## Wireshark Lab 2: UDP

Group Code: x6w1

## Mark:

|   | Question   | Answer   |
|---|--|--|
| 1 | Select one packet. From this packet, determine how many fields there are in the UDP header. Name these fields.   | 4. The four headers are: source port, destination port, length, and checksum.  |
| 2 | From the packet content field, determine the length (in bytes) of each of the UDP header fields.   | The length of each of the UDP header fields is 2 bytes long.w  |
| 3 | The value in the Length field is the length of what? Verify your claim with your captured UDP packet.  | Length is 39 bytes. 8 bytes for the header and 31 bytes for data, which is the domain name system (query).                                   |
| 4 | What is the maximum number of bytes that can be included in a UDP payload.   | The maximum number of bytes that can be included in a UDP payload is $2^16-1$ bytes minus the header bytes. So that is $65535 - 8 = 65527$ . |
| 5 | What is the largest possible source port number?   | The largest source port number is 65535.   |
| 6 | What is the protocol number for UDP? Give your answer in both hexadecimal and decimal notation. (To answer this question, you'll need to look into the IP header.) | 0x11 in hex and 17 in decimal.   |

| 7 | Search "UDP" in Google and determine the fields over which the UDP checksum is calculated.   | Ip source and destination address, prototal and UDP length, UDP header and data.   |
|---|--|--|
| 8 | Examine a pair of UDP packets in which the first packet is sent by your host and the second packet is a reply to the first packet. Describe the relationship between the port numbers in the two packets | The relationship between port numbers is that the source port on the send message is the destination port of the receive message. The destination port for the send message is also the source port for the receive message. |