

Exercise 3:

Q1.

HTTP/1.1 200 (text/html)

Q2.

last modified at Tue Sep 23, 2003 5:29:00 in GMT. Yes, server's time is the DATA header.

Q3.

Persistent, because

```
Accept-Charset: ISO-8859-1, utf-8;q=0.66, *
Keep-Alive: 300\r\n
Connection: keep-alive\r\n
```

Q4.

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```
HyperText Transfer Protocol
Line-based text data: text/html (3 lines)
<html>\n
Congratulations. You've downloaded the file lab2-1.html!\n
</html>\n
```

Q5.

Exercise 4:

Q1.

No I haven't.

Q2.

Yes.

```
Last-Modified: Tue, 23 Sep 2003 05:35:00 GMT\r\n
```

Q3. Yes.

```
If-Modified-Since: Tue, 23 Sep 2003 05:35:00 GMT\r\n
If-None-Match: "1bfef-173-8f4ae900"\r\n
```

Q4.

```
> HTTP/1.1 304 Not Modified\r\n
```

NO, it did not return any contents, error message 304 means that the web did not modified since last request so there are not any contents could be return

Q5.

```
ETag: "1bfef-173-8f4ae900"\r\n
```

The value didn't change because the first request is success and the message was received.

Etag USES the browser's cache to reduce the bandwidth pressure on our servers. This can improve the performance of the server because web server does not need to send a full response if the content has not changed

Exercise 5

```
z5211414@vx5:/tmp_and/reed/export/reed/1/z5211414/Desktop/Comp3331/lab02$ python
3 PingClient.py localhost 4397
ping to localhost, seq = 0, rtt = 156.95ms
ping to localhost, seq = 1, rtt = 98.27ms
ping to localhost, seq = 2, rtt = Timeout
ping to localhost, seq = 3, rtt = Timeout
ping to localhost, seq = 4, rtt = Timeout
ping to localhost, seq = 5, rtt = 197.99ms
ping to localhost, seq = 6, rtt = 98.99ms
ping to localhost, seq = 7, rtt = 141.26ms
ping to localhost, seq = 8, rtt = 38.16ms
ping to localhost, seq = 9, rtt = 200.48ms
ping to localhost, seq = 10, rtt = 137.17ms
ping to localhost, seq = 11, rtt = 44.27ms
ping to localhost, seq = 12, rtt = Timeout
ping to localhost, seq = 13, rtt = 84.58ms
ping to localhost, seq = 14, rtt = 87.17ms
Max rtt: 200.48ms
Min rtt: 38.16ms
Max rtt: 116.84ms
z5211414@vx5:/tmp_and/reed/export/reed/1/z5211414/Desktop/Comp3331/lab02$ █
```