Task 6:

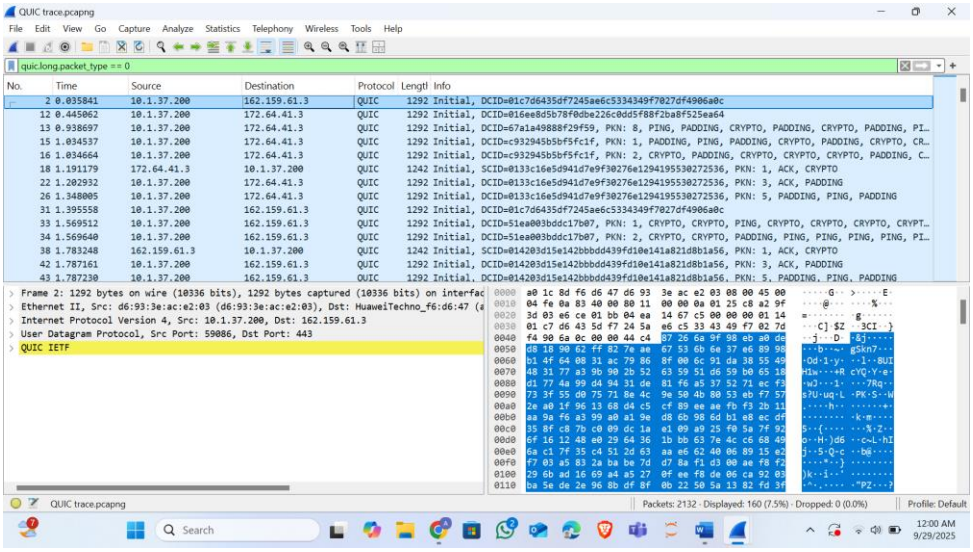
QUIC based questions

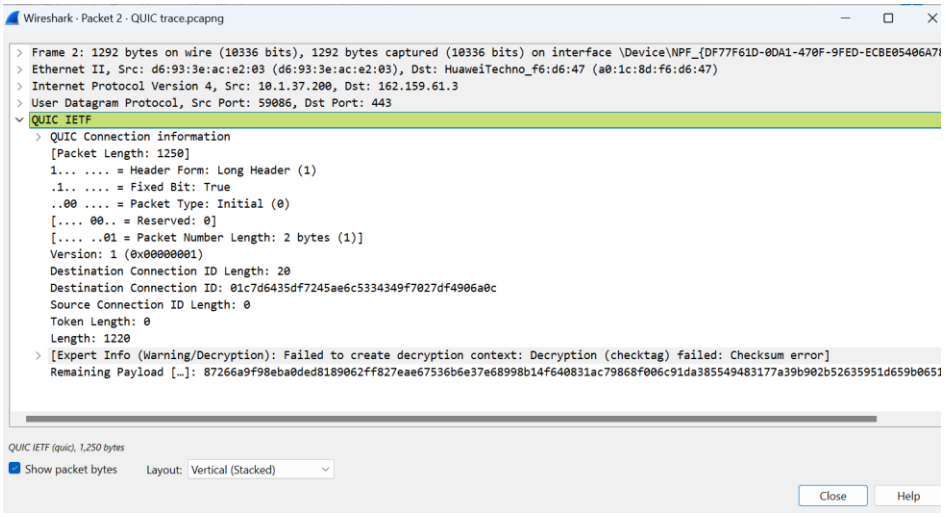
1. What is the name of website?

