COMP9331 Lab 2

March 11, 2020

Exercise 3

Question 1

- Status Code : 200
- Response Pharase :OK

Question 2

- Last-Modified : Tue, 23 Sep 2003 05:29:00 GMT
- Yes, it does contain a Date header, which record the timestamp when the server receive the request of the client.The requested file can be modified by other clients at any other time rather than the Date when the request is received.

Question 3

- The connection is persistent.
- The Connection header says Keep-Alive,which means the connection is persistent.

Question 4

- Content length :73

Question 5

- Content-Type :text/html. The response packet contains a text based HTML file.

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

Exercise 4

Question 1

- No,there is no such line in the first GET request.

Question 2

- Yes, it does. The last time the file was modified is Tue,23 Sep 2003 05:35:50 GMT

Question 3

- Yes, there are lines of "IF-MODIFIED-SINCE" and "IF-NONE-MATCH".

- They respectively contains the content of "Last-Modified" and "ETag" from the last response packet answering the request for this file.
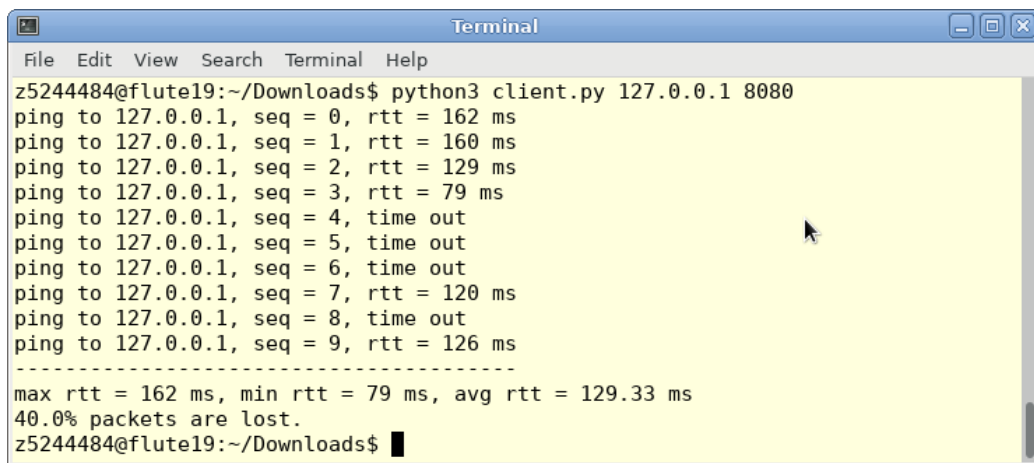
Question 4

- Status Code : 304

- Response Pharase Not Modified

- No, it didn't.Only when "IF-MODIFIED-SINCE" or "IF-NONE-MATCH" doesn't match with "Last-Modified" or "ETag",the server would send the requested file.Otherwise, the server return the status code of 304 to tell the client to use the local file.

Question 5

- ETag: 1bfef-173-8f4ae900 It is uniquely generated when the file is created or modified.

- No, it did not change because the file is not modified.

Exercise 5


```
z5244484@flute19:~/Downloads$ python3 client.py 127.0.0.1 8080
ping to 127.0.0.1, seq = 0, rtt = 162 ms
ping to 127.0.0.1, seq = 1, rtt = 160 ms
ping to 127.0.0.1, seq = 2, rtt = 129 ms
ping to 127.0.0.1, seq = 3, rtt = 79 ms
ping to 127.0.0.1, seq = 4, time out
ping to 127.0.0.1, seq = 5, time out
ping to 127.0.0.1, seq = 6, time out
ping to 127.0.0.1, seq = 7, rtt = 120 ms
ping to 127.0.0.1, seq = 8, time out
ping to 127.0.0.1, seq = 9, rtt = 126 ms
----------------------------------------
max rtt = 162 ms, min rtt = 79 ms, avg rtt = 129.33 ms
40.0% packets are lost.
z5244484@flute19:~/Downloads$
```