

# Wireshark

## WIRESHARK

### Summary:-

- ① Wireshark is a powerful open source network protocol analyzer used for capturing and inspecting network traffic in real time.
- ② Features:
  - Packet capture displays packets in detailed formats.
  - Filtering - Isolate protocols for analysis.
  - Protocol analysis breakdown for details.
  - Packet reassembly - Fragmentation & reassembly analysis for application layer communication.
- ③ Hands on usage:-
  - Captured live traffic.
  - Used filters like http and ip.src == <IP> to narrow down packets of interest.
  - Examined packet details such as Source / dest IPs, ports, payload data, timestamps.
  - Saved captured traffic to .pcap file for future analysis.
- ④ Learnings:-
  - Gained insight into how data is transmitted across a network.
  - Understood structure of common network protocols & their role in communication.

Wireshark provides valuable insights into network behavior, helps diagnose issues, and enhances understanding of protocol level communication.