Report for Lab 3-1: UDP

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1	a. Source port number:53	b. Destination port number:53
	c. Total length of user diagram:68 bytes (payload only)	d. Length of data:68 bytes (same as total length as it's a UDP packet)
	e. Is the packet from client or server? Server	f. Application layer protocolDNS
	g. Is checksum calculated? No.Unverified	

2	Are answer in number 1 are verified by the information in the detail pane lane? Yes, the answers in question 1 seem to be verified by the information in the detail pane of Frame 71.
3	Source and destination IP addresses in the query message: 192.168.1.138 (client) and 192.168.1.1 (router) (from Frame 67) Source and destination IP addresses in the response) message: Yes, the answers in question 1 seem to be verified by the information in the detail pane of Frame 71. Relation between IP addresses: They are on the same private network (192.168.1.x).
4	Source and destination port number in the query message: 47681 (client) and 53 (DNS) (from Frame 67) Source and destination port number in the response message: 53 (DNS) and 47681 (client) (from Frame 71) Relation between port numbers:They are different ports: Each communication uses a dynamically assigned port (47681 in this case) on the client side and the well-known DNS port (53) on the server side. Which port number is well-known? 53
5	The length of the first UDP packet: 1399 Packet 19 How many bytes of payload are carried by the first UDP packet? 455
6	Number of bytes in the DNS message: 688 bits or 86 bytes Does the count agree with the answer to question 5? NO
7	Is the checksum calculated for the first UDP packet? **Frame 67 (query):** UDP is connectionless and doesn't have a checksum at the protocol level. Wireshark shows it as unverified.

	• **Frame 71 (response):** UDP is still connectionless, and the checksum information is unverified Value of the checksum: unverified