1. Run nslookup to obtain the IP address of a Web server in Asia. What is the IP address of that server?

I did <https://www.lankadeepa.lk/> and the ip is 134.117.1.11

1. Run nslookup to determine the authoritative DNS servers for a university in Europe.

<https://www.ox.ac.uk/> - 134.117.1.11

1. Run nslookup so that one of the DNS servers obtained in Question 2 is queried for the mail servers for Yahoo! mail. What is its IP address?

66.218.84.42

1. Locate the DNS query and response messages. Are then sent over UDP or TCP?

A screenshot of a computer

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 UDP

1. What is the destination port for the DNS query message? What is the source port of DNS response message?

Dest is 53 and source is 53.

1. To what IP address is the DNS query message sent? Use ipconfig to determine the IP address of your local DNS server. Are these two IP addresses the same?

It’s sent to the router 192.168.1.1, and it’s also acting as a DNS server

1. Examine the DNS query message. What “Type” of DNS query is it? Does the query message contain any “answers”?

Standard Query Type.

1. Examine the DNS response message. How many “answers” are provided? What do each of these answers contain?

Host, the type of address, class, the TTL, the data length and the IP address

A computer screen shot of a computer program

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1. Consider the subsequent TCP SYN packet sent by your host. Does the destination IP address of the SYN packet correspond to any of the IP addresses provided in the DNS response message?

First SYN packet is sent to the IP from the DNS server.

1. This web page contains images. Before retrieving each image, does your host issue new DNS queries?

Nope.

1. What is the destination port for the DNS query message? What is the source port of DNS response message?

53

1. To what IP address is the DNS query message sent? Is this the IP address of your default local DNS server?

192.168.1.1, which is the local DNS server (and router)

1. Examine the DNS query message. What “Type” of DNS query is it? Does the query message contain any “answers”?

Type A, no answers

1. Examine the DNS response message. How many “answers” are provided? What do each of these answers contain?

A screen shot of a computer program

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 One.

1. To what IP address is the DNS query message sent? Is this the IP address of your default local DNS server?

128.238.29.22, which is not my DNS server.

1. Examine the DNS query message. What “Type” of DNS query is it? Does the query message contain any “answers”?

NS and doesn’t contain any answers

1. Examine the DNS response message. What MIT nameservers does the response message provide? Does this response message also provide the IP addresses of the MIT namesers?

A screenshot of a computer

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20.

A black and white text with white text

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21. Examine the DNS query message. What “Type” of DNS query is it? Does the query message contain any “answers”?

Type A

22. A computer screen shot of a black background

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