

**EXP:05**

**Experiments on Packet capture tool: Wireshark**

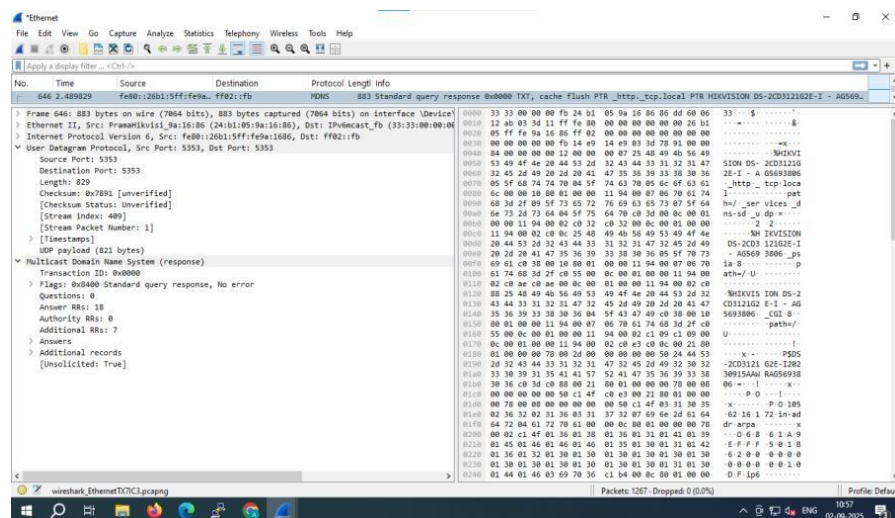
**Aim**

To understand the features of Wireshark as a packet capture tool and analyze the encapsulation of information at various layers of the Protocol stack.

**Algorithm / Procedure**

1. **Install** and launch the Wireshark packet capture tool.
2. **Select** the appropriate network interface for capturing traffic.
3. **Start** a packet capture session.
4. **Generate** network traffic (e.g., browse a website, ping a host).
5. **Stop** the capture and **analyze** the captured packets, focusing on the header information at the Data Link, Network, and Transport layers to understand encapsulation.
6. **Apply** filters (e.g., http, tcp, ip.addr == x.x.x.x) to isolate specific traffic.

**Output Image:**



**Result:**

Wireshark was successfully used to capture and analyze network traffic. The process of protocol encapsulation and the structure of packet headers at different layers were observed and understood.