- google

2. Find the packet that contains the Initial QUIC handshake. What information is exchanged here?

- Packet no 2



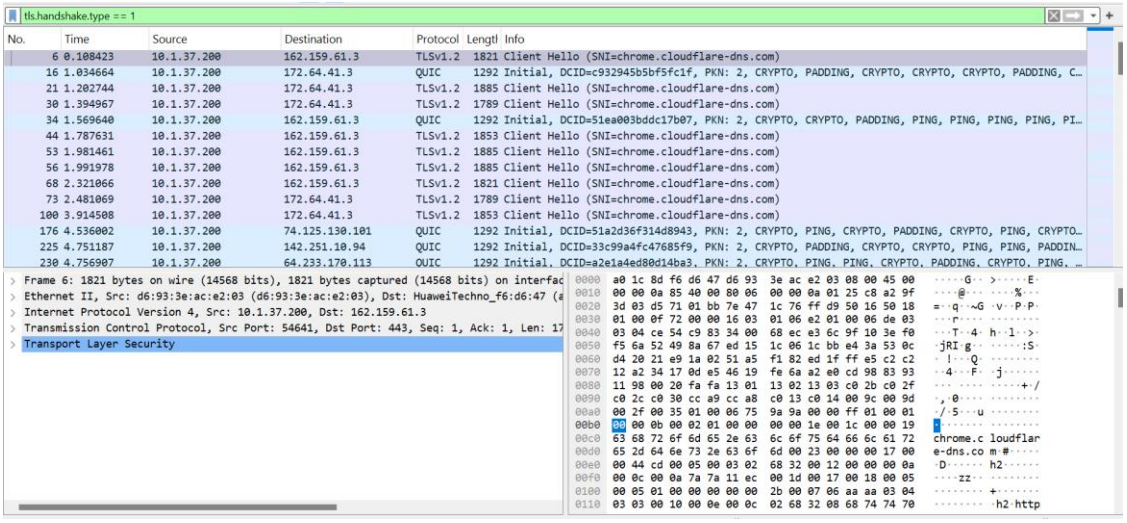


Exchanged informations:

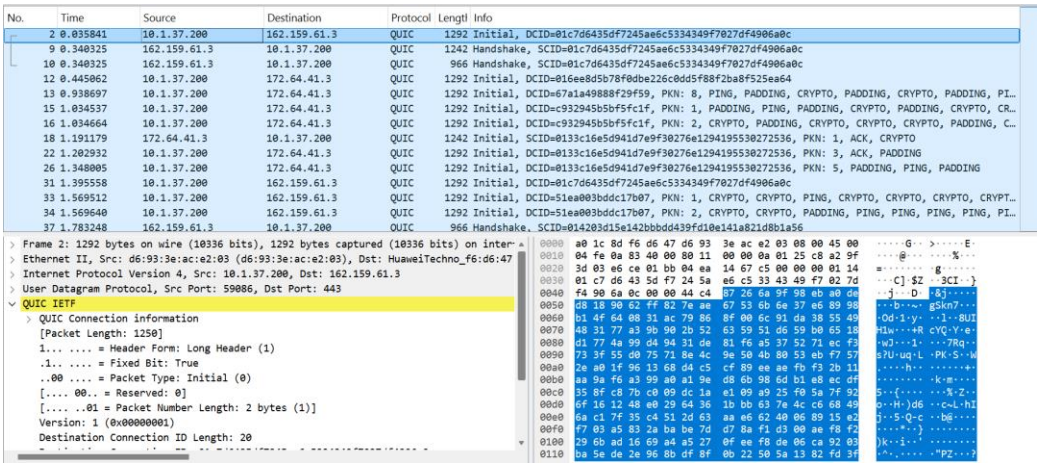
- Source connection id
- Destination connection id
- Destination connection id length
- Version
- Token length

3. Identify the QUIC packet that contains the TLS ClientHello (QUIC embeds TLS handshake inside QUIC).

- Frame 6



4. Which QUIC version is used in your trace?



- Packet no: 2
- Quic version :1
- Found in the QUIC Long Header of the Initial packet. The client proposes this version during the handshake.

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

- 0-RTT: packet 1201
- 1-RTT: Packet 327
- This is the first packet encrypted with early (0-RTT) or final (1-RTT) keys, marking the transition from handshake to secure data exchange.

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

In **HTTP/3 (QUIC)**:

- No TCP handshake.
- TLS is built into QUIC.
- First application packet appears **immediately after 1-RTT keys** are established.

In **HTTP over TCP**:

- Must first complete **TCP handshake + TLS handshake** before sending any HTTP request.
- More round trips → slower startup compared to QUIC.