Report for Lab 3-1: UDP

Name: Aarna Bafna	Student ID: 11	Date: 08-03-24

1	a. Source port number:50235	b. Destination port number:3478
	c. Total length of user diagram:239	d. Length of data:219
	e. Is the packet from client or server? :Client	f. Application layer protocol: UDP
	g. Is checksum calculated? (Unverified)	
2	Are answer in number 1 are verified by the information in the detail pane lane?: Yes	
3	Source and destination IP addresses in the query message: Source-192.168.154.230, Destination-142.250.82.223 Source and destination IP addresses in the response) message: Source-192.168.154.230, Destination-142.250.82.223 Relation between IP addresses: The source and destination addresses interchange when the data is incoming and outgoing.	
4	Source and destination port number in the query message: Source port-50235, Destination port-3478 Source and destination port number in the response message: Destination port-3478, Source port-50235 Relation between port numbers: The source and destination port numbers interchange when the data is incoming and outgoing. Which port number is well-known? : Domain Name Service (53)	
5	The length of the first UDP packet: 219 How many bytes of payload are carried by the first UDP packet? 211 bytes	
6	Number of bytes in the DNS message: Does the count agree with the answer to question 5?	
7	Is the checksum calculated for the first UDP packet?: No Value of the checksum: Unverified	

Report for LAB 3-2: TCP

Name: Aarna Bafna	Student ID: 11	Date: 08-03-24

Part I	
1	Socket addresses: Source port-443 Destination port-63013
2	Set flags: Don't fragment (In IPv4 Section) Acknowledgment (In TCP Section)
3	Sequence number and acknowledgement number: Sequence number (raw) –1130722459 Acknowledgment number (raw) – 3271565803
4	Window size:11

Part II	
1	Set flag in HTTP GET message:
2	Number of bytes transmitted by the HTTP GET message:
3	Acknowledgement frequency: Corresponding rule:
4	Number of bytes transmitted by each packet: Relation to sequence and acknowledgement Number:
5	Original window sizes: Are these numbers expected? Yes How window sizes change? The window size of all these TCP connections will drop to one and once the interface congestion is gone, all their window sizes will increase again
6	How the window size is used in flow control? When the receiving application reads data as fast as the sending system can send it, the receive window stays at or near the size of the receive buffer. The result is that data flows smoothly across

	the network. If the receiving application can read the data fast enough, a larger receive window can improve performance
7	Purpose of the HTTP OK message: It indicates that the request has succeeded.

Part III	
1	Number of TCP segments exchanged for connection termination:
1	Which end point started the connection termination phase?
2	Flags sets in each of the segments used for connection termination:

Part IV		
1	a. Source port number:443	b. Destination port number:63013
	c. Sequence number: 1130722459	d. Acknowledgement number: 3271565803
	e. Heather length: 20 bytes	f. Set flags: Don't Flag, Acknowledgement
	g. Window size:11	h. Urgent pointer: 0
2	Are answer in the question number 1 verified by the information in the detail pane lane? : Yes	
3	Does any of the TCP packet headers carry options? : Yes Explain: Kind is time stamp option.	
4	Size of a TCP packet with no option: Size of a TCP packet with options:	
5	Is window size in any of the TCP packet zero? : No Explain:	