the name of the field in the DHCP ACK message (as indicated in the Wireshark window) that contains the assigned client IP address.

18. DHCP server assigned this IP address for 1 hour.

19. The IP address of the first hop router as provided by the DHCP message is 10.200.176.2