**Wireshark Lab: UDP v8.1**

1. Select the first UDP segment in your trace. What is the packet number of this segment in the trace file?

The first UDP packet number is 120



What type of application-layer payload or protocol message is being carried in this UDP segment?

A screenshot of a computer

AI-generated content may be incorrect.

The payload is Domain Name System, with protocol message query.

Look at the details of this packet in Wireshark. How many fields there are in the UDP header? (You shouldn’t look in the textbook!

A screen shot of a computer

AI-generated content may be incorrect.

There are 4 fields in the UDP header.

Answer these questions directly from what you observe in the packet trace.) What are the names of these fields?

2. By consulting the displayed information in Wireshark’s packet content field for this packet (or by consulting the textbook), what is the length (in bytes) of each of the UDP header fields?



Every field is 2 bytes in size total is 8 bytes

3. The value in the Length field is the length of what? (You can consult the text for this answer). Verify your claim with your captured UDP packet.

The length is 39. The length represents the total bytes in the UDP data program.



4. What is the maximum number of bytes that can be included in a UDP payload? (Hint: the answer to this question can be determined by your answer to 2. above)

The maximum bytes is 8.

5. What is the largest possible source port number? (Hint: see the hint in 4.)



The maximum source port is 52274

6. What is the protocol number for UDP? Give your answer in decimal notation. To answer this question, you’ll need to look into the Protocol field of the IP datagram containing this UDP segment (see Figure 4.13 in the text, and the discussion of IP header fields).

7. Examine the pair of UDP packets in which your host sends the first UDP packet and the second UDP packet is a reply to this first UDP packet. (Hint: for a second packet to be sent in response to a first packet, the sender of the first packet should be the destination of the second packet). What is the packet number 5 of the first of these two UDP segments in the trace file? What is the packet number 6 of the second of these two UDP segments in the trace file? Describe the relationship between the port numbers in the two packets.