

Lab 3

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Due Nov 10 by 11:59pm **Points** 25 **Submitting** a text entry box or a file upload
Available after Oct 27 at 12am

IT IS VERY IMPORTANT THAT YOU FINISH THIS LAB BEFORE TAKING THE MIDTERM!

See the attached documents for Lab 3. This lab gets into the details of TCP segments, especially sequence numbers and acknowledgement numbers, before looking at congestion avoidance and flow control. Also, this lab will take you quite a bit longer than Lab 2 to complete, so don't neglect it!

Attachments

- [Lab03.docx](#) 
- [Lab03.pdf](#) 

Lab 3 Rubric

Criteria	Ratings		Pts
(1) or (3) - IP Address TCP Port	1.0 pts Full Marks	0.0 pts No Marks	1.0 pts
(2) - IP Address TCP Port	1.0 pts Full Marks	0.0 pts No Marks	1.0 pts
(4) - SYN What identifies SYN segment	2.0 pts Full Marks	0.0 pts No Marks	2.0 pts
(5) - SYNACK ACK Value? How?	2.0 pts Full Marks	0.0 pts No Marks	2.0 pts
(6) - Sequence Number	1.0 pts Full Marks	0.0 pts No Marks	1.0 pts
(7) - Seq #s Time Sent / ACK Received RTT EstRTT	4.0 pts Full Marks	0.0 pts No Marks	4.0 pts
(8) - Length (6 segments)	2.0 pts Full Marks	0.0 pts No Marks	2.0 pts
(9) - Buffer space Sender throttled?	2.0 pts Full Marks	0.0 pts No Marks	2.0 pts
(10) - Retransmitted Segments? How checked?	2.0 pts Full Marks	0.0 pts No Marks	2.0 pts

Criteria	Ratings		Pts
(11) - Data ACKed ACKing every other?	2.0 pts Full Marks	0.0 pts No Marks	2.0 pts
(12) - Throughput? Explain!	2.0 pts Full Marks	0.0 pts No Marks	2.0 pts
(13) - Downloaded Trace - Slowstart? Congestion avoidance? Comments Note that slowstart should look like an exponential increase. Congestion avoidance will look like a linear increase, except when congestion is detected. With repeated congestion it'll look like a sawtooth function.	2.0 pts Full Marks	0.0 pts No Marks	2.0 pts
(14) - Personal Trace - Slowstart? Congestion avoidance? Comments Note that slowstart should look like an exponential increase. Congestion avoidance will look like a linear increase, except when congestion is detected. With repeated congestion it'll look like a sawtooth function.	2.0 pts Full Marks	0.0 pts No Marks	2.0 pts
Total Points: 25.0			