Computer Communications and Networks (COMN)
2022/23, Semester 1

Assignment 2 Results Sheet

Forename and Surname:	
Matriculation Number:	

Question 1 – Number of retransmissions and throughput with different retransmission timeout values with stop-and-wait protocol. For each value of retransmission timeout, run the experiments for **5 times** and write down the **average number of retransmissions** and the **average throughput**.

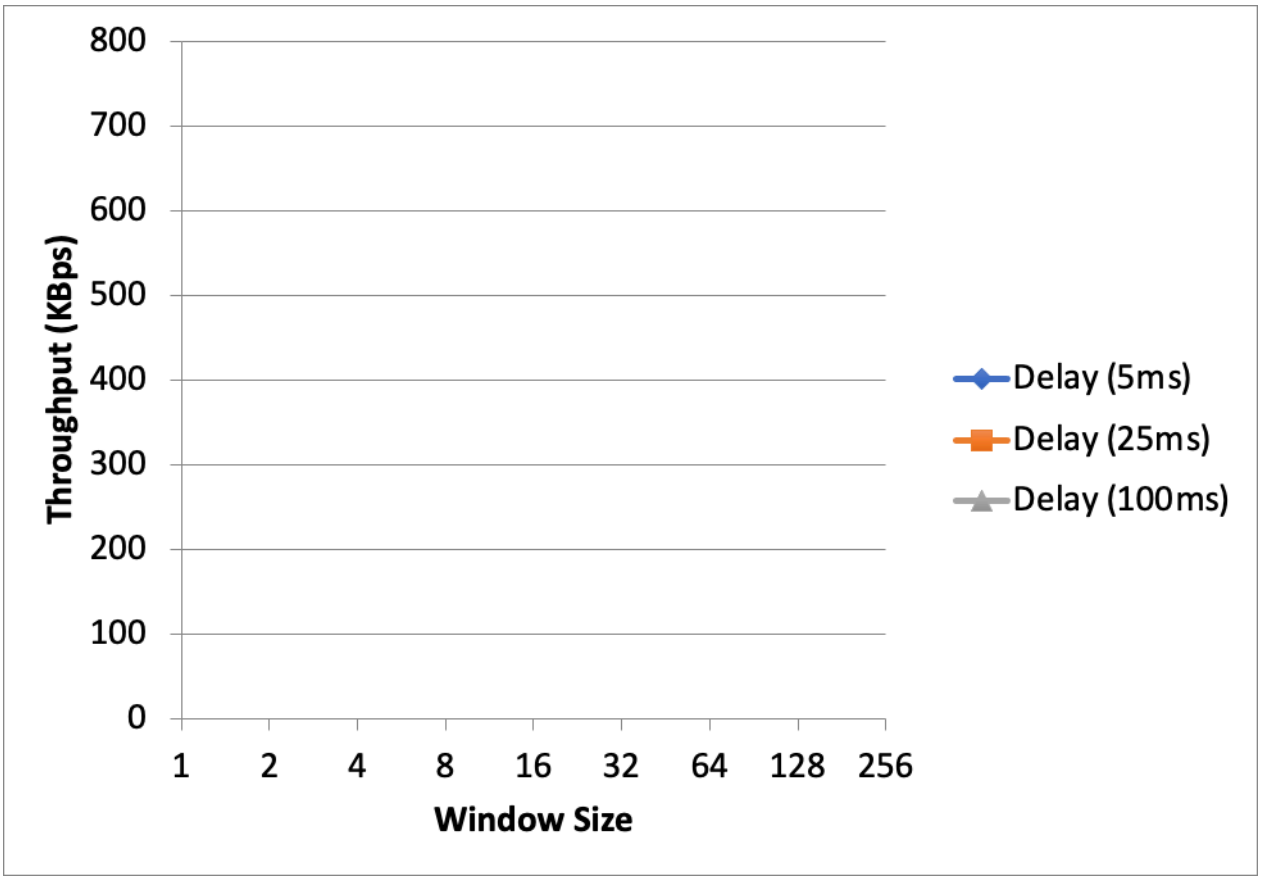
Retransmission timeout (ms)	Average number of retransmissions	Average throughput (Kilobytes per second)
5		
10		
15		
20		
25		
30		
40		
50		
75		
100		

Question 2 – Discuss the impact of retransmission timeout value on the number of retransmissions and throughput. Indicate the optimal timeout value from a communication efficiency viewpoint (i.e., the timeout that minimizes the number of retransmissions while ensuring a high throughput).

Question 3 – Experimentation with Go-Back-N. For each value of window size, run the experiments for **5 times** and write down the **average throughput**.

1			
2			
4			
8			
16			
32			
64			
128			
256			

Create a graph as shown below using the results from the above table:



Question 4 – Discuss your results from Question 3.

Question 5 – Experimentation with Selective Repeat. For each value of window size, run the experiments for **5 times** and write down the **average throughput**.

1	
2	
4	
8	
16	
32	

Question 6 - Compare the throughput obtained when using “Selective Repeat” with the corresponding results you got from the “Go Back N” experiment and explain the reasons behind any differences.

Question 7 – Experimentation with *iperf*. For each value of window size, run the experiments for **5 times** and write down the **average throughput**.

1	
2	
4	
8	
16	
32	

Question 8 - Compare the throughput obtained when using "Selective Repeat" and "Go Back N" with the corresponding results you got from the *iperf* experiment and explain the reasons behind any differences.
