**TASK 1**

**HTTP PACKET TRACING :**

**QUESTION 1 :**

What is the name of website?

**ANSWER 1 :**

The name of website is gaia.cs.umass.edu.

**QUESTION 2 :**

Find the packet that contains the first GET request for the website you have accessed.

**ANSWER 2 :**

The packet that received first GET request is packet no 255 (GET /kurose\_ross/index.php HTTP/1.1)

**QUESTION 3:**

Describe all headers and their values in this GET request message.

**ANSWER 3 :**

Headers in the GET request (Packet 255) are :

**Host:** gaia.cs.umass.edu

**Connection**: keep-alive

**Upgrade-Insecure-Requests**: 1

**User-Agent:** Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/139.0.0.0 Safari/537.36

**Accept:**text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,/;q=0.8,application/signed-exchange;v=b3;q=0.7

**Accept-Encoding:** gzip, deflate

**Accept-Language:** en-US,en;q=0.9

**QUESTION 4 :**

Identify the status code in the first server response.

**ANSWER 4 :**

The status code in the first server response is (HTTP/1.1 200 OK)

**QUESTION 5 :**

How many HTTP response messages are exchanged in total?

**ANSWER 5 :**

1 HTTP response message. The response is in Packet 293 with status code HTTP/1.1 200 OK.

**QUESTION 6 :**

Determine whether the connection is persistent or not. Justify with evidence from packet captures.

**ANSWER 6 :**

The connection is persistent because the server response shows Connection: keep-alive, meaning the same TCP connection can handle multiple requests.