Wireshark Intro Lab Report

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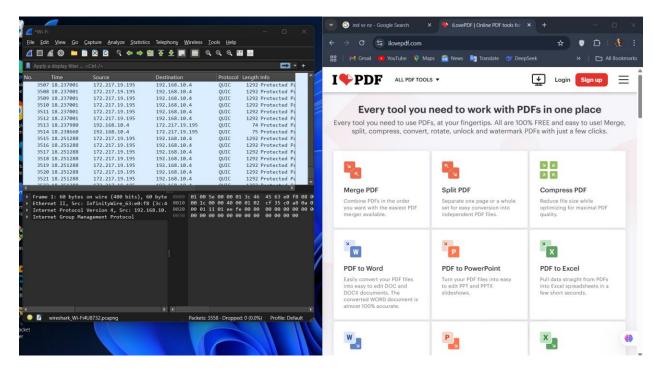
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1. Capturing Network Traffic

- 1. Open Wireshark and start packet capture on your active network interface.
- 2. Perform basic network activity, such as visiting www.google.com.
- 3. Stop the capture after 30-60 seconds.

Wireshark capturing packets (Show the main Wireshark window with packets captured).



2. Identifying Your IP Address

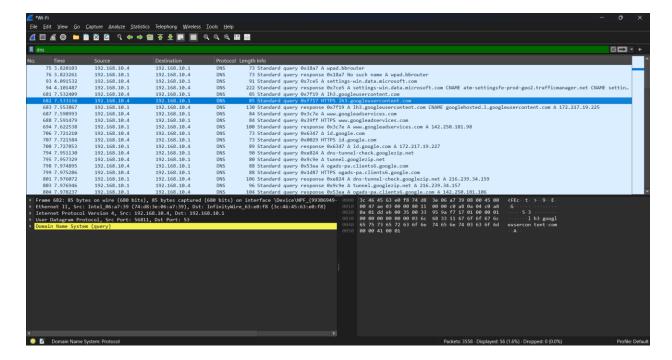
- 1. Open a terminal or command prompt.
 - o Windows: Run ipconfig
 - o Mac/Linux: Run ifconfig or ip a
- 2. Note your IP address.

Output of ipconfig / ifconfig showing your IP address.

3. Filtering DNS Traffic

- 1. Apply the filter dns in Wireshark.
- 2. Identify DNS requests and responses for visited websites.

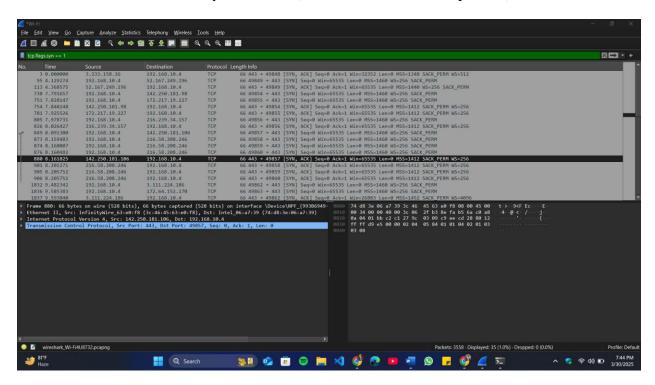
DNS query and response packets. Highlight the queried domain names.



4. Analyzing TCP Three-Way Handshake

- 1. Use the filter tcp.flags.syn == 1 to locate a SYN packet.
- 2. Right-click the SYN packet and "Follow TCP Stream" to view the handshake.

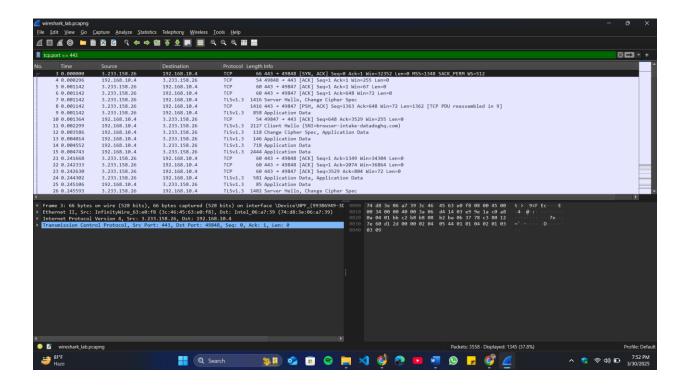
Attach Screenshot: Three-way handshake (SYN, SYN-ACK, ACK packets).



5. Examining HTTP Traffic

- 1. Apply the filter http in Wireshark.
- 2. Look at GET and POST requests to identify visited websites and request details.

Attach Screenshot: HTTP request headers showing requested URLs.



6. Saving and Submitting Capture File

1. Go to File \rightarrow Save As, and save the file as wireshark lab.pcapng