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COSC 370-750

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Lab 5

Lab Report: This lab was pretty straightforward. I was able to see the TCP in action which was cool. Wireshark is almost second nature at this point. I completed this lab 100% independently with no help from outside resources (excluding provided content).

1) IP (client): 192.168.1.102 & TCP port # (client): 1161

2) IP (gaia.cs.umass.edu): 128.119.245.12 & TCP port # (gaia.cs.umass.edu): 80

3) IP (Personal): 192.168.95.64 & TCP port # (Personal): 55241

4) The sequence number is 0 and the SYN can be indicated by setting the syn flag to 1

5) The sequence number is also 0. The value is 1 in the acknowledgement field. The client told the destination what value. The values/flags of syn and ack are both 1.

6) Sequence Number of TCP (segment with HTTP POST): 1

7&8) EstimatedRTT: 189.875 ms (when $\alpha = .125$)

Sequence #	RTT (ms)	Length
1	about 190	565
566	about 189	1460
2026	about 189	1460
3486	about 189	1460
4946	about 190	1460
6406	about 190	1460

9) The minimum amount of available buffer space: 5840 bytes. The lack of receiver buffer space doesn't ever throttle the sender.

10) There are no retransmitted segments. I looked for any repeating segment numbers.

11) The receiver acknowledges 1460 bytes of data in ack. They would double if it was acknowledging every other segment.

12) File size: 177851 bytes / Total time: 7.593 = Throughput: 23,423.021 Bps

13) slowstart phase: Packet 1-13. The data doesn't take the normal exponential to linear approach as with situation studied prior.

14) My personal shows slowstart phase: Packet 1-219 (this after analysis may be an error on my part)