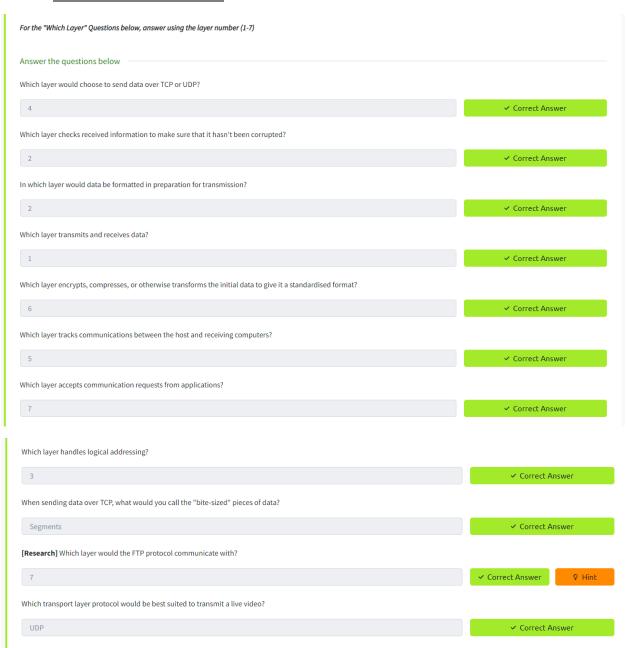# tryhackme - Introductory Networking

Name – Saimon Soren
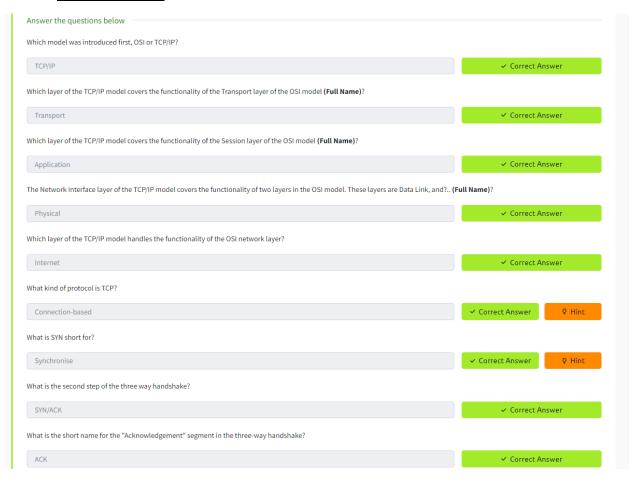
Roll no – 22

MCA 1st Semester

Task 2 – The OSI Model: An Overview

For the "Which Layer" Questions below, answer using the layer number (1-7)

Answer the questions below

Which layer would choose to send data over TCP or UDP?

4	✓ Correct Answer

Which layer checks received information to make sure that it hasn't been corrupted?

2	✓ Correct Answer

In which layer would data be formatted in preparation for transmission?

2	✓ Correct Answer

Which layer transmits and receives data?

1	✓ Correct Answer

Which layer encrypts, compresses, or otherwise transforms the initial data to give it a standardised format?

6	✓ Correct Answer

Which layer tracks communications between the host and receiving computers?

5	✓ Correct Answer

Which layer accepts communication requests from applications?

7	✓ Correct Answer

Which layer handles logical addressing?

3	✓ Correct Answer

When sending data over TCP, what would you call the "bite-sized" pieces of data?

Segments	✓ Correct Answer

[Research] Which layer would the FTP protocol communicate with?

7	✓ Correct Answer	♀ Hint

Which transport layer protocol would be best suited to transmit a live video?

UDP	✓ Correct Answer

Task 4 – The TCP/IP Model

Answer the questions below

Which model was introduced first, OSI or TCP/IP?

TCP/IP	✓ Correct Answer

Which layer of the TCP/IP model covers the functionality of the Transport layer of the OSI model **(Full Name)**?

Transport	✓ Correct Answer

Which layer of the TCP/IP model covers the functionality of the Session layer of the OSI model **(Full Name)**?

Application	✓ Correct Answer

The Network Interface layer of the TCP/IP model covers the functionality of two layers in the OSI model. These layers are Data Link, and?.. **(Full Name)**?

Physical	✓ Correct Answer

Which layer of the TCP/IP model handles the functionality of the OSI network layer?

Internet	✓ Correct Answer

What kind of protocol is TCP?

Connection-based	✓ Correct Answer	♀ Hint

What is SYN short for?

Synchronise	✓ Correct Answer	♀ Hint

What is the second step of the three way handshake?

SYN/ACK	✓ Correct Answer

What is the short name for the "Acknowledgement" segment in the three-way handshake?

ACK	✓ Correct Answer

Task 5 – Ping

Answer the questions below

What command would you use to ping the bbc.co.uk website?

ping bbc.co.uk	✓ Correct Answer

Ping *muirlandoracle.co.uk*
What is the IPv4 address?

217.160.0.152	✓ Correct Answer	♀ Hint

What switch lets you change the interval of sent ping requests?

-i	✓ Correct Answer	♀ Hint

What switch would allow you to restrict requests to IPv4?

-4	✓ Correct Answer

What switch would give you a more verbose output?

-v	✓ Correct Answer

Task 6 – <u>Traceroute</u>

Answer the questions below

Use traceroute on tryhackme.com
Can you see the path your request has taken?

No answer needed	✓ Correct Answer

What switch would you use to specify an interface when using Traceroute?

-i	✓ Correct Answer	♀ Hint

What switch would you use if you wanted to use TCP SYN requests when tracing the route?

-T	✓ Correct Answer

[Lateral Thinking] Which layer of the *TCP/IP* model will traceroute run on by default (Windows)?

Internet	✓ Correct Answer

Task 7 – <u>WHOIS</u>

Answer the questions below

Perform a whois search on `facebook.com`

No answer needed	✓ Correct Answer

What is the registrant postal code for facebook.com?

94025	✓ Correct Answer

When was the facebook.com domain first registered (Format: DD/MM/YYYY)?

29/03/1997	✓ Correct Answer

Perform a whois search on `microsoft.com`

(Note: Please ensure you have read the task above before attempting the next questions.)

No answer needed	✓ Correct Answer

Which city is the registrant based in?

Redmond	✓ Correct Answer

[OSINT] What is the name of the golf course that is near the registrant address for microsoft.com?

Bellevue Golf Course	✓ Correct Answer

What is the registered Tech Email for microsoft.com?

msnhst@microsoft.com	✓ Correct Answer