

Assignment 01 CCN Theory



Spring 2025

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Class Section: **A**

“On my honor, as student of University of Engineering and Technology, I have neither given nor received unauthorized assistance on this academic work.”

A handwritten signature in black ink, which appears to read "Mohsin Sajjad".

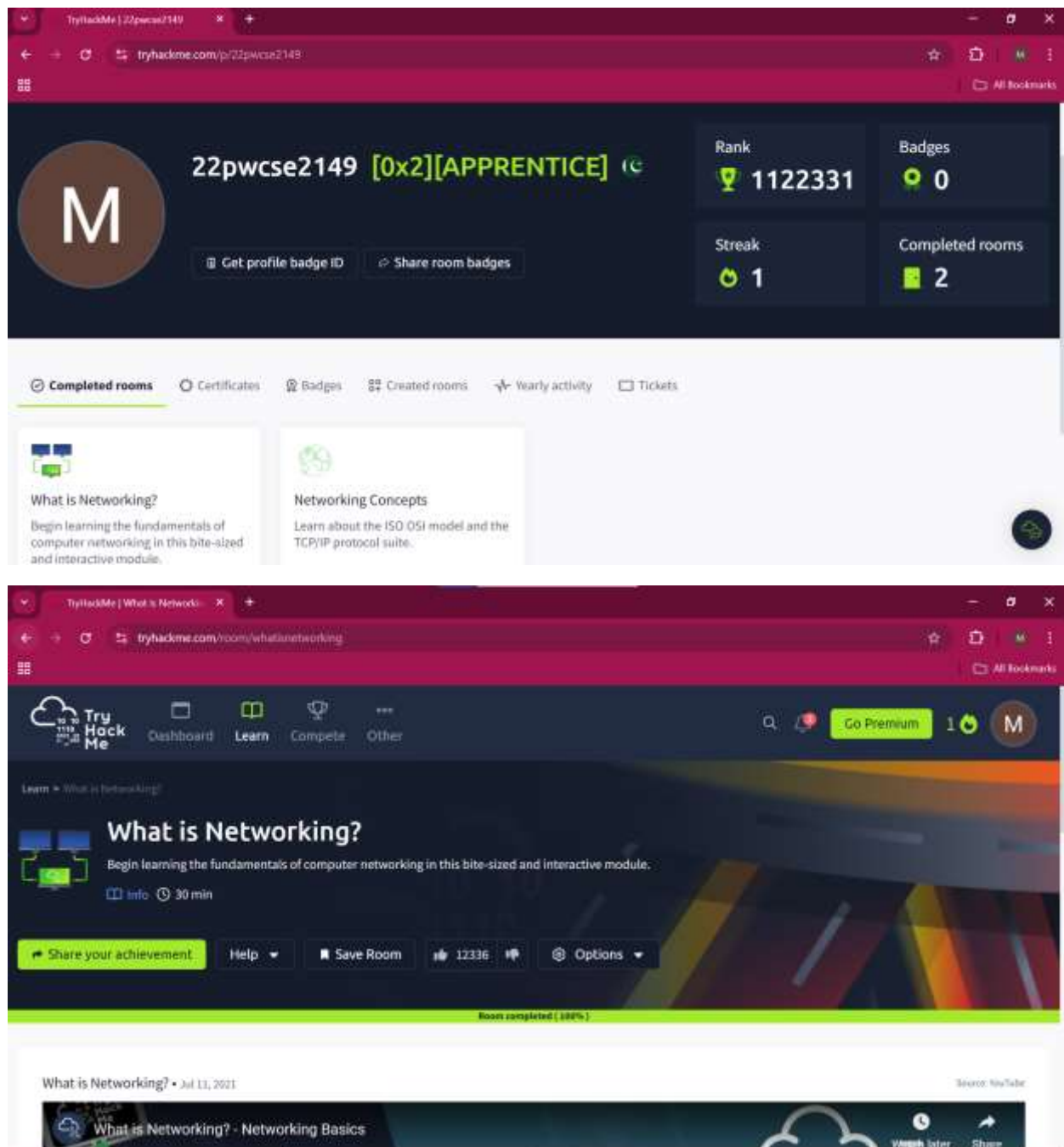
Student Signature: _____

Submitted to:

Engr. Ihsan ul haq

Month Day, Year (08 04, 2025)

Department of Computer Systems Engineering
University of Engineering and Technology, Peshawar



What is the key term for devices that are connected together?

Answer:

Network

Who invented the World Wide Web?

Answer:

Tim Berners-Lee

What does the term "IP" stand for?

Answer:

Internet Protocol

What is each section of an IP address called?

Answer:

octet

How many sections (in digits) does an IPv4 address have?

Answer:

4

What does the term "MAC" stand for?

Answer:

Media Access Control

Deploy the interactive lab using the "View Site" button and spoof your MAC address to access the site. What is the flag?

Answer:

THM{YOU_GOT_ON_TRYHACKME}

What protocol does ping use?

Answer:

ICMP

What is the syntax to ping 10.10.10.10?

Answer:

ping 10.10.10.10

What flag do you get when you ping 8.8.8.8?

Answer:
THM{I_PINGED_THE_SERVER}



Which layer is responsible for end-to-end communication between running applications?

Answer:

4

Which layer is responsible for routing packets to the proper network?

Answer:

3

In the OSI model, which layer is responsible for encoding the application data?

Answer:

6

Which layer is responsible for transferring data between hosts on the same network segment?

Answer:

2

To which layer does HTTP belong in the TCP/IP model?

Answer:

Application Layer

How many layers of the OSI model does the application layer in the TCP/IP model cover?

Answer:

3

Which of the following IP addresses is not a private IP address?

Answer:

49.69.147.197

Which of the following IP addresses is not a valid IP address?

Answer:

192.168.305.19

Which protocol requires a three-way handshake?

Answer:

TCP

What is the approximate number of port numbers (in thousands)?

Answer:

65

On a WiFi, within what will an IP packet be encapsulated?

Answer:

Frame

What do you call the UDP data unit that encapsulates the application data?

Answer:

Datagram

What do you call the data unit that encapsulates the application data sent over TCP?

Answer:

segment

Use `telnet` to connect to the web server on `MACHINE_IP`. What is the name and version of the HTTP server?

Answer:

lighttpd/1.4.63

What flag did you get when you viewed the page?

Answer:

THM{TELNET_MASTER}