CMSC 417 Homework Four

Name: ____________________________

Read 4.1: 4.1.1, 4.1.2, 4.1.3, 4.1.4.
Read 5.2: all subsections. Note: Nagle’s algorithm is not a solution to silly window syndrome; the text confuses the two.
Due Wednesday, October 4.
Note: The midterm will be Oct 25.

1. Fill in the following table (use printf if you need to):

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>256</th>
</tr>
</thead>
<tbody>
<tr>
<td>htons</td>
<td></td>
<td></td>
</tr>
<tr>
<td>htonl</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. What sequence of states does a TCP client use to reach the ESTABLISHED state?

3. What is the difference between flow control and congestion control?

4. Why are sequence numbers in TCP applied to bytes not packets?

5. Why do SYN and FIN flags consume a sequence number?