## Week 3 Lab Report - COMP3331

## Exercise 3

Q1:

• The status code is 200. The phrase returned from the server to the client browser is 0K.

Q2:

- The HTML file was last modified at Last-Modified=Tue, 23 Sep 2003 05:29:00 GMT.
   Also, the response contains a DATE header and DATE=Tue, 23 Sep 2003 05:29:50 GMT.
- By definition, the DATE general HTTP header contains the date and time at which the
  message was originated. The Last-Modified response HTTP header contains the
  date and time at which the origin server believes the resource was last modified.
  Hence, we can tell that this header message is originated at DATE and last time when
  that lab2-1.html(resource) was modified is at Last-Modified time.

Q3:

• The connection is persistent. One reason is that it is used by HTTP/1.1 protocol. In HTTP/1.1, all connections are considered persistent unless declared otherwise, which conforms with the description **Connection**: **Keep-Alive**.

Q4:

• 73 bytes. I can tell from **Content-Length: 73.** 

Q5:

• It contains

<html>\nCongratulations. You've downloaded the file lab2-1.html!\n</html>\n

## Exercise 4

Q1:

• No, I did not see it.

Q2:

• Yes. Last-Modified: Tue, 23 Sep 2003 05:35:00 GMT

Q3:

• Yes, If-Modified-Since: Tue, 23 Sep 2003 05:35:00 GMT This time is when that file had been last modified. The browser basically asked whether the file has been modified or not since the time that file had been last modified.

Q4:

• Status code is 304. The phrase is Not Modified. Also, the server did not explicitly returned the contents of the file. This is because when the browser first requested the server, it would put something in its cache as well as storing ETag or Last-Modified date as a "key" from the server.

So, next time, when the browser wants to send a request to the server again, it would include the **ETag** or **Last-Modified** date, telling the server to send a 304 if the content still has that date or ETag.