## Lab 2

#### Exercise 3

### Question 1:

• Status Code = 200

#### Question 2:

- Tuesday, 23 September 2003 05:29:00 GMT
- Yes it contains a date header
- Date is the date and time the last message was sent whereas last modified is the last modified date for the requested object.

#### Question 3:

 The connection is persistent. This is because the HTTP connection says "Keep-Alive", meaning that the connection is not closed when sending and receiving multiple requests. This means that it uses a single TCP connection instead of multiple connections

#### Question 4:

• 73 bytes

#### Question 5:

Text and html

### Exercise 4

#### Question 1:

• No

### Question 2:

No

#### Question 3:

If-Modified since: Tue, 23 Sep 2003If-None-Match: "1bfef-173-8f4ae900"

### Question 4:

- It returns 304 Not modified
- The server did not return the contents of the file, because there was no success message (usually 200)
- The server did not return the body contents of the file because the GET request is conditional. The server will only send back data if it has been modified after the date, but since it isn't the response is 304 without any body.

## Question 5:

ETag: "1bfef-173-8f4ae900"

The ETag for the  $1^{st}$  and  $2^{nd}$  response messages are the same because the content of the URL hasn't changed/been updated.

### Exercise 5

# Sample output:

## For port 1048

```
z5161709@weber:~/comp3331/lab2$ javac PingClient.java
z5161709@weber:~/comp3331/lab2$ java PingClient 127.0.0.1 1048
Ping to 127.0.0.1 seq = 0
rtt = 221ms
Ping to 127.0.0.1 seq = 1
rtt = 14ms
Ping to 127.0.0.1 seq = 2
rtt = 140ms
Ping to 127.0.0.1 seq = 3
rtt = 167ms
Ping to 127.0.0.1 seq = 4
rtt = 73ms
Ping to 127.0.0.1 seq = 5
rtt = 94ms
Ping to 127.0.0.1 seq = 6
rtt = 37ms
Ping to 127.0.0.1 seq = 7
time out
Ping to 127.0.0.1 seq = 8
rtt = 4ms
Ping to 127.0.0.1 seq = 9
rtt = 148ms
Min = 4 Max = 221 Avg = 99
```