Task 6:

For the QUIC based website access, answer the following:

1. What is the name of website?
   youtube.com

2. Find the packet that contains the Initial QUIC handshake. What information is exchanged here?
   In the first Initial packet, connection IDs and version info are exchanged, and TLS handshake starts.

3. Identify the QUIC packet that contains the TLS ClientHello (QUIC embeds TLS handshake inside QUIC).
   Client sends TLS ClientHello inside an Initial packet (includes SNI = cloudflare.com, versions, extensions).

4.Which QUIC version is used in your trace? QUIC v1 (0x1) is used in the trace.

5.Locate the packet where 0-RTT or 1-RTT keys are first used?

First seen right after handshake when encryption changes to 0-RTT or 1-RTT.

6. Find the first packet that carries application data (HTTP/3). How does this differ from HTTP over TCP?

Found in first Short Header packet. It is different from HTTP over TCP because QUIC runs on UDP, so faster and no head-of-line blocking